



Impact of Digital Globalization

Dr. Rishikesh Kumar Gautam
Dr. Hari Krishna Behera



Global Academy

IMPACT OF DIGITAL GLOBALIZATION

Editors

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GLOBAL ACADEMY

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Preface

The rapid advancement of digital technologies and the seamless flow of information across borders have fundamentally transformed our world, ushering in an era of digital globalization. The impact of this phenomenon is far-reaching, influencing various aspects of our lives—from communication and commerce to culture and governance. As the digital revolution continues to evolve, it is crucial to examine its implications on a global scale, understanding both its opportunities and challenges.

This book, “Impact of Digital Globalization,” brings together 40 insightful chapters that explore the multifaceted effects of digital globalization. Each chapter delves into a specific aspect of this transformation, providing a comprehensive analysis of how digital technologies are reshaping industries, societies, and individual lives. The contributors, who are experts in their respective fields, offer diverse perspectives on the implications of digital globalization, ensuring a rich and nuanced understanding of the topic.

The chapters cover a wide range of themes, including the role of digital media in global communication, the transformation of economies through e-commerce and digital trade, the impact of social media on cultural exchange and identity, and the challenges of cybersecurity in a hyper-connected world. Additionally, the book examines the ethical considerations and regulatory challenges that arise in the context of digital globalization, offering insights into how we can navigate this complex landscape responsibly.

As the editors of this volume, we are honoured to present this collection of work that addresses one of the most significant phenomena of our time. It is my hope that this book will serve as a valuable resource for scholars, practitioners, and anyone interested in understanding the profound impact of digital globalization. The insights and analyses offered here will not only enhance our understanding of the present but also guide us in shaping the future of our increasingly interconnected world.

We extend my sincere gratitude to all the contributors for their hard work and dedication to this project. Their expertise and commitment have made this book a reality. We also wish to thank the readers who will engage with these chapters; your interest in this critical subject is what drives our collective inquiry and progress.

Dr. Rishikesh Kumar Gautam

Dr. Hari Krishna Behera

Editors

Contents

<i>Preface</i>	<i>iii</i>
1. Digital Technology's Impact on Globalization	1-8
<i>Mrs. Thakar Dipikaben Umakant & Dr. Bhawesh Kumawat</i>	
2. A Comparison between Indian Economy and Digital Globalization: A Socio-Economic Study	9-17
<i>Sandeep Kumar Sharma</i>	
3. A Study on Pradhan Mantri Kaushal Vikash Yojana	18-22
<i>Surya Prakash</i>	
4. A Study of Emotional Intelligence and Working Women's Mental Health	23-30
<i>A. Aswini & Dr. R. Rajesh Kanna</i>	
5. Digital Advertising of Makeup and Clothing Brands Educates and Normalizes Gender Inclusivity	31-34
<i>Ankur Chourasia</i>	
6. Important of Library and Information Services in College Libraries: A Study	35-40
<i>Dhanesh B Thokor & Dr. Bharti L Vaja</i>	
7. Indian Economy and Digital Globalization	41-49
<i>Parikshit Layek</i>	
8. Unlocking Knowledge: Strategies and Innovations in Library Digitization	50-61
<i>Devender Kumar</i>	
9. Cultural Hybridity and Identity in R.K. Narayan's Novels: A Global Perspective	62-66
<i>Vishnu Ram Gehlot & Dr. Jaydeep Pandya</i>	
10. Digital Globalisation and Media	67-69
<i>Ravi Prakash Patel</i>	
11. Digital Globalization and Its Impact on the Indian Education System: A Comprehensive Analysis	70-74
<i>Mr. Trivedi Vishal Rajendrakumar & Dr. Bhawesh Kumawat</i>	
12. Digital Reading Habits of Children	75-80
<i>Malek Sahista & Surabhi Joshi</i>	

13. Digitization and Education in India	81-85
<i>Shreya Biswas</i>	
14. Exploring Digitization Techniques and Their Impact on Library Services: A Comprehensive Analysis	86-87
<i>Dr. Renu</i>	
15. Impact of Digital Globalization on Indian Education System	88-94
<i>Dr. Devender</i>	
16. Bengal Patachitra Have Global Potential on 21st Century Digital Era: Where Traditional Art is a Way of Life and Make Changes Out of It?	95-107
<i>Arunava Rakshit</i>	
17. From Chalkboards to Cyber-boards: Digital Globalization in Indian Education System	108-116
<i>Anvesha Verma</i>	
18. Impact of Digital Globalization on Indian Society (Tribal Women Empowerment of South Gujarat Region)	117-121
<i>Ms. Deval K. Engineer & Dr. Madhubhai N. Gayakwad</i>	
19. Impact of Digital Globalization on Indian Society	122-126
<i>Dr. (Mrs.) Ravinder Kaur Vilku</i>	
20. Impact of Digital Globalization on Indian Education System	127-131
<i>Khan Heena Kausar Siraj</i>	
21. Globalization on English Language of Communication: An Impact	132-137
<i>Vinod Kumar Mahawar</i>	
22. Green Library Technology: Towards Sustainable Development	138-148
<i>Prof. (Dr.) Priyanki R. Vyas & Reshma Panchal</i>	
23. Impact on Indian Literature During the Global Digitalization Era	149-152
<i>Dr. Namrata Jain</i>	
24. Impact of Digital Globalisation on Cultural Identity and Social Strata of India	153-158
<i>Dr. Aman Jyoti</i>	
25. Impact of Digital Globalization on Indian Education System	159-162
<i>Mr. Shivaji Govind Sawant & Dr. R. K. Shelak</i>	
26. A Study of Digital Library Initiatives in India: An Overview	163-168
<i>Rakhi</i>	
27. The Impact of Internet Addiction on Emotional Regulation and Communication Skills: A Review	169-177
<i>Sonam Yadav & Dr. Dolly Bansal</i>	
28. College Library and Its Uses	178-183
<i>Komal Joshi Research & Dr. Bharti Vaja</i>	

29. Unveiling the Deficiencies of Language in Articulating Trauma: Unearthing the Uniqueness of Same-Gender Empathy in Understanding the Profound Trauma Experience in the novel <i>The Colour Purple</i> by Alice Walker.	184-195
<i>Charu</i>	
30. NEP, Indian Knowledge System and Digital Globalization	196-199
<i>Irani Aruna Singh</i>	
31. Impact of the National Education Policy 2023 on Digitalization of Education: Opportunities, Challenges, and Future Directions	200-205
<i>Ms. Jayshree Chirag Mehta</i>	
32. Dealing with Missing Data and Uncertainty in the Context of Data Mining	206-217
<i>Nidhi S Bhavsar & Dr. Khushbu</i>	
33. Redefining Borders in the Era of Digital Globalisation: A Study of India-China Border Disagreements	218-224
<i>Mr. Hemkholen Haokip & Mr. Lhunjamang Baite</i>	
34. Impact of Digital Globalization on the Indian Education System	225-230
<i>Dr. Hetal Bharatkumar Prajapati & Dr. Anil Kashyap</i>	
35. English Literature in Digital Globalization : Effects and Impacts	231-234
<i>Mohd Nageen Rather</i>	
36. Digital Environment: VNSG University's Departmental Libraries	235-242
<i>Dr. Shaileshkumar C. Patel & Dr. Shishir Mandalia</i>	
37. Impact of Digital Globalization on Folk Culture and Folk Artists of Assam	243-247
<i>Ms. Juhi Kalita</i>	
38. Transforming Knowledge Access: A study on the Digitization of Academic Libraries	248-253
<i>Kinjal N. Mistry & Dr. Bhavina Naik</i>	
39. Digitalization in Libraries : Techniques & Tools	254-260
<i>Dr. Sanjeev Kumar Sharma & Vikash</i>	
40. Tribal Identity and Digital Globalization: With Special Reference to Sagar District of Madhya Pradesh	261-265
<i>Amisha Mishra</i>	

Digital Technology's Impact on Globalization

**Mrs. Thakar Dipikaben Umakant* &
Dr. Bhawesh Kumawat****

INTRODUCTION

Globalisation has had a vast have an effect on on each society. The primary driving force of improvement has been the nations' economic growth. Technology has helped globalisation develop greater fast, and globalisation has always pushed new technologies ahead. Globalisation and technology now constitute one phenomenon. The improvement of digital generation has greatly facilitated globalisation. Digital technology improvements compel organizations to move worldwide due to the fact they need larger markets to attain economies of scale. Digital era improvements reduce transportation and communicate fees across international locations and facilitate the global sourcing of raw materials and different inputs. It encourages globalization because the assignment proudly owning the patent can make the most foreign markets without tons competition. The definition of digital technology is virtual devices, structures, and sources that help create, shop, and manipulate records. An critical aspect of digital generation is records era (IT) which refers to using computers to procedure records and records.

Most organizations use digital technology in recent times to control operations and methods and to enhance their provider.

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EXACTLY WHY IS VIRTUAL ERA SO ESSENTIAL?

Most groups use virtual technology these days to control operations and methods and to beautify their provider. Every detail of life has modified due to virtual technology. Travel, employment, retail, leisure, and communications are only some of the industries that have undergone a worldwide transformation in current years. Nowadays, it's uncommon to come upon an electrical machine or piece of equipment that does not use virtual technology. Smart gadgets can also now be smaller, faster, lighter, and extra adaptable thanks to virtual technology.

On a worldwide scale, considerable volumes of facts can be transported round nearly right away and stored domestically or remotely. Large statistics documents may now be despatched across the net extremely immediately, streaming video and song in actual time, and facts can now be accessed from almost everywhere within the global. Even the phrase "records" has increased this.

These are the seven outcomes of virtual era on globalisation

HEALTHCARE

The fundamental effect of digital era on healthcare is that it has increased get right of entry to to care for people and nations who won't otherwise have it or be able to pay it. New and superior medicines and treatments are being researched and developed on a big scale the world over.

Additionally, it broadens expertise during the sector and promotes international cooperation. For example, it has facilitated the development of new treatments on account of advanced expertise of genetic abnormalities, novel infections, and persistent ailments.

Farming and Agriculture Sector

Due to the constrained quantity of agricultural land available globally and the scarcity of herbal resources, using virtual technology inputs in farming and agribusiness has increased greater than ever. International Journal of Research Publication and Reviews, Vol 4, no 5, pp 2788-2792, May 2023 2789 Digital era has greater methods that result in worthwhile agricultural yields, anticipated farm enter evaluation, sensing and misuse of agriculture inputs, and fast movement for crop sickness prevention in a number of nations.

Education Area

Due to its fundamental role in figuring out a rustic's stage of development, virtual era has significant outcomes on education. New generation raises the diploma of literacy in a State and expands profession options, which in the end advantages the country. Incorporating expertise from both developing and advanced international locations, virtual libraries, cognitive studying, net offerings, multilingual translation, and intelligent tutoring systems have all been evolved.

BANKING AND FINANCE

Digital technology has given banking and finance some of blessings nowadays, including the capability to clearly behavior all banking transactions on line on

a worldwide scale and the ability to combine all monetary institutions, specific forex transactions, investments, taxation, and commercial enterprise globally on a 24/7 foundation.

Supply -chain

Another enterprise that has simply integrated synthetic outputs, dispatch services, transportation, and custom and border administration services among providers and users of products and services throughout international locations is supply chain control. Utilising digital channels for verbal exchange and transportation as well as broadly used software program application standards enables it.

Better Statistics Series

Data gathering and analytics across international locations are optimised by digital technologies. Larger quantities of records may be processed or saved more speedy. Faster records evaluation costs also mean faster information transfer speeds. You improve your consumer insights to introduce consumer-centric strategies for the development of nations.

CREATES A DIGITAL CULTURE

Digital tools and technology affect and form the place of job this is created by using digital technology. Most employees utilise virtual generation to collaborate, broaden, and offer clients with get right of entry to to items, services, and aid in groups throughout nations with sophisticated digital cultures.

TYPES OF DIGITAL TECHNOLOGY'S IMPACT ON GLOBALIZATION:

The impact of digital technology on globalization can manifest in various forms, each contributing to the interconnectedness of economies, societies, and cultures worldwide. Here are some key types of digital technology's impact on globalization:



1. **Communication:** Digital technology facilitates instant communication through channels such as email, social media, messaging apps, and video

conferencing. This enables individuals and businesses to connect across borders, fostering collaboration, knowledge exchange, and cultural interaction on a global scale.

2. **Commerce:** E-commerce platforms and digital marketplaces enable businesses to sell products and services internationally, breaking down geographical barriers and expanding market reach. Digital payment systems facilitate cross-border transactions, simplifying the process of buying and selling goods and services globally.
3. **Information Access:** The internet provides access to vast amounts of information on virtually any topic, empowering individuals to learn, research, and stay informed regardless of their location. Digital technology democratizes access to education, news, entertainment, and other resources, promoting knowledge-sharing and cultural exchange.
4. **Remote Work:** Digital technology enables remote work by providing tools and platforms for virtual collaboration, project management, and communication. This allows individuals to work from anywhere with an internet connection, transcending geographic constraints and promoting global workforce participation.
5. **Data Analytics:** Digital technology generates vast amounts of data that can be analyzed to gain insights into consumer behavior, market trends, and competitive dynamics. Data analytics tools and techniques help businesses make informed decisions, optimize operations, and tailor products and services to global market preferences.
6. **Cultural Exchange:** Digital technology facilitates cultural exchange by providing platforms for sharing and consuming cultural content such as music, movies, literature, and art. Social media, streaming services, and online communities enable people from different cultures to connect, share experiences, and appreciate diverse perspectives.
7. **Innovation:** Digital technology fosters innovation by providing tools, resources, and platforms for experimentation, collaboration, and entrepreneurship. Startups and innovators leverage digital technology to develop new products, services, and business models that disrupt traditional industries and drive global economic growth.
8. **Global Collaboration:** Digital technology enables collaboration and cooperation among individuals, organizations, and governments across borders. Collaborative platforms, open-source software, and digital networks facilitate joint research, development projects, and initiatives aimed at addressing global challenges such as climate change, healthcare, and poverty.
9. **Market Access:** Digital technology provides businesses with access to global markets and customers, regardless of their physical location. Online advertising, search engine optimization, and social media marketing enable businesses to reach target audiences worldwide, driving sales and brand awareness on a global scale.
10. **Cultural Preservation:** Digital technology can also play a role in preserving and promoting cultural heritage and diversity. Digital archives, virtual museums, and online exhibitions help preserve cultural artifacts and

traditions, making them accessible to people around the world and fostering appreciation for cultural diversity.

These types of digital technology's impact on globalization collectively shape the interconnected nature of our modern world, influencing how people, businesses, and societies interact and collaborate across borders.

CHARACTERISTICS OF DIGITAL TECHNOLOGY'S IMPACT ON GLOBALIZATION

The characteristics of digital technology's impact on globalization encapsulate the unique attributes and qualities that define how digital advancements influence the process of globalization. Let's delve into each characteristic:

1. **Connectivity:** Digital technology enables unprecedented levels of connectivity by facilitating instant communication and interaction across geographical boundaries. This characteristic allows individuals, businesses, and organizations worldwide to engage with each other seamlessly, transcending physical limitations and fostering global networks.
2. **Accessibility:** Digital technology democratizes access to information, services, and opportunities by breaking down barriers such as geography, language, and socio-economic status. This characteristic ensures that people from diverse backgrounds can participate in the global economy and society, thus promoting inclusivity and equity.
3. **Speed:** Digital technology accelerates the pace of globalization by enabling rapid communication, transactions, and information exchange. This characteristic ensures that processes are executed swiftly, allowing businesses to adapt quickly to market changes and seize emerging opportunities.
4. **Innovation:** Digital technology fuels innovation by providing platforms for collaboration, experimentation, and creativity. This characteristic encourages the development of new products, services, and business models that drive economic growth and competitiveness on a global scale.
5. **Flexibility:** Digital technology offers flexibility in how work is conducted, allowing for remote collaboration, flexible work arrangements, and decentralized decision-making. This characteristic empowers individuals and organizations to adapt to evolving circumstances and capitalize on global opportunities.
6. **Disruption:** Digital technology disrupts traditional industries and business models, challenging established norms and creating opportunities for innovation and entrepreneurship. This characteristic reshapes the global economic landscape by fostering competition and driving structural change.
7. **Data-driven Decision Making:** Digital technology generates vast amounts of data that can be analyzed to gain insights and inform decision-making. This characteristic enables businesses to make informed choices, optimize their strategies, and enhance their competitiveness in the global marketplace.
8. **Cultural Exchange:** Digital technology facilitates cultural exchange and understanding by enabling people from different cultural backgrounds to connect, share, and learn from each other. This characteristic promotes intercultural dialogue and cooperation, enriching global society.

9. **Cyber security:** Digital technology introduces cybersecurity risks and challenges, such as cyberattacks, data breaches, and privacy concerns. This characteristic underscores the importance of cybersecurity measures and protocols to protect against potential threats and vulnerabilities.
10. **Ethical Considerations:** Digital technology raises ethical considerations related to privacy, data protection, digital rights, and algorithmic bias. This characteristic highlights the need for ethical guidelines, regulations, and responsible practices to ensure that globalization is inclusive, equitable, and sustainable for all stakeholders.

These characteristics collectively shape the impact of digital technology on globalization, influencing how societies, economies, and individuals interact and evolve in an increasingly interconnected world.

ADVANTAGES OF DIGITAL TECHNOLOGY'S IMPACT ON GLOBALIZATION

1. **Enhanced Connectivity:** Digital technology has facilitated instantaneous communication and collaboration across borders, enabling individuals and businesses to connect with each other more easily than ever before.
2. **Economic Growth:** Digital platforms and e-commerce have expanded market opportunities, allowing businesses of all sizes to reach global audiences and participate in international trade, thus stimulating economic growth.
3. **Access to Information:** The internet and digital tools have democratized access to information, empowering individuals with knowledge and resources that were previously inaccessible, thereby bridging knowledge gaps and promoting education.
4. **Innovation and Creativity:** Digital technology has fueled innovation and creativity by providing platforms for idea-sharing, collaboration, and entrepreneurship, leading to the development of new products, services, and industries.
5. **Cultural Exchange:** Digital platforms have facilitated cultural exchange and understanding by enabling people from different parts of the world to share their traditions, beliefs, and experiences, fostering greater intercultural dialogue and appreciation.

DISADVANTAGES OF DIGITAL TECHNOLOGY'S IMPACT ON GLOBALIZATION

1. **Digital Divide:** Disparities in access to technology and digital literacy create a digital divide, exacerbating inequalities between developed and developing regions, and limiting opportunities for socio-economic advancement.
2. **Cyber security Risks:** Increased reliance on digital infrastructure exposes individuals, businesses, and governments to cybersecurity threats such as hacking, data breaches, and identity theft, posing risks to privacy and security.
3. **Job Displacement:** Automation and digitalization have led to job displacement in certain sectors, as traditional roles are replaced by

technology-driven solutions, resulting in unemployment and economic instability for affected workers.

4. **Loss of Cultural Identity:** Globalization facilitated by digital technology can lead to the homogenization of culture, as Western values and norms often dominate digital spaces, potentially eroding local traditions and identities.
5. **Digital Dependence:** Over-reliance on digital technology can lead to addiction, social isolation, and mental health issues, as individuals become increasingly disconnected from real-world interactions and experiences.

Overall, while digital technology has brought about numerous benefits in terms of connectivity, economic growth, and innovation, it is essential to address its associated challenges and risks to ensure that globalization is inclusive, sustainable, and equitable for all stakeholders.

RESEARCH METHODOLOGY

The present look at is in the nature of qualitative and deep understanding approximately the standards of Globalization, New verbal exchange technologies (Social Media) and its socio-cultural modifications and interrelationship between them. This research paper is based totally on extensive overview .

CONCLUSION

In conclusion, digital technology has profoundly impacted globalization, revolutionizing various sectors such as healthcare, agriculture, education, banking, and supply chain management. The types of digital technology's impact on globalization include communication, commerce, information access, remote work, data analytics, cultural exchange, innovation, global collaboration, market access, and cultural preservation. These impacts are characterized by enhanced connectivity, accessibility, speed, innovation, flexibility, disruption, data-driven decision-making, cultural exchange, cybersecurity concerns, and ethical considerations. While digital technology has brought numerous advantages such as enhanced connectivity, economic growth, access to information, innovation, and cultural exchange, it also presents challenges like the digital divide, cybersecurity risks, job displacement, loss of cultural identity, and digital dependence. It is crucial to address these challenges to ensure that globalization facilitated by digital technology remains inclusive, sustainable, and equitable for all stakeholders.

References

1. Bridge, G. (2002). Grounding globalization: The prospects and perils of linking economic processes of globalization to environmental outcomes. *Economic Geography*, 78(3), 361. doi:10.2307/4140814
2. Frank, A. (1998). *Re-Orient: Global economy in the Asian age*. Berkeley.
3. *Globalization: Threats or Opportunity*. (2000). International Monetary Fund.
4. Bridges, G. (2002). *Grounding Globalization: The Prospects and Perils of Linking Economic*.
5. Bridge, G. (2009). Grounding globalization: The prospects and perils of linking economic processes of globalization to environmental outcomes. *Economic Geography*, 78(3), 361–386. doi:10.1111/j.1944-8287.2002.tb00191.x

6. Manovich, L. (n.d.). New Media From Borges to HTML. In *The New Media Reader*.
7. *Building Media's industry while promoting community of values in the*. (n.d.).
8. Politické Vedy. (2011). *Journal of International Affairs, Policy and Security*.
9. Fakulta politických vied a medzinárodných vzťahov. (n.d.). Retrieved 15 April 2024, from <http://www.fpvmmv.umb.sk/politickevedy>
10. Volkmer, I. (1999). *News in the Global Sphere. A Study of CNN and its impact on*.
11. Williams, R. (2003). *Television: Technology and cultural form* (3rd ed.). Taylor & Francis Group.
12. Durham, M., & Kellner, D. (2001). *Media and Cultural Studies*. Blackwell Publishing.
13. Castells, M. (2011). *The rise of the network society* (2nd ed.). Chichester, England: Wiley-Blackwell.
14. Leech, G. N., & McLuhan, M. (1963). The Gutenberg galaxy: The making of typographic man. *The Modern Language Review*, 58(4), 542. doi:10.2307/3719923
15. Kreimer, O., & McLuhan, M. (1969). Understanding media: The extensions of man. *Desarrollo Economico*, 9(34), 314. doi:10.2307/3466127
16. Manovich, L. (2001). *The Language of New Media* MIT Press. Cambridge and London.
17. Reshaping social movement media for a new millennium. (2017). In *Social Movements* (pp. 355–372). doi:10.4324/9781315662084-21
18. Preston, P. (n.d.). *Reshaping Communications: Technology*. Information and Social.
19. Wasserman, H. (2007). Is a new worldwide web possible? An explorative comparison of the use of ICTs by two South African social movements. *African Studies Review*, 50(1), 109–131. doi:10.1353/arw.2005.0144
20. *Mind Your Tweets: The CIA Social Networking Surveillance System*. (n.d.). (N.d.). Retrieved 15 April 2024, from http://www.wikileaks.org/wiki/Mind_Your_Tweets:_The_CIA_Social_Networking_Surveillance
21. Croteau, D., & Hoynes, W. (2003). *Media Society: Industries, Images and Audiences*.
22. CjLivesey. (n.d.). Sociology central: Home. Retrieved 15 April 2024, from <http://www.sociology.org.uk/as4mm3a.do>

A Comparison between Indian Economy and Digital Globalization: A Socio-Economic Study

Sandeep Kumar Sharma*

1. INTRODUCTION

An economy refers to the system of production, distribution, and consumption of goods and services. As a fledgling democracy, India's economic experiment of planned development was held out as an example to many aspiring low-income countries in the 1950s. While some countries raced ahead in the development process, India lagged. This is evident from the fact that it took 40 long years from 1950 for India's real per capita GDP to double by 1990-91. The Government of India introduced the New Economic Policy (NEP) in 1991 characterized by liberalization, privatization, and globalization.¹

While the literature on globalization frequently mentions the connection between digitalization and globalization, it does not address directly the question of how much global economic activity was stimulated by the rapid diffusion of information and communication technologies (ICTs) and by the declining costs associated with them.²

India's Digital India Flagship program, launched in 2015, stands out as a transformative initiative driving the nation towards digital empowerment. It has propelled India to the forefront of the global digital economy. The COVID-19 pandemic has further accelerated digitalization, with the Indian population's

1 Article by Namrata Anand, *"An Overview of Indian Economy (1991-2013),"* IOSR Journal of Economics and Finance, PP. 19-24

2 Article by Jeffrey A. Hart, *"Globalization and Digitalization,"* Indiana University. Bloomington, IN 47405

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quick adaptation being a key factor. Private players, along with government initiatives like Make in India and Digital India, have fostered this growth, making India a leader in digital innovation.

2. REVIEW OF LITERATURE

Daniele Schilirò, *“Digital Transformation COVID-19 and the future of work,”* IJBMER said that more and more recent research claims that digital globalization is a new form of globalization and that it would bring relevant changes to the way business is conducted. Digital globalization is increasing global economic, financial, and social connections through digital platforms as data and information grow.³

Dr. J. Muni Narendra & Dr. K. Balasubramanyam, *“Trends, Opportunities And Challenges In Digital Economy Of India,”* IJRAR said that the digital economy is the worldwide network of economic activities, commercial transactions, and professional interactions that are enabled by information and communications technologies (ICT). It can be succinctly summed up as an economy based on digital technologies. Digital Economy refers to an economy that is based on digital technologies.⁴

Anjali-shrivastva, *“Impact Digitalization India’s Economic-growth”* said the fast-paced digitalization has significantly impacted the country’s economic growth, with tremendous opportunities for continued growth in the digital economy.⁵

J.K. Jain *“Digitalization & Its Impact On Inhabitants Of India Through Digital India Product And Services”* (IJIRA), explained that Digital India promotes financial progress and the generation of numerous employment possibilities, Digitalization has become one of the major economic drivers in several nations in previous years.⁶

Dr. Shazia Khan & Mohsina Aftab, *“Digitization And Its Impact On Economy”* (IJDLs) stated that digitization has a proven impact on the economy and society by reducing unemployment, improving quality of life, and boosting access to knowledge and other public services. The process of digitization is marked by cost-effectiveness to cut the cost incurred in various knowledge practices related to the production, organization, and communication of information that makes long-term economic growth.⁷

3. OBJECTIVES OF THE STUDY

The objective of this research article is to comprehensively analyze the impact of digital globalization on the Indian economy.

- I. To analyze the impact of digital globalization on the Indian economy.
- II. To navigate the opportunities and challenges presented by digitalization.
- III. To provide valuable measures/suggestions for policymakers, businesses, and other stakeholders.

3 Vol 12(3), 2021, 1945-1952

4 July 2022, Volume 9, Issue 3

5 www.linkedin.com

6 Volume 03, No. 01(III), January- March, 2023, pp 55-63

7 Vol. 5, April - June 2015, Issue - 2

4. METHOD

The method used in this paper is the descriptive-evaluative method. The study is mainly review-based. It is based on only secondary sources of data, i.e. books, journals, papers and articles, and the internet.

5. THE JOURNEY OF THE INDIAN ECONOMY

- I. **Post-Independence Challenges (1947-1990):** The period immediately following India's independence was marked by numerous challenges, including poverty, a large agrarian economy, limited industrialization, and inadequate infrastructure. The government adopted a planned economy approach, focusing on import substitution industrialization, and implemented policies aimed at self-reliance.⁸
- II. **Economic Reforms and Liberalization (1991-2000):** The economy responded with a surge in growth, which averaged 6.3 percent annually in the 1990s and the early 2000s, a rate double that of earlier time frames. Shortages disappeared. On the eve of the reforms, the public telecom monopoly had installed five million landlines in the entire country and there was a seven-year waiting list to get a new line.⁹
- III. **Information Technology and Services Boom (2000-2010):** The 2000s witnessed the rapid growth of India's information technology (IT) and services sector. India emerged as a global hub for IT outsourcing, software development, and business process outsourcing. This sector played a crucial role in driving economic growth, job creation, and foreign exchange earnings.
- IV. **Infrastructure Development (2010-2020):** The last decade saw a significant focus on infrastructure development. The government launched initiatives such as the National Highways Development Project, Smart Cities Mission, and Digital India. Investments in transportation, energy, and digital infrastructure aimed to enhance connectivity, support economic activities, and improve the quality of life.
- V. **Shift towards Innovation and Startups (2010-2023):** In recent years, India has witnessed a surge in entrepreneurial activity and a thriving startup ecosystem. The government's initiatives such as Startup India and Make in India have fostered innovation, technological advancements, and job creation. Sectors such as e-commerce, fintech, and healthcare technology have seen rapid growth, attracting domestic and foreign investments.

6. CURRENT STATE OF THE INDIAN ECONOMY

Maria Reshchikova (2023) "Drivers and Limitations of the Indian Startup Industry" (MGIMO Review of International Relations) stated the current state of the Indian economy presents a mixed picture of growth and challenges. India has positioned itself as one of the fastest-growing major economies globally, with a GDP projected to surpass China's in the coming years.¹⁰

8 www.linkedin.com/pulse/1947-2023-remarkable-journey-indian-economy-its-growth-gaurang-patel

9 www.asianstudies.org/publications/ea/archives/the-history-of-economic-development-in-india-since-independence

10 2023, pp. 263-297

7. DIGITAL GLOBALIZATION AND ITS IMPACT ON THE INDIAN ECONOMY

Digital globalization has had a profound impact on the Indian economy, offering numerous opportunities for growth and development. With increasing access to global markets through digital platforms, Indian businesses can reach a broader audience at a fraction of the cost compared to traditional methods. This has led to a significant rise in e-commerce activities and outsourcing services, creating new job opportunities and boosting economic growth. Additionally, the adoption of digital technologies has enhanced efficiency in various sectors, such as finance, healthcare, and education, leading to increased productivity and competitiveness.

8. DIGITAL INDIA FOR SUSTAINABLE DEVELOPMENT GOALS

I. Sustainable Development Goals (SDGs) - Relevance for Digital India:

SDGs are comprehensive and focus on the five Ps – people, planet, prosperity, peace, and partnership. Agenda 2030 is a set of 17 specific goals – ranging from poverty elimination, ending hunger and malnutrition, health and well-being, education, gender equality, water and sanitation, energy, growth, resilient infrastructure, inequality reduction, sustainable production and consumption, urbanization and habitat, climate change, life on land, life below water, peace, and justice, and global partnerships - to be achieved by 2030.



The below goals are aligned with the Digital India vision which is centered on three key areas, viz., Digital Infrastructure as a Core Utility for Every Citizen, Governance and Services on Demand, and Digital Empowerment of Citizens.



II. Mapping - Digital India and SDGs

The formulation of a Global Roadmap Document for Digital India and SDGs is based upon mapping the interface between SDGs (17 Goals and 169 targets) and Digital India. The mapping specifically covers the schemes relevant to each Goal and describes where the key interventions are already underway or are in the process of implementation. Moreover, given that the SDGs are closely interlinked, it helps to pinpoint actionable issues where Digital India can foster better coordination and more effective outcomes.

The mapping exercise indicates the direct linkage between the SDGs and Digital India initiatives.

For instance, **MGNREGA** – one of the world's largest rural employment guarantee programmes, which guarantees a minimum of 100 days' employment on demand to rural poor, is directly covering Goal 1 – End Poverty in all its forms everywhere. NREGA Soft Payments, an initiative under Digital India, enables wages to be paid using Aadhaar-based Direct Benefit Transfer (DBT). This ensures better management of MGNREGA and timely payment of wages.

Similarly, all other SDGs have direct intervention or indirect support from Digital India – ranging from food security (Targeted Public Distribution system – an end-to-end online PDS that automates and makes transparent all operations from procurement to final disbursement) to health (e-Hospital for healthcare services and online registration system for appointment in hospitals), education (SMS-based Mid-Day Meal monitoring, and eBasta for digital school textbooks), gender equality (Beti Padhao, Beti Bachao scheme for empowering girl child), drinking water & sanitation (Swachh Bharat app to monitor waste management), rural energy services (GARV application to track progress of rural electrification and DBT PAHAL helps in distribution of LPG cylinders in rural areas to provide clean and efficient cooking fuel), sustainable growth (Common Services Centres for village level entrepreneurs), entrepreneurship through Start-Up India (incubation centres and scholarships for PhD students), BharatNet and National Knowledge Network provide high-speed broadband connectivity), inculcation of innovation (DigiLocker provides access to authentic documents from single source of truth), and inclusion of marginalized groups through Stand-Up India

app (for facilitating loans) for the differently-abled citizens, among many others. This mapping indicates that Digital India has the most direct relevance to SDG 17 which underpins all SDGs – strengthening the means of implementation and partnerships. Digital India is the umbrella for the JAM (JanDhan, Aadhaar and Mobile) trinity, Unified Payment Interface (UPI), Bharat Interface for Money (BHIM) app, e-Trade MMP, mMyGov, Electronic Transaction Aggregation & Analysis Layer (eTAAL), etc. Other SDG 17 - related interventions such as Goods & Services Tax (GST), online Income Tax, e-Sansad, Project Management Information System (PMIS), knowledge and learning management, and e-procurement are also supported by Digital India initiatives such as Open Forge, GST Network, PayOnline, DigiShala, DigiLocker, PMIS, Unified Mobile Application for New-Age Governance (UMANG), etc.¹¹

9. COMPARISON BETWEEN A DEVELOPED COUNTRY AND A DEVELOPING COUNTRY

Basis For Comparison	Developed Countries	Developing Countries
Meaning	A country that has an effective rate of industrialization and individual income is known as a developed country.	A developing country is a country that has a slow rate of industrialization and low per capita income.
Unemployment and Poverty	Comparatively Lower	Generally Higher
Rates	The infant mortality rate, death rate, and birth rate are low, while the life expectancy rate is high.	High infant mortality rate, death rate, and birth rate, along with a low life expectancy rate.
Living conditions	Good	Moderate
Generates more revenue from	Industrial sector	Service sector
Growth	High industrial growth.	They rely on developed countries for their growth.
Standard of living	Generally Higher	Comparatively Lower
Distribution of Income	Equal	Unequal
Factors of Production	Effectively utilized	Ineffectively utilized

10. ADVANTAGES AND DISADVANTAGES OF DIGITAL GLOBALIZATION

- I. **Easier International Trade:** With digital technologies, we can speed up customs at nation-state borders, move money more efficiently, and even move goods faster as air flight innovation improves. A clear example is the rise of international currency conversion apps like TransferWise.
- II. **One World Economy:** Technologies that automate trade can help create a more cohesive globalized economy. This will speed up the development of market efficiencies and economies of scale. One example of this is if one

11 Digital India for Sustainable Development Goals Pathways for Progress, www.meity.gov.in

nation has a competitive advantage in producing a particular good, they can produce it en masse and make it cheaply available to the whole world.¹²

- III. **Economic Growth:** The World Bank found that technological globalization has “contributed to rising domestic productivity levels in advanced and emerging economies.” Technologies can help us produce goods more efficiently and with less manpower, which in turn makes those goods cheaper and allows businesses to scale faster.¹³
- IV. **Reducing Poverty:** The World Bank also found that technological globalization has overall reduced poverty rates around the world. They state: “Rapid technological progress in developing countries has been central to the reduction of poverty in recent decades”. Despite this excellent outcome, there are also clear losers from globalization, which is discussed below.¹⁴
- V. **Faster Technological Innovation:** The global spread of technology has also enabled scientists and engineers around the world to engage in global competition. Each nation observes other nations’ innovations and builds on them, enabling technology to be developed faster and faster.
- VI. **Rise of Online Communities:** Those with access to the internet are able to develop contacts with others who share their own hobbies and interests around the world. This has allowed people to ‘find their tribe’ and helped people to develop their identities in unique new ways, rather than around traditional nationalistic or regional identity formations.

Disadvantages

- I. **Replacement of Workers by Machines:** New technologies have been implemented in factories to replace workers in menial tasks. While this has been good for making cheaper goods, many worry that it will destroy entire industries and leave people unemployed and disillusioned. For example, Andrew Yang warns of the impact of automated driverless trucks on the trucking industry:
- II. **Cultural Homogenization:** As people around the world get access to global media technologies, the dominant media producers (namely, the United States and, in particular, Hollywood) spread their cultures around the world. This has led to people blaming globalization for the “Disneyfication of culture” while indigenous and local cultures become diluted and people increasingly develop transnational identities.¹⁵
- III. **Rise of Fake News:** As internet technologies have enabled anyone to develop their own podcast, YouTube channel, or blog, control over the spread of information has been diluted. There are concerns that new technologies have allowed conspiracy theorists and extremist organizations to spread their nefarious messages online.

12 <https://helpfulprofessor.com/capitalism-examples/>

13 <https://www.worldbank.org/en/events/2018/10/18/globalization-and-technological-transformation>

14 *ibid*

15 <https://helpfulprofessor.com/technological-globalization-examples-pros-cons/>

10. DATA REPRESENTATION AND ANALYSIS

As a developing nation grappling with various financial challenges, India confronts the task of bridging the digital divide, particularly in rural areas where approximately 70% of the population resides. While strides have been made in internet penetration and technological adoption, the crucial endeavor lies in directing these advancements toward enhancing productivity and bolstering economic value. Educating rural communities about the benefits and implications of digitalization stands as a paramount challenge, especially in the aftermath of the COVID-19 pandemic. Empowering individuals with financial literacy emerges as a key priority for fostering economic growth and resilience.¹⁶

12. FINDINGS

- I. Technology and digital divide between cities and rural areas
- II. Lack of government support for digitalization in rural areas
- III. Poorly designed education systems for digitalization
- IV. Limited government skill formation initiatives exist for digitalization.
- V. There are uncertainties about the security risks of unsecured virtual facilities.

13. CONCLUSIONS AND SUGGESTIONS

Digitization revolutionizes the landscape of work, enhancing both its effectiveness and efficiency. When applied to governance, as in e-governance initiatives, it not only amplifies transparency within governmental bodies but also streamlines service delivery, ultimately elevating the quality of life for citizens. By accelerating processes and minimizing time constraints across various functions, digitalization trims costs and expands market reach, thus bolstering profitability across sectors. In agriculture, automation mitigates uncertainties while optimizing resource utilization. Similarly, industrial automation fosters superior product innovation and increased profit margins, fostering healthy competition and sectoral growth. Moreover, digitizing services ensures heightened customer satisfaction and service quality through timely and extensive delivery. This transformation also catalyzes the evolution and expansion of the service sector, presenting vast opportunities for development. Notably, the impact extends to the employment landscape, underscoring the imperative for India's economy to transition from developing to developed status. Achieving this demands concerted efforts to surmount obstacles obstructing digitalization. Successful implementation of programs like Digital India promises improved agricultural yields, enhanced cost-output ratios in the industry, and heightened service quality, all while instilling transparency across systems and processes, ultimately enriching the quality of life.

Bibliography

1. Article by Namrata Anand, "An Overview of Indian Economy (1991-2013)," IOSR Journal of Economics and Finance, PP. 19-24
 2. Article by Ms.Neeta M, "Digital India programme and impact of digitalization on Indian economy" 2019 IJRAR February 2019, Volume 6, Issue 1
-
- 16 Article by Atul Choudhary, "Impact and Challenges of Digitalisation on Indian Economy: A Post Pandemic Content Analysis " International Journal of Research Publication and Reviews, Vol 4, no 5, pp 448-451

3. Article by Jeffrey A. Hart, *"Globalization and Digitalization"*, Indiana University. Bloomington, IN 47405
4. Article by Daniele Schilirò, *"Digital Transformation COVID-19 and the future of work"* International Journal of Business Management and Economic Research(IJBMER), Vol 12(3), 2021, 1945-1952
5. Article by Dr.J.Muni Narendra & Dr.K.Balasubramanyam, *"Trends, Opportunities And Challenges In Digital Economy Of India,"* IJRAR July 2022, Volume 9, Issue 3
6. <https://www.linkedin.com/pulse/impact-digitalization-indias-economic-growth-anjali-shrivastva/>
7. Article by Prof. J.K. Jain *"Digitalization & Its Impact On Inhabitants Of India Through Digital India Product And Services"* International Journal of Innovations & Research Analysis (IJIRA), Volume 03, No. 01(III), January- March, 2023, pp 55-63
8. www.linkedin.com/pulse/1947-2023-remarkable-journey-indian-economy-its-growth-gaurang-patel
9. www.asianstudies.org/publications/ea/archives/the-history-of-economic-development-in-india-since-independence
10. Dr. Shazia Khan & Mohsina Aftab, *"Digitization And Its Impact On Economy"* International Journal of Digital Library Services, Vol. 5, April - June 2015
11. Digital India for Sustainable Development Goals Pathways for Progress, www.meity.gov.in
12. Article by Martin P. Mandalu, www.linkedin.com/pulse/exploring-5-major-differences-between-developing-vs-mandalu-ph-d/
13. <https://helpfulprofessor.com/capitalism-examples/>
14. <https://www.worldbank.org/en/events/2018/10/18/globalization-and-technological-transformation>
15. <https://helpfulprofessor.com/technological-globalization-examples-pros-cons/>
16. Article by Atul Choudhary, *"Impact and Challenges of Digitalisation on Indian Economy: A Post Pandemic Content Analysis "* International Journal of Research Publication and Reviews, Vol 4, no 5, pp 448-451

A Study on Pradhan Mantri Kaushal Vikash Yojana

Surya Prakash*

INTRODUCTION

Pradhan Mantri Kaushal Vikas Yojana is a skill development initiative scheme of Government of India for recognition and standardisation of skills. The aim of the pmkvy scheme is to encourage aptitude towards employable skills and to increase working efficiency of probable and existing daily wage earners, by giving monetary awards and rewards and by providing quality training to them. Average award amount per person has been kept as ₹8,000 (US\$110). Those wage earners already possessing a standard level of skill will be given recognition as per scheme and average award amount for them is ₹2000 to ₹2500. In the initial year, a target to distribute ₹15 billion (US\$210 million) has been laid down for the scheme. Training programmes have been worked out on the basis of National Occupational Standards (NOS) and qualification packs specifically developed in various sectors of skills. For this qualification plans and quality plans have been developed by various Sector Skill Councils (SSC) created with participation of Industries. National Skill Development Council (NSDC) has been made coordinating and driving agency for the same. An outlay of ₹120 billion (US\$1.7 billion) has been approved by the cabinet for this project. The scheme has a target to train 1 crore Indian youth from 2016-20. As of 18 July 2016, 17.93 lakh candidates were trained out of 18 lakh who enrolled for the scheme. The Union Cabinet, chaired by the Prime Minister, Shri Narendra Modi, approved the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) with an outlay of Rs. 1500 crores. This will be the flagship scheme for skill training the youth, to be

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implemented by the new Ministry of Skill Development and Entrepreneurship, through the National Skill Development Corporation (NSDC). Skill training would be based on the National Skill Qualification Framework (NSQF) and industry led standards. Under the Scheme, a monetary reward is given to trainees on assessment and certification by third party assessment bodies. Highlights of skill training would be that it would be done on the basis of demand, assessed by the NSDC. For assessment of demand, Central ministries/Department /State Governments, Industry and Business would be consulted. A demand aggregator platform would be launched for the purpose very soon. The target for skilling would be aligned to demand from other flagship programmes, launched in recent times, such as MAKE IN INDIA, DIGITAL INDIA, and NATIONAL SOLAR MISSION AND SWACHH BHARAT ABHIYAN. Considering the diversity of the country, cross-cultural differences, and local languages, a country-wide network will have to take into account the varied surfaces of skill development. As the economy becomes more dependent on digital technology, more and more jobs are also becoming digitally depended. SCC NASSCOM has taken the foremost footstep to allow the workforce of today by training them by giving the required capabilities and technical skills. It has undertaken a variety of initiatives to sanction for downy changeover of its workforce from university students to professionals in the IT-ITeS sector.

Currently, only a very small proportion of India's workforce has any formal skill training. Not surprisingly therefore several sectors of the country's economy face shortage of skilled people and are mired with low productivity levels due to poor quality of workforce. At the same time, large sections of the country's youth are looking for economic and livelihood opportunities. In this context, skill development has become a key priority area for the country. This is not only essential for economic development, but would help to fulfil youth aspirations for good quality, better paid jobs and self-employment opportunities. This would also enable the country to take advantage of its favourable demographic profile. With a large pool of skilled people, India has an opportunity to become a skill provider for the world, particularly the ageing developed world. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship outcome-based skill training scheme of the new Ministry of Skill Development & Entrepreneurship (MSDE). This skill certification and reward scheme aims to enable and mobilize a large number of Indian youth to take up skill training and become employable and earn their livelihood. Under the scheme, monetary reward would be provided to trainees who are successfully trained, assessed and certified in skill courses run by affiliated training providers. This will boost the productivity of the country's workforce by enabling them to acquire high quality skill training across a range of sectors. It will also bring about a paradigm shift from input-based to outcome-based skill training in the country. It also seeks to significantly scale up skill training activities in the country and enable skill training to happen at a fast pace without compromising quality. Institutional arrangements comprising of the National Skill Development Corporation (NSDC), Sector Skill Councils (SSCs), Assessing agencies and Training Partners are already in place for implementation of the scheme.

PMKVY 1.0: Launch: India's largest Skill Certification Scheme Pradhan Mantri Kaushal Vikas Yojana (PMKVY) - was launched on 15 July, 2015 th (World Youth Skills Day).

Aim: To encourage and promote skill development in the country by providing free short duration skill training and incentivizing this by providing monetary rewards to youth for skill certification. **Implementation:** PMKVY is implemented by the National Skills Development Corporation (NSDC) under the guidance of the Ministry of Skill Development and Entrepreneurship (MSDE).

Key Components: Short Term Training, Special Projects, Prior Learning, Kaushal & Rozgar Mela, etc. **Outcome:** In 2015-16, 19.85 lakh candidates were trained.

PMKVY 2.0: Coverage: PMKVY 2016-20 (PMKVY 2.0) was launched by scaling up both in terms of Sector and Geography and by greater alignment with other missions of the Government of India like Make in India, Digital India, Swachh Bharat, etc. **Budget:** Rs. 12,000 Crore. **Implementation Through Two Components:** Centrally Sponsored Centrally Managed (CSCM): This component was implemented by National Skill Development Corporation. 75% of the PMKVY 2016-20 funds and corresponding physical targets have been allocated under CSCM. Centrally Sponsored State Managed (CSSM): This component was implemented by State Governments through State Skill Development Missions (SSDMs). 25% of the PMKVY 2016-20 funds and corresponding physical targets have been allocated under CSSM. **Outcome:** More than 1.2 Crore youth have been trained/oriented through an improved standardized skilling ecosystem in the country under PMKVY 1.0 and PMKVY 2.0.

PMKVY 3.0: Coverage: Launched in 717 districts, 28 States/eight UTs, PMKVY 3.0 is a step towards Source: PIB 'Atmanirbhar Bharat'. **Implementation:** It will be implemented in a more decentralized structure with greater responsibilities and support from States/UTs and Districts. District Skill Committees (DSCs), under the guidance of State Skill Development Missions (SSDM), shall play a key role in addressing the skill gap and assessing demand at the district level.

Features: It envisages training of eight lakh candidates over a scheme period of 2020-2021 with an outlay of Rs. 948.90 crore. The 729 Pradhan Mantri Kaushal Kendras (PMKKs), empaneled non-PMKK training centres and more than 200 Industrial Training Institutes (ITIs) under Skill India will be rolling out PMKVY 3.0 training to build a robust pool of skilled professionals. It will be more trainee- and learner-centric. The focus is on bridging the demand-supply gap by promoting skill development in areas of new-age and Industry 4.0 job roles. It will be a propagator of vocational education at an early level for youth to capitalize on industry-linked opportunities. The National Educational Policy 2020 also puts focus on vocational training for a holistic growth and increased employability. By taking the bottom-up approach to training, it will identify job roles that have demand at the local level and skill the youth, linking them to these opportunities (Vocal for Local). It will encourage healthy competition between states by making available increased allocation to those states that perform better.

Advantages and Disadvantages of PMKVY-

- It helps to develop the skill
- The certificate pradhan mantri koshal vikas yojana help to get job
- The free and open for everyone
- There are number of course list is available in pmkv

- Doing pmkvy develop to start his own business
- After doing pmkvy we get lot of opportunity
- Pmkvy gave Monetary rewards to the best performer
- Student who has done this program can apply it various prominent job
- The centre of pmkvy we can get easily
- This type of digital scheme help to grow India
- Pmkvy scheme help to grow the economy

Disadvantages of PMKVY-

- Trained in one role placed in another
- Trained in one role but do not land a job
- Training location vs job location
- Lower Payouts for training
- Students Payouts
- Franchising
- Focus on school dropouts
- Mobilisation support from government
- People did not aware much of pmkvy
- Fraud happens in this type scheme

OBJECTIVE OF STUDY

1. To know about pmkvy.
2. To know about employment opportunities by pmkvy.
3. To know about advantages and disadvantages of pmkvy.
4. To know about training location and job location.

RESEARCH METHODOLOGY OF STUDY

In this research paper we used secondary data.

CONCLUSION

This paper has analysed the activities of Indian government for making open doors for Indian youth to build up their aptitudes, and the requirements that test them. Today, India faces huge difficulties to build up the abilities of Indian youth. Indian youngsters fall into two primary gatherings. A little part from monetarily well-off working classes get great instruction and preparing and generously compensated occupations in the composed segment. In this research paper we found that pmkvy is effective in rural and urban areas. And pmkvy is able to provide jobs and skill to Indian youth.

References

1. S Bhuvana, Kavya, P Geetanjali
2. A Study on Effectiveness of Pradhana Mantri Kaushal Vikas Yojana Centres in Bengaluru Regions
3. J. of Management and Commerce, volume 4 , issue 2 , p. 22 - 25 Posted: 2018

4. M Agrawal , K S Thakur
5. Impact of Pradhan Mantri Kaushal Vikas Yojana on the Productivity of Youth in Gwalior Region
6. India. International Journal of Recent Technology and Engineering , volume 8 , issue 4 , p. 801 - 806 Posted: 2019
7. S Gupta , S K Kashyap
8. Analysing pradhan mantri kaushal vikas yojana from the lens of training literature
9. International Journal of Agriculture Sciences , volume 10 , issue 12 , p. 6408 - 6410 Posted: 2018

Websites

1. Pmkvyofficial.org
2. Nsdcindia.org
3. Msde.gov.in

A Study of Emotional Intelligence and Working women's Mental Health

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1.1 INTRODUCTION

The absence of mental diseases is only one aspect of mental wellness. The World Health Organization's (WHO) concept of health as stated in its constitution emphasises the positive aspect of mental health: Not just the absence of illness or disability, but also whole physical, mental, and social well-being is referred to as "health" Women are psychologically stronger than men, according to research by Holmstrom Reijo (1976). The phrase "mental health" itself has a wide range of meanings because it refers to a nebulous and diffuse field. Blanco field (1967) defined mental health as a composite of attitude towards oneself, ability to realize once potential through action, degree of independence from social influence and the ability to perceive realistically the world around. Ferguson (1965) stated that mental health is the ability to cope with one's environment in such a way that one's institutional drives are gratified.

1.2 REVIEW OF LITERATURE

Emotional Intelligence (EI) is a behavioural concept that has only recently gained popularity thanks to Daniel Goleman's 1995 book of the same name. When psychologists first started discussing intelligence, they tended to concentrate on cognitive skills like memory and problem-solving. Researchers did, however, understand early on the importance of the non-cognitive components. The majority of studies have shown a high correlation between emotional intelligence and mental health. As a predictor of their mental health, Sanjeev (2015) looked at

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the emotional competence of 120 scientific pre-service teachers. Results showed that there were substantial differences between the mental health of pre-service science instructors who fell into the general and reserved categories. The low mental health score of pre-service teachers who fall into the reserved category shows that they lack traits like self-assurance, self-acceptance, self-identity, self-realization, acceptance of others, and situational flexibility. EI and mental health were found to be adversely associated in a study by Katarzyna (2016). However, it was discovered that individuals with a low EI had considerably lower mental health than participants with an average or high EI when unemployed people with low, average, and high EI were compared. Emotional intelligence and self-efficacy, according to research by Garima and Sushil Kumar (2010), are positively connected with mental health. Additionally, it was discovered that male students outperformed female students in terms of self-efficacy, emotional intelligence, and mental wellness. According to Jafar et al. (2010), there is a substantial correlation between emotional intelligence and the results of mental health scales and subscales. This study also showed that emotional intelligence affects the scores on mental health scales and subscales.

1.3 NEED OF THE STUDY

It is clear from surveys of the research on mental and emotional intelligence that several areas, including origins, consequences, and predictors of mental health, require further study. There are several scales for evaluating mental health, however they often evaluate mental illness rather than healthy mental functioning. There are surprisingly few studies that look at how emotional intelligence affects women's mental health. There was no research that looked at the impact of emotional IQ on the mental health of working women.

1.4 OBJECTIVES

The main objective of the present study is to examine

1. To understand low and high emotional intelligence on mental health of working women.
2. To identify origins, consequences, and predictors of mental health, require further study.

1.5 HYPOTHESES

In order to realize the objectives of the study the following hypotheses have been formulated:

1. There will be no significant difference between low and high Appraisal of Emotions in the Self of emotional intelligence on mental health of working women.
2. There will be no significant difference between low and high Appraisal of Emotions in the others of emotional intelligence on mental health of working women.
3. There will be no significant influence between low and high Emotional Expression of emotional intelligence on mental health of working women.
4. There will be no significant difference between low and high Emotional Regulation of the Self of emotional intelligence on mental health of working women.

5. There will be no significant difference between low and high Emotional Regulation of the others of emotional intelligence on mental health of working women.
6. There will be no significant difference between low and high Utilization of Emotions in Problem Solving of emotional intelligence on mental health of working women.
7. There will be no significant difference between low and high uncategorized of emotional intelligence on mental health of working women.

Measures

In the present study, two different measures were used, namely Mental health Inventory (MHI), and Emotional Intelligence (EI)

1.6 SAMPLE PROCEDURE AND DATA COLLECTION

The working women in the Visakhapatnam area of Andhra Pradesh, India, were the subjects of the study. The information was gathered at random from 201 working women in the Visakhapatnam district of Andhra Pradesh. Participants included teachers, pretty business owners, Anganvadi workers, and other unorganised organisations. The concerned parties were informed of the study's goal by the researcher, who then used their responses to determine how to respond to each issue. Forms with blank or missing fields were not taken into account for the analysis. Along with the normal surveys, all of the questionnaires were translated into Telugu to help the sample members comprehend.

1.7 ANALYSIS OF THE DATA

The SPSS statistical software, version 21, was used to conduct all of these statistical analyses. The data were described using descriptive statistics, and mean values were calculated. The 't' test was used to investigate the significance of Mean's regarding the low and high emotional intelligence on working women's mental health.

1.8 RESULTS AND DISCUSSION

The findings of this section illustrate how emotional intelligence affects working women's mental health in different ways. The working women were divided into two categories based on how emotionally intelligent they were: low and high. Based on the average value of each dimension, these groupings were created.

Table 1 Mental Health
Low and high appraisal of emotions in self among working women

MH dimensions	Appraisal of Emotions in Self	N	Mean	SD	t- value
Positive Self Evaluation	Low	92	23.41	4.31	2.12*
	High	109	22.03	4.86	
Perception of Reality	Low	92	19.32	3.36	0.14
	High	109	19.19	7.78	

Integration of Personality	Low	92	28.00	4.96	1.04
	High	109	27.23	5.44	
Autonomy	Low	92	14.60	2.84	2.26*
	High	109	13.66	3.00	
Group Oriented Attitudes	Low	92	23.35	3.65	0.97
	High	109	22.83	3.95	
Environmental Mastery	Low	92	25.03	3.84	0.20
	High	109	24.91	4.90	

* $p \leq .05$ level, ** $p \leq .01$ level

1.9 APPRAISAL OF EMOTIONS IN THE SELF

The above table 1 displays the statistically significant mean differences between working women's low and high ratings of their own emotions on various mental health parameters. The t- values clearly show that it is statistically significant. The null hypothesis is therefore disproved. According to the results, a high self-emotional self-appraisal group significantly outperformed a low self-emotional self-appraisal group on the dimensions of positive self-evaluation ($t=2.12$, $p.05$) and autonomy ($t=2.26$, $p.05$) of mental health. It means that high appraisal of emotions in self working women have a feeling self confident, able to take quick decisions, playing important role in social ceremony. The well-adjusted person accepted her limitations and does not blame others for her deficiencies and does not run away from challenging situations.

Table 2 Mental Health
Low and high appraisal of emotions in others among working women

MH Dimensions	Appraisal of Emotions in Others	N	Mean	SD	t- value
Positive Self Evaluation	Low	94	21.74	4.77	2.66*
	High	107	23.47	4.42	
Perception of Reality	Low	94	18.43	4.08	1.79
	High	107	19.97	7.46	
Integration of Personality	Low	94	27.38	4.65	0.51
	High	107	27.76	5.70	
Autonomy	Low	94	13.80	2.81	1.31
	High	107	14.35	3.07	
Group Oriented Attitudes	Low	94	23.06	3.94	0.00
	High	107	23.07	3.71	
Environmental Mastery	Low	94	24.03	4.11	2.85*
	High	107	25.79	4.56	

* $p \leq .05$ level

1.10 APPRAISAL OF EMOTIONS IN OTHERS

Table 2 shows the statistically significant mean differences between low and high emotional intelligence on the working women's mental health dimension. The results showed that, compared to the low appraisal of emotions group, the assessment of emotions in others showed a more significant difference on the positive self evaluation ($t=2.66$, $p<0.05$) and environmental mastery ($t=2.85$, $p<0.05$) dimensions of mental health. Thus, the null hypothesis is disproved.

According to the findings, working women who provide good ratings to others are better equipped to make decisions, overcome their own challenges, and stay upbeat than those who give negative ratings to others. Additionally, it is considered that working women would like to be in an environment where they could manage their own problems and create a healthy and acceptable setting for their emotional and psychological well-being. It indicates that high emotional intelligence have positive influence with mental health. Earlier studies also documented that working women have positive self-evaluation (kiranben, 2014).

Table 3 Mental Health
Low and high emotional expression of working women

MH Dimensions	Emotional Expression	N	Mean	SD	t- value
Positive Self Evaluation	Low	132	22.30	4.54	-1.55
	High	69	23.36	4.82	
Perception of Reality	Low	132	19.32	7.03	0.22
	High	69	19.12	3.98	
Integration of Personality	Low	132	27.96	5.76	1.43
	High	69	26.86	3.96	
Autonomy	Low	132	14.23	2.99	0.91
	High	69	13.83	2.91	
Group Oriented Attitudes	Low	132	23.12	4.06	0.29
	High	69	22.96	3.33	
Environmental Mastery	Low	132	24.25	4.02	3.24**
	High	69	26.33	4.87	

** $p \leq 0.01$ level

1.11 EMOTIONAL EXPRESSIONS

Table 3 shows the statistically significant mean difference between low and high emotional expression in terms of working women's mental health. From the results, it can be shown that the high emotional expression group substantially varied from the low emotional expression group on the environmental mastery dimensions of mental health ($t=3.24$, $p<0.01$). Thus, the null hypothesis is disproved. It seems that working women when to speak about personal problems to others are able to fight with problems even in adverse circumstances and satisfied with most of the aspects in life. Generally, educated and working women would have more emotional expression due to more social participation.

Table 4: Mental Health

Low and high emotional regulation of the self among working women

MH Dimensions	Emotional regulation of the Self	N	Mean	SD	t-value
Positive Self Evaluation	Low	114	23.67	4.47	3.61**
	High	87	21.34	4.59	
Perception of Reality	Low	114	19.61	3.51	0.96
	High	87	18.77	8.45	
Integration of Personality	Low	114	27.44	4.61	0.44
	High	87	27.77	5.96	
Autonomy	Low	114	14.83	3.01	4.25**
	High	87	13.11	2.60	
Group Oriented Attitudes	Low	114	23.31	3.58	1.03
	High	87	22.75	4.10	
Environmental Mastery	Low	114	25.57	4.23	2.24*
	High	87	24.17	4.58	

* $p \leq .05$ level, ** $p \leq .01$ level

1.12 EMOTIONAL REGULATION OF OTHERS

Table 5 displays the statistically significant mean difference between poor and high emotional regulation and other emotional intelligence on working women's mental health characteristics. The findings showed that there is no statistically significant difference in any of the aspects of mental health. The null hypothesis is therefore accepted. However, it can be said from mean values that high emotional regulation of others group has more mental health all the dimensions when compared with low emotional regulation of others group.

Table 5 Mental Health

Low and high utilization of emotions in problem solving among working women

MH Dimensions	Utilization of Emotions in Problemsolving	N	Mean	SD	t- value
Positive SelfEvaluation	Low	130	23.06	4.33	1.65
	High	71	21.93	5.16	
Perception of Reality	Low	130	19.74	6.92	1.53
	High	71	18.35	4.32	
Integration of Personality	Low	130	27.55	4.79	0.13
	High	71	27.65	5.98	

Autonomy	Low	130	14.47	3.01	2.49*
	High	71	13.39	2.74	
Group Oriented Attitudes	Low	130	23.25	3.79	0.95
	High	71	22.72	3.85	
Environmental Mastery	Low	130	24.68	4.30	1.22
	High	71	25.48	4.65	

* $p \leq .05$ level

1.13 CONCLUSION

It could be concluded that the Mental health is connected to A deeper understanding and more effective interventions could be made possible by emotional intelligence and its determinants. The primary goal of the current study is to determine how working women's mental health is impacted by their emotional intelligence levels, both high and low. In this regard, information was gathered at random from 401 women in the Andhra Pradesh district of East Godavari. For this investigation, two separate scales—the Mental Health Inventory (Jagdish & Srivastava, 1983) and the Emotional Intelligence (Nutan and Usha, 1999)—were used. The SPSS statistical software, version 21, was used to conduct all of these statistical analyses. To summarise the data and determine the mean values and significant influences of the Mean's about the low and high emotional intelligence on working women's mental health, descriptive statistics and the t-test were utilised. Positive self-evaluation and autonomy components of mental health were significantly influenced by high self-emotional appraisal. Women who value their emotions highly are able to make wise decisions, overcome obstacles and self-problems in a cheerful manner, as well as deal with external issues and create a healthy and appropriate personal and psychological environment. Working women with high emotional expression are able to discuss personal issues with others and deal with issues even in challenging situations.

References

1. Balkir N, Arens EA, Barnow S (2013) Exploring the relevance of autonomy and relatedness for mental health in healthy and depressed women from two different cultures: when does culture matter. *Int J Soc Psychiatry*. 59(5):482- 92.
2. Fernandez - Berrocal, P., & Extremera, N. (2006). About Emotional Intelligence and Moral Decisions, 123-126, Mumbai, Himalayan Publishing House focused coping strategies and repatriation adjustment. *Human resource management*. volume 48, Issue1, Pages 69–88
3. Garima G and Sushil K (2010). Mental Health in Relation to Emotional Intelligence and Self Efficacy among College Students. *Journal of the Indian Academy of Applied Psychology* January, Vol.36, No.1, 61-67
4. Holmstrom, Reijo (1976). Sex differences related to Mental Health in a Group of University and College Students, on a picture of Mental Health. *Psychiatria, fennica* 133-147.

5. Jafar Shabani., Siti Aishah Hassan., Aminah Ahmad., & Maznah Baba (2010) Exploring the Relationship of Emotional Intelligence with Mental Health among Early Adolescents. *International Journal of Psychological Studies* Vol. 2, No. 2; December 2010
6. Jagdish and Srivastava, A K (1983). *Mental Health Inventory*. Varanasi: Manovaigyanik Parikchan Sans than. *Health Administrator* Vol: XVII, Number 1: 50-53,

Digital Advertising of Makeup and Clothing Brands Educates and Normalizes Gender Inclusivity

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INTRODUCTION

Gender inclusivity has become a prevalent topic in the fashion and beauty industry in recent years. Makeup and clothing brands are starting to focus on creating inclusive products that cater to people of all genders. This review of literature aims to explore the influence of makeup and clothing brands in promoting gender inclusivity. The fashion industry has traditionally been divided into binary gender categories, with clothing and makeup marketed specifically to either men or women. However, in recent years, there has been a shift towards more gender-neutral fashion and beauty products. Research conducted by Harvard Business Review (2016) found that there is a growing trend of consumers who want gender-neutral products and brands who cater to this demand will have a competitive advantage.

Makeup brands such as Fenty Beauty by Rihanna and Pat McGrath Labs have been praised for their inclusive shade ranges, catering to people of all skin tones and undertones. A study by Nielsen (2018) found that the beauty industry has been slow to adapt to the needs of diverse consumers but brands that focus on inclusivity are more likely to succeed.

In addition to makeup brands, clothing brands have also been taking steps towards inclusivity.

Retailers such as Zara and H&M have launched gender-neutral clothing lines, featuring clothing that can be worn by people of all genders. This trend has also been seen in luxury fashion, with Gucci launching a gender-neutral collection in 2020 (Vogue, 2020).

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In addition to promoting items, digital advertisements are essential for communicating society ideas and ideals (Kervyn et al., 2012). To appeal to a wider range of customers, marketing strategies have placed an increasing emphasis on inclusivity and diversity in recent years. Due to its importance in self-expression and identity development, makeup and clothing businesses have used digital marketing more and more to spread messages of inclusivity that cut across gender boundaries (Chan & Reid, 2020).

Nonetheless, the effectiveness of these commercials in promoting gender inclusion is still a topic of scientific inquiry and social significance. Although several businesses have made progress in representing a range of gender identities and shattering conventional stereotypes, more research is needed to determine the degree to which these efforts affect college students' views and perceptions (Lee & Watkins, 2015).

This study aims to explore the world of beauty and apparel brand commercials, evaluating how they represent gender inclusion and looking into how they affect college students' views and perceptions. This study intends to provide light on how digital advertising shapes gender stereotypes and promotes inclusivity among younger consumers by closely examining the messaging, content, and reception of these commercials.

Research has shown that there is a growing demand for gender-neutral products, with consumers seeking brands that are inclusive and cater to all. A study by Accenture (2019) found that 70% of Gen Z consumers believe that gender-neutral options should be available, and 56% of consumers are more likely to buy from a brand that is inclusive of all genders.

The fashion and beauty industry is starting to take steps towards gender inclusivity, with makeup and clothing brands focusing on creating products that cater to people of all genders.

Research has shown that there is a demand for gender-neutral products, and brands who cater to this demand are more likely to succeed in the industry. It is important for brands to continue to prioritise inclusivity and ensure that their products are accessible to all consumers.

Digital advertising of makeup and clothing brands has played a significant role in promoting gender inclusivity in recent years. This literature review aims to explore the impact of digital advertising on gender inclusivity in the fashion and beauty industry.

The traditional approach to digital advertising has been to market products towards specific gender categories. However, this approach has been challenged by a growing demand for gender neutral products and digital advertisements. Research conducted by Nielsen (2018) found that brands that feature diverse and inclusive digital advertising are more likely to succeed in the beauty industry.

Makeup brands such as MAC Cosmetics and Maybelline have featured men in their digital advertisements, challenging the notion that makeup is only for women. This approach has been praised for promoting inclusivity and diversity in the industry. Similarly, clothing brands such as H&M and Zara have featured gender-neutral models in their digital advertisements, showcasing clothing that can be worn by people of all genders.

The impact of inclusive digital advertising has been studied by various researchers. A study by the Journal of Business Research (2017) found that digital advertisements that feature diverse models are more likely to be perceived positively by consumers. Another study by the Journal of Digital Advertising (2018) found that inclusive digital advertising can lead to increased brand loyalty and positive attitudes towards the brand.

In addition to promoting inclusivity, digital advertising can also challenge societal norms and stereotypes. A study by the Journal of Digital Advertising Research (2016) found that digital advertising can play a role in changing societal attitudes towards gender roles and promoting gender equality.

Commercials have a significant impact on cultural standards in today's culture, especially when it comes to inclusion and gender portrayal. The digital advertising landscape for clothes and beauty firms has changed significantly in an effort to represent and serve a wider range of consumers.

Research on how these digital commercials portray gender inclusion has become crucial, particularly with college students who are particularly sensitive to changes in gender norms and attitudes in Society.

In conclusion, the digital advertising of makeup and clothing brands has played a significant role in promoting gender inclusivity in the fashion and beauty industry. Inclusive digital advertising has been found to be positively perceived by consumers and can lead to increased brand loyalty. Brands that prioritise inclusivity and diversity in their digital advertising are more likely to succeed in the industry and can play a role in challenging societal norms and stereotypes.

CONTENT

Literature review

Methodology

Data analysis and interpretations

Conclusion and recommendations

References

1. Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166-176. <https://doi.org/10.1016/j.jcps.2011.05.003>
2. Chan, T., & Reid, L. N. (2020). The Impact of Cultural Differences on Advertising Effectiveness. *International Journal of Advertising*, 39(5), 712-728. <https://doi.org/10.1080/02650487.2020.1717173>
3. Lee, J., & Watkins, B. (2015). The Power of Storytelling in Advertising. *Journal of Consumer Behavior*, 14(2), 198-207. <https://doi.org/10.1002/cb.1529>
4. Hester, N., & Gibson, K. (2007). Queer eye for the straight girl: Same-sex imagery in advertising. *Journal of Promotion Management*, 13(1-2), 137-153. https://doi.org/10.1300/J057v13n01_08
5. Oakenfull, G., McCarthy, M. S., & Greenlee, R. T. (2008). Seeing is believing: Effects of visual rhetoric on perceptions of same-sex couples in advertising. *Journal of Advertising*, 37(3), 57-70. <https://doi.org/10.2753/JOA0091-3367370305>
6. Hooten, M. W., Noeva, E. N., & Hammond, W. E. (2009). The effects of gender role congruence and congruity in advertising. *Journal of Advertising*, 38(3), 53-69. <https://doi.org/10.2753/JOA0091-3367380305>

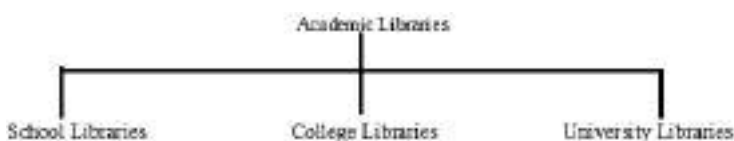
7. Um, N. H. (2014). Revisiting the effects of sexual orientation in advertising. *Journal of 70 Advertising*, 43(1), 82-93. <https://doi.org/10.1080/00913367.2013.834359>
8. Bond, S., & Farrell, T. (2020). Impact of sexuality imagery in advertising on consumer responses. *Journal of Consumer Behaviour*, 19(5), 456-470. <https://doi.org/10.1002/cb.1868>
9. Del Saz-Rubio, M. M. (2019). The portrayal of male identities in cosmetics advertising. *Journal of Gender Studies*, 28(2), 147-160. <https://doi.org/10.1080/09589236.2017.1410749>
10. Clark, J., Carmichael, P., & Alexov, A. (2019). Advertising, media, and the male consumer. *Journal of Advertising Research*, 59(2), 203-218. <https://doi.org/10.2501/JAR2019-015>
11. Laverie, D. A., & Arnett, D. B. (2000). Factors affecting attitudes toward advertising via mobile telephones. *Journal of Advertising*, 29(3), 33-45. <https://doi.org/10.1080/00913367.2000.10673663>
12. Dahl, S. (2019). Advertising and the Construction of Violent Masculinities: A Critical Discourse Analysis of Men's Grooming Advertisements. *Journal of Advertising*, 48(1), 43-56. <https://doi.org/10.1080/00913367.2018.1533448>
13. Pechmann, C., & Ratneshwar, S. (1992). The effects of antismoking and cigarette advertising on young adolescents' perceptions of peers who smoke. *Journal of Consumer Research*, 19(4), 580- 588. <https://doi.org/10.1086/209320>
14. Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166-176. <https://doi.org/10.1016/j.jcps.2011.05.003>
15. Smith, A. (2017). The Role of Emotional Advertising in Consumer Behavior. **Journal of Marketing Research*, 24*(3), 45-58. <https://doi.org/10.1080/00223980.2016.1268530>
16. Chan, T., & Reid, L. N. (2020). The Impact of Cultural Differences on Advertising Effectiveness. **International Journal of Advertising*, 39*(5), 712-728. <https://doi.org/10.1080/02650487.2020.1717173>
17. Lee, J., & Watkins, B. (2015). The Power of Storytelling in Advertising. **Journal of Consumer Behavior*, 14*(2), 198-207. <https://doi.org/10.1002/cb.1529>
18. Phillips, L. W., & Sternthal, B. (1977). Age Differences in Information Processing: A Perspective on the Aged Consumer. **Journal of Marketing Research*, 14*(3), 444-457. <https://doi.org/10.1177/002224377701400320>
19. Belk, R. W. (1984). The Effects of Television Advertising on Children and Adolescents. *Journal of Consumer Research*, 11(4), 888-895. <https://doi.org/10.1086/208978>
20. Taylor, C. R., & Leiberan, A. A. (1989). Gender Role Portrayals in Advertising: An Individual Differences Analysis. *Journal of Business Research*, 19(2), 83-96. [https://doi.org/10.1016/0148-2963\(89\)90037-9](https://doi.org/10.1016/0148-2963(89)90037-9)
21. Nelson, M. R., & Paek, H. J. (2005). Cultural Values in Television Advertising in Jamaica, Japan, and the US. *Journal of Advertising*, 34(1), 99-110. <https://doi.org/10.1080/00913367.2005.10639185>
22. Groza, M. D., & Walker, M. (2006). Perceived Ethicality of Pro-Environmental Marketing Appeals: The Impact of Reference Group Norms. *Journal of Marketing Management*, 22(5-6), 561-578. <https://doi.org/10.1362/026725706778935547>
23. Ferguson, J. H., & Perse, E. M. (2000). The World Wide Web as a Functional Alternative to Television. *Journal of Broadcasting & Electronic Media*, 44(2), 155-174. https://doi.org/10.1207/s15506878jobem4402_1

Important of Library and Information Services in College Libraries: A Study

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INTRODUCTION

Academic libraries are often centers of technical education. Academic librarians participate in schools and support classroom instruction to achieve the goals of modern education. For this reason, many working groups and working groups emphasize the importance of libraries and their services in colleges and universities. According to the Harrods Dictionary of Librarian Terms, an academic library is «the library of colleges, universities and all libraries». Other institutions forming part of or associated with the university: High school and school libraries:



This Module is devoted to the study of the objectives, functions, growth and development, collection, and services of college libraries.

2. AIMS AND OBJECTIVES OF COLLEGE LIBRARY

A college is regarded as an important institution of higher education which offers graduate degree and/or post- graduate degree courses. A college library is established to serve the students, faculty, and the other staff of the college.

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2.1 Objectives

The major objectives of college library are as under:

1. to support the teaching programme of the college;
2. to provide reading material for independent study and research;
3. to encourage life- long learning among students to make them more enlightened and knowledgeable.
4. to support the objectives, mission and vision of the college.

The Education Commission (India, 1964-66) has also set out the objectives of a college library are as follows:

1. to provide the resources necessary for research in the fields of special interests to the college;
2. to aid the teacher in keeping abreast of developments in his/her field;
3. to library facilities and services necessary for the success of all formal programmes of instructions; and
4. to open the door to the wide world of books that lie beyond conditions which encourage reading for pleasure, self-discovery, personal growth and the sharpening of intellectual curiosity.

University librarians often limit their activities to textbooks and other reading materials. As the face of university education changes, research, access to journals, CDs, use of the Internet to access information to complete tasks, etc. There is an urgent need to encourage the use of public libraries through.

2.2 Functions

Academic librarians have a responsibility to support their parent institution's goals of meeting the teaching, learning, and research needs. In order to meet the information needs of users in the community, the academic library strives to provide necessary reading materials. According to W. M. Randall and FL, the Goodrich University Library does the following to achieve these educational goals:

Makes available to the students, books and allied reading material relevant to the courses offered in the college;

1. makes available the books and documents required by faculty members in preparation of their instructional courses;
2. provides supplementary books and reading material to help study and teaching at the college;
3. provides comprehensive selection of authoritative books and documents needed by the faculty members to pursue their research programmes;
4. promotes the proper use of the reading material available in the stock; and
5. trains the students in making use of the library properly and derive full advantage out of it, integrating the library with the educational courses.

In their book on college library administration, D. L. Smith and E. O. Baxter have enumerated the functions of college libraries as follows:

To acquire and provide text and standard reference books to the students, necessary to prepare for their examinations;

1. To train college students in the use of the library material and to encourage them to enrich their knowledge and outlook in a wider perspective through general and wider readings;
2. To help and assist faculty members of the college in preparation of their instructional courses and in keeping them abreast of the current knowledge and concepts in different areas of study; and
3. To assist the teaching staff in the pursuit of higher studies and research and support them with relevant literature and information on the subject.

Considering the above-mentioned functions of the college library, S. N. Sahai observed that the college library “lays emphasis on the acquisition and dissemination of knowledge at the undergraduate and postgraduate levels” only. The functions of a college library can therefore be restated as follows:

1. To assist the parent institution in fulfilling its educational objectives;
2. To provide latest collection of text books, course related materials and journals;
3. To maintain good collection or reference books, magazines, newspapers, and internet facilities to provide wider access to information;
4. To train the students in the use of library catalogue, reference sources, and internet access;
5. To provide career guidance to students and make them useful citizens of society;
6. To offer variety of services such as newspaper clippings, bibliographies, access to databases, etc.;
7. To create helping reading environment for students and faculty with a good ambience; and
8. To preserve documents for future use.

3. INFORMATION RESOURCES

As noted above, to meet the needs of students and teachers, academic libraries must maintain a large and comprehensive collection of books, reference books, journals, magazines, newspapers, and other reading materials (which may also include some electronic materials).... Career challenges, funny books, personal development, biographies, stories, history, notes, etc. can add more information to their articles that will be useful to the student community.

In addition, the emerging information society and the development of information technology in recent years have also encouraged the creation of new information. These include many information materials, CD-ROMs and e-books, which are important sources of current and other international information that is very important for education and training today.

Thus, according to the Kothari Committee, the purpose of library planning is «not to create a collection of books unrelated to classroom work and research studies in the laboratory and lecture room»; Relating to the world of «learning», which includes the daily needs and activities of teachers and students. Book selection should be guided to support teaching and research. > ebooks etc. There is also about 50,000 lira.

4. LIBRARY AND INFORMATION SERVICES

A college library is set up to provide various services to the academic community, viz., students and faculty members. The image of a college library and status of college librarian depend to a large extent upon, not only the variety of services offered, but also the efficient manner in which these are provided to the users. The strength of college library lies in the strength of its services.

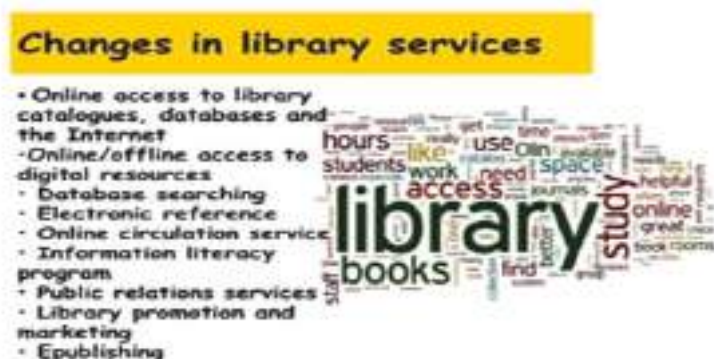
The following services are generally provided by a college library:

1. Book lending is the main service offered to students and teachers;
2. Readers' advisory services;
3. Reference services;
4. Library orientation and user education;
5. Information literacy;
6. Career guidance;
7. Bibliographic services;
8. Circulation of list of new additions;
9. Display of new books as a regular feature and/or on special occasions;
10. Net-worked based services
11. Online Public Access Catalogue (OPAC)

It is only through these and other services that the college library can ensure the effective use of its information resources. When the library satisfies the curiosity of the undergraduates and the inquisitiveness of the graduates, it becomes, as M.A. Gelfand believes, a method of teaching.

It may, however, be pointed out that library services available in a large majority of college libraries in India, with the exception of a couple of them, are regarded as insufficient and even ineffective.

4.1 LIBRARY SERVICES IN CHANGING INFORMATION ENVIRONMENT



Nowadays, with the influence of information technology, computerization has become a buzzword. While large computer libraries use their information to participate in the region and the country, academic libraries should also develop

their libraries and information services to meet the needs, aim, and the goals of its parent organization.

As India develops towards an information society, information and knowledge are accepted as capital and school libraries are changing. Change slowly. The use of computers in processing, storing, retrieving and distributing information in library activities is changing the traditional definition of libraries and library services. Seizing the opportunity for every development to transform India into a knowledge-based society, the Prime Minister of India established the National Information Commission in 2005. Its mandate was to establish a library task force to review and improve existing library services. Among the many suggestions put forward is the hope to encourage the use of information and communications technology (ICT) in libraries.

In recent years, the National Assessment and Accreditation Council (NAAC) of University Education and Academic Libraries in India has been very helpful in highlighting the role of academic libraries in knowledge transfer in higher education. It provides a great opportunity for school libraries to develop services that support educational goals.

Academic libraries, including school libraries, are today in a better position to share and collaborate, and these libraries also use the Internet and other networks. INFLIBNET and UGC-infonet have started working to connect all academic and research libraries in the country. There are also DELNET, CALIBNET etc. in the city. There are many libraries. They help provide information delivery and dissemination services to participating libraries.

These and other developments in recent years have helped to update and improve information and services for the benefit of their users. The new system will also help reduce work, improve management, expand and deepen services, improve collaboration, improve data recovery and, most importantly, improve service quality by increasing performance. College DRTC and NISCAIR, courses, workshops etc. Provides continuing education and professional training for librarians. Additionally, Academic Staff appointed by UGC in selected universities are given a renewal period of three to four weeks to enable them to catch up with the latest developments in ICT and Library and Information Science of higher education institutions. One of the above can be found in school libraries etc. It is clear that major changes have occurred and attitudes have changed. Where you can get information and knowledge.

SUMMARY

College libraries are considered the center of learning at the university. It plays an important role in the lives of young students who have access to a variety of reading materials tailored to their information needs. This model discusses the purpose and function of academic libraries in supporting higher education. Describes the University Library's various sources of income for financing the purchase of books and other materials, hiring of library staff, library construction, purchase of various furniture and equipment, etc. He added that when such a system is implemented, librarians and other support staff can provide useful and effective information to support the university in achieving its academic goals.

References

1. Bavakutty, M. Libraries in Higher Education. New Delhi: Ess Ess Publications, 1988.
2. Gupta, O. P. Library Services in University and College Libraries in India. New Delhi: Reliance, 1998. India. National Knowledge Commission. Report. New Delhi: National Knowledge Commission, 2007.
3. Randall, W. M. and Goodrich, Francis L. D. Principles of College Library Administration. Chicago: American Library Association, 1936, quoted in Sahai, S. N., op. cit.
4. Sahai, S. N. Academic Library System. New Delhi: Allied, 1990.
5. Sewa Singh and Madhuri Arora, eds. Handbook of College Libraries. New Delhi: Beacon Books, 1995. Smith, D. L. and E. O. Baxter. College Library Administration. London: Oxford University Press, 1965.
6. University Grants Commission (India). Library Committee: Report: University and College Libraries. New Delhi: UGC, 1965.
7. Varalakshmi, R. S. R. "Measurement of College Library Performance: An Evaluative Study with Standards." International Information and Library Review 35, (2003): 19-37.

Indian Economy and Digital Globalization

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INTRODUCTION

India, one of the fastest-growing economies in the world, has become a key player in the global digital economy. With the advent of digital globalization, India has seen a significant shift in its economic landscape, with technology playing a crucial role in driving growth and innovation. In this article, we will discuss the impact of digital globalization on the Indian economy, the opportunities it presents, and the challenges it poses. The Indian government has played a key role in promoting digitalization in the country through its flagship program, Digital India. Launched in 2015, Digital India aims to transform India into a digitally empowered society and knowledge economy. The initiative focuses on improving connectivity, promoting digital literacy, and driving digital infrastructure development. One of the key components of Digital India is the push for e-governance services, which has helped streamline government processes and improve transparency. The introduction of the Aadhar biometric identification system has also played a significant role in enabling digital financial services and inclusive growth.

The government has also been actively promoting the startup ecosystem in India, with initiatives such as Startup India aiming to foster innovation and entrepreneurship. The growing number of startups in the country has led to the creation of new digital products and services, contributing to economic growth and job creation. The aim is to provide the citizens with such digitally and electronically advanced means so that the rural areas are connected to the urban areas through network devices and services. The programme is designed to ensure that the government services are accessible even to the poor and downtrodden people, through electronic means, thereby, fastening the rendering of services and improving the quality of life of even the lowest stratum

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of society. To accomplish the vision, steps are being taken to improve the digital infrastructure in the country and to increase the access to network devices through increased band width and advanced digital technologies. Initiatives are also being taken to increase the digital literacy of the population so that the majority of citizens become capable of operating digital gadgets and equipment. This will boost the generation and growth of employment opportunities in the country. To connect the whole country virtually, major innovations and advancements need to be done in the technological field so that the country moves towards being a digitally empowered economy. Indian economy is growing at a fast pace. It is ranked among the top fast-developing economies in the world. The Indian economy takes 7th place among the largest economies when measured through nominal GDP and 3rd place when measured on the basis of PPP (Purchasing Power Parity). Due to the growing industrialization in the country, it is considered one among the major G-20 economies. The average growth rate of the economy has been around 7% for the last two decades.

DIGITALIZATION AND FINANCIAL INCLUSION WAY FOR OVERALL GROWTH OF INDIAN ECONOMY

Digital globalization has played a significant role in promoting financial inclusion in India. The rise of digital payment platforms such as Paytm, Google Pay, and PhonePe has made it easier for people to access financial services, even in rural areas. The demonetization drive in 2016 also accelerated the adoption of digital payments in the country. The introduction of the Unified Payments Interface (UPI) has revolutionized the way people transact, making it faster, cheaper, and more convenient. UPI has become the preferred mode of payment for many Indians, leading to a significant increase in digital transactions. Digitalization has also enabled the growth of online lending platforms, which provide credit to underserved segments of the population. These platforms use alternative data sources such as mobile phone usage and social media activity to assess creditworthiness, making it easier for people to access credit.

India is chalking out its own growth strategy driven by digitalization, connectivity, cash-less/paper-less economy, and start-up innovation ecosystem. Indian economic growth will be driven by the rising tech adoption. Smartphones penetration is rising in the country with 700 million users expected by 2020; we will have 331 million internet users by 2020. With Aadhar UID, 1 billion users can authenticate 100 transactions per day in real time. India Stack is a complete set of APIs for developers which include Aadhar for authentication, e-KYC, and e-sign amongst others. All these will propel technological disruption, digital connectivity, the growth of tech start-ups in order to achieve the said vision of Digital India. Technology will allow businesses to transact easily and efficiently, and thus contribute faster to economic growth. The launch of new devices that feature iris scanner that is Aadhar and STQC certified, will enable cashless and paperless services for banking, passport, taxation, etc. All these, along with Immediate Payment Service, Unified Payments Interface, micro ATMs, m-POS and financial inclusion programs by the Government (such as Pradhan Mantri Jan-Dhan Yojana), will aggressively pave the way for digital payments in India. After demonetization on November 8, we have seen an adoption of payment solutions like e-wallets, cash cards, bit coins, online platforms and POS (point-of-sale) services. Coming back to India Stack, and how it will revolutionize the

space for business, fuel innovation, India stack comprises of four key layers-presence-lesses, paperless, cashless and consent. This means for tech start-ups and app developers is that they can readily create novel business apps using the infrastructure provided by the stack. To conclude we cannot emulate other economics. Technology and digitalization will propel growth in India. Digital Bharat is the goal, which will create opportunities for stakeholders and industries alike. The cashless and paperless economy is catapulting small and medium businesses, making it easier to transact. So much data and transactions are creating huge demands for cyber security, storage, and web performance & faster computing. A digitally-advanced India will create more job opportunities. Homes, businesses and industries will become smart, cities will be run on the click of a button, transactions will be done without cash hassles and the overall economy will become stronger.

PROPOSED IMPACT OF DIGITAL INDIA

The estimated impact of Digital India by 2019 would be cross cutting, ranging from broadband connectivity in all Panchayats, Wi-Fi in schools and universities and Public Wi-Fi hotspots. The programme will generate a huge number of IT, Telecom and Electronics jobs, both directly and indirectly. The success of this programme will make India Digitally empowered and the leader in usage of IT in the delivery of services related to various domains such as health, education, agriculture, banking, etc. Digital empowerment of citizens will pay emphasis on universal digital literacy and availability of digital resources/services in Indian languages. The programme will be implemented in phases from 2014 till 2018. The source of funding for most of the e-Governance projects at present is through budgetary provisions of respective ministries/departments in the central or state governments. Requirements of funds for the individual project(s) for Digital India will be worked out by respective nodal ministries/departments but according to government estimate it will cost Rs 113,000 crore. To implement this government is planning to strengthen National Informatics Center (NIC) by restructuring it to support all central government departments and state governments.

- (i) **Economic impact:** According to analysts, the Digital India plan could boost GDP up to \$1 trillion by 2025. It can play a key role in macro economic factors such as GDP growth, employment generation, labor productivity, growth in a number of businesses and revenue leakages for the Government. As per the World Bank report, a 10% increase in mobile and broadband penetration increases the per capita GDP by 0.81% and 1.38% respectively in the developing countries. India is the 2nd largest telecom market in the world with 915 million wireless subscribers and world's 3rd largest Internet market with almost 259 million broadband users. There is still a huge economic opportunity in India as the tele-density in rural India is only 45% where more than 65% of the population lives. Future growth of telecommunication industry in terms of a number of subscribers is expected to come from rural areas as urban areas are saturated with a tele-density of more than 160%.
- (ii) **Social impact:** Social sectors such as education, healthcare, and banking are unable to reach out to the citizens due to obstructions and limitations such as middleman, illiteracy, ignorance, poverty, lack of funds, information

and investments. These challenges have led to an imbalanced growth in the rural and urban areas with marked differences in the economic and social status of the people in these areas. Modern ICT makes it easier for people to obtain access to services and resources. The penetration of mobile devices may be highly useful as a complementary channel to public service delivery apart from the creation of entirely new services which may have an enormous impact on the quality of life of the users and lead to social modernization. The poor literacy rate in India is due to unavailability of physical infrastructure in rural and remote areas. This is where m-Education services can play an important role by reaching remote masses. According to estimates, the digital literacy in India is just 6.5% and the internet penetration is 20.83 out of 100 populations. The Digital India project will be helpful in providing real-time education and partly address the challenge of lack of teachers in the education system through smart and virtual classrooms. Education to farmers, fisher men can be provided through mobile devices. The high speed network can provide the adequate infrastructure for online education platforms like massive open online courses (MOOCs). Mobile and internet banking can improve the financial inclusion in the country and can create a win-win situation for all parties in the value-chain by creating an interoperable ecosystem and revenue sharing business models. Telecom operators get additional revenue streams while the banks can reach new customer groups incurring lowest possible costs. Factors such as a burgeoning population, poor doctor-patient ratio (1:870), high infant mortality rate, increasing life expectancy, fewer quality physicians and a majority of the population living in remote villages, support and justify the need for tele-medicine in the country. M-health can promote innovation and enhance the reach of healthcare services. Digital platforms can help farmers in know-how (crop choice, seed variety), context (weather, plant protection, cultivation best practices) and market information (market prices, market demand, logistics).

- (iii) **Environmental impact:** The major changes in the technology space will not only brought changes to the economic system but will also contribute to the environmental changes. The next generation technologies will help in lowering the carbon footprint by reducing fuel consumption, waste management, greener workplaces and thus leading to a greener ecosystem. The ICT sector helps in efficient management and usage of scarce and non-renewable resources. Cloud computing technology minimizes carbon emissions by improving mobility and flexibility. The energy consumption can be decreased from 201.8 terawatt hour (TWh) in 2010 to 139.8 TWh in 2020 by higher adoption of cloud data centers causing a 28% reduction in carbon footprint from 2010 levels.

CHALLENGES & DIFFICULTIES OF DIGITALIZATION

While digital globalization presents numerous opportunities for the Indian economy, it also poses several challenges. One of the key challenges is the digital divide, with many people in rural areas lacking access to the internet and digital devices. This hampers their ability to take advantage of digital services and participate in the digital economy. Cyber security is another major challenge posed by digital globalization. As more transactions move online, the risk of

cyber attacks and data breaches increases. This poses a threat to businesses, individuals, and the overall economy, highlighting the need for robust cyber security measures. Regulatory challenges also exist in the digital economy, with outdated regulations often hindering innovation and growth. The lack of a comprehensive data protection framework, for example, has raised concerns about the privacy and security of personal data in India.

Digital transformation does not only mean adopting new technologies but also adopting new business models. This indicates that organizations should well-understand digital transformation and consider every factor, starting with the way employees will react to the way it will impact their customers. Nowadays, almost every organization considers digital transformation and according to Gartner, 91% of them are already engaged in some form of digital initiative. As they are pursuing digital technologies and digital transformation, they are also channeling huge investments toward it. By 2025, global digital transformation investment is predicted to reach US \$2.8 trillion, up from US \$1.8 trillion in 2022.

However, although so many organizations start on this journey easily, some of them find it difficult to complete. In fact, according to BCG around 70% of digital transformation programs are not successful and fail to reach their stated goals. In terms of money, organizational effort, and time lost, such results are massively costly. So, considering all these facts, we can conclude that even though digital transformation can sometimes be challenging to achieve, its benefits and advantages make it almost inevitable in today's industries.



1. Lack of Organizational Change Management Strategy

Organizational change management refers to an organized approach to managing changes in an organization, in this case, to managing digital transformation. It can be difficult, however, it is crucial. The lack of proper organizational change management can negatively impact an organization's digital transformation which is why it is one of the primary reasons for the high failure rate.

Furthermore, organizational change management focuses on various components of an organization rather than only one. For example, it starts from the top and involves changes in culture, mindset, processes, structures, to

the whole business model. Having a strong and effective change management strategy is vital for success as it increases the likelihood for an organization to achieve its transformation objectives.

2. Lack of Expertise

When an organization aims digital transformation, the lack of expertise could threaten its journey. Considering how complex digital transformation strategies are, the right skill and knowledge set are required to implement the necessary changes.

According to KPMG, organizations have reported talent gap issues that threaten to slow down digital transformation. 44% of the survey respondents said that a shortage of experts hindered the progress, 32% said that adding new talent and new systems is costly, and 29% said that a lack of skills to implement these systems led to delayed progress. Organizations lack employees with adequate skills in digital transformation procedures, cyber security, application architecture, and other related IT and non-IT fields.

3. Continuous Evolution of Customer Needs

Customers' expectations and demands have advanced as a result of evolving developments and improvements in customer service, and this poses a challenge for many organizations. Even when organizations put years of effort into digital transformation, customers' needs can change throughout that time as they are constantly looking for more intuitive and enhanced services. This means that extra effort is needed to implement the new digital technologies that would meet the continuous evolutions of customer needs.

4. Internal Resistance to Change

Despite their fascinating ability to adapt to changes, humans by their nature tend to enjoy comfort and routine as it gives them a sense of security. Changes, especially the big ones, can make people feel uncomfortable and cause stress for some, impacting their well-being. That is why, when organizations are going through digital transformation, they can experience employee pushback.

The best way to handle it is by keeping employees engaged through the whole process and being transparent with them. Furthermore, leaders need to be aware that even when doing everything right, if the transitional period is short, all the fast changes and all the new tools, processes, and technologies can impact their performance and efficiency. That is why it is important to start with a slow transition as it helps people shift their mindset and prepare for the new changes.

5. Security Concerns

As organizations adopt remote work, digital processes, and cloud-based technology, they are exposed to higher levels of risk. Consequently, they are required to implement higher security measures and improve their cyber security to defend themselves against threats. Not protecting data and other valuable assets of an organization can lead to enormous risks and negative consequences.

FUTURE OUTLOOK

Despite the challenges, the future looks promising for the Indian economy in the digital age. The government's push for digitalization, coupled with the growing adoption of digital technologies by businesses and consumers, bodes well for the country's economic growth. The rise of artificial intelligence, block-chain, and the Internet of Things is expected to further revolutionize the Indian economy, driving innovation and productivity across sectors. The recent announcement of the National AI Portal and the National Block-chain Strategy demonstrates the government's commitment to harnessing these technologies for economic growth.

According to a digital transformation expert, Dennis Akkerman, three critical factors for every successful digital transformation are:

- Strategy
- Mindset
- Skill and tech

A perfect balance between this Golden Triangle of Digital Transformation and a change in each element is undoubtedly a big step toward a successful digital transformation journey. Organizations need to have a clear strategy and integrate it into all organizations' processes.

1. **Organizational change management:** To implement a successful organizational change management, organizations should apply many strategies and actions. Some of the key elements for managing organizational change are: *Plan, Start from the top management levels, Create a roadmap, Monitor and measure.*
2. **Up skilling and recruitment:** Lack of expertise is a very common challenge of digital transformation. Organizations should understand that they need to have skilled employees who can carry on the process, and if needed, they should seriously consider investing in bringing in new employees who have the required expertise, skills, and knowledge.
3. **Meeting customer's needs:** Digital transformation is impacting the customer experiences fundamentally. In order to meet their expectations and needs, which are evolving constantly, organizations should stay up to date with the newest trends and learn continuously about new ways, methods, and technologies developed to enhance their experience.
4. **Work cultural change:** The importance of human factor has now been established. As reported by Forbes, the key to the digital success of organizations is starting the change process with humans, not technology. Organizations need to work on a cultural mindset change and the whole organizational culture by raising awareness about the importance of digital transformation and other related elements. A good method to mitigate employee resistance to change is involving the whole team from the beginning and communicating with them frequently and transparently.
5. **Digital transformation security:** Digital transformation is a process that carries risks and their identification and management are crucial to a successful and secure change. Organizations should implement security

controls and policies, invest in new tools and technologies, implement risk management, and train employees.

6. **Digital transformation budget planning:** Besides the investment in time, digital transformation requires a lot of investment in money which needs to be planned carefully. Organizations should create a financial roadmap to facilitate the processes. A budget should be prepared based on overall goals and needs, strategies, priorities, timelines, planned outcomes, return on investments, etc. The budget should be flexible in case any challenges or issues are rising.

CONCLUSION

Digital globalization has the potential to transform the Indian economy and drive inclusive growth. With the government's focus on promoting digitalization, the country is well-positioned to leverage digital technologies and emerge as a global leader in the digital economy. However, addressing the challenges posed by digitalization will be crucial in ensuring that the benefits of digital globalization are realized by all segments of society. The digitalization of globalization is imminent (Burlacu et al., 2021), if it has not already happened as a result of more than a year of global measures based mainly on employment and online school to maintain social distance as a basic measure in combating the Covid-19 pandemic (Balu et al., 2021). Its economic impact could be measured both in monetary units and in the volume of trade or labor (Radulescu et al., 2021). Its social or life impact can also be easily understood both in the short and long term (Sarbu et al., 2021). Replacing direct communication with distance communication that drastically limits emotional transmission may be factors that shape these horizons. However, more in-depth research is needed to differentiate between what is considered beneficial and what could be harmful, today or in the future. The proliferation of technologies was possible due to scientific progress but perhaps also to the enthusiasm with which these advances were received. Meanwhile, digitalization has become so complex but also uniform at the same time, from cloud computing, smartphones, massive data, digital mining, cryptocurrencies or artificial intelligence that it is possible to meet all this in one place and everywhere. Concerns about the digitalization of globalization remain today on the front page of researchers around the world.

References

1. Balu, F. O., Radulescu, C. V., Bodislaw, D. A., Gole, I., Buzoianu, O. C. A., Burlacu, S., & Balu, P. E. (2021). Cost modeling and computation in the healthcare industry. case study on a swiss medical care organization. *Economic Computation & Economic Cybernetics Studies & Research*, 55(1).
2. Bughin, J., Lund, S., & Manyika, J. (2016). Five priorities for competing in an era of digital globalization. *McKinsey Quarterly*, 2, 55–61.
3. Burlacu, S., Diaconu, A., Balu, E. P., & Gole, I. (2021). The economic and social effects of unemployment in Romania. *Revista de Management Comparat International*, 22(1), 21–27.
4. Burlacu, S., Patarlageanu, S. R., Diaconu, A., & Ciobanu, G. (2021). E-government in the era of globalization and the health crisis caused by the covid-19 pandemic, between standards and innovation. *Les Ulis: EDP Sciences*.

5. Chernyshenko, V., Vertakova, Y., & Mkrttchian, V. (2020). Development and Implementation of Adaptive Trade Policy in the Era of Digital Globalization Based on Virtual Exchange of Intellectual Knowledge. In V. Mkrttchian, L. Gamidullaeva, & E. Aleshina (Ed.), *Avatar-Based Models, Tools, and Innovation in the Digital Economy* (pp. 131–140).
6. Sandhu, A. S. (2008). *Globalization of Services and the Making of a New Global Labor Force in India's Silicon Valley*. University of California Santa Barbara, May, 2–4.
7. Trifonas P. (2017). Digital globalization and the ends of education. In: Heidkamp B., Kergel D. (eds) *Precurity within the Digital Age. Prekarisierung und soziale Entkopplung – transdisziplinäre Studien*. Springer VS, Wiesbaden.
8. Ying, Y. H., Chang, K., & Lee, C. H. (2014). The impact of globalization on economic growth. *Romanian Journal of Economic Forecasting*, 17(2), 25–34.

Unlocking Knowledge: Strategies and Innovations in Library Digitization

Devender Kumar*

INTRODUCTION

All information stored in traditional libraries exists in analog form. Printed books, journal articles, manuscripts, cards, photos, vinyl records, video cassettes, and audiotapes are all examples of this. On the other hand, analog data is converted into digital format—represented by 0s and 1s—when it is entered into a computer. Its properties are converted from analog to digital through this process. It is possible to manipulate and compress these digital fragments for storage. Large encyclopedias that take up a lot of room in analog format can be compressed into a tiny digital area on a computer drive or kept on a CD-ROM disc. This digital format enables easy searching, retrieval, manipulation, and transmission over networks. A key attribute of digital information is its fluidity. Digital texts are not static, final, or constrained like texts printed on paper are. Until they are printed out as a hard copy, they are still malleable in both substance and form.

Flexibility stands out as a primary advantage of digital information. Numerous identical copies can be generated from a digital file without any degradation, unlike analog formats. Additionally, digital information allows for simultaneous access from remote locations by numerous users.

Content from tangible media, including books, periodicals, manuscripts, cards, photos, vinyl disks, and more, can be converted into digital format through a process called digitization. This procedure results in the availability of documents on the library's website and, subsequently, the Internet in various library contexts. When digitizing photos, bitmaps are often created using optical

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scanners and digital cameras. Furthermore, it is feasible to digitize various forms of media, including sound, video, graphics, animations, and so forth.

Digitization is not merely a final goal; it involves transforming analog images into digital ones. The selection criteria, especially those aligned with user requirements, hold significant weight. Hence, the principles guiding traditional collection development remain relevant in the selection of materials for digitization. Still, a number of other aspects—technical, legal, policy, and resource—become more significant in digitalization initiatives. Out of the three essential methods for creating digital collections, digitization is one of them. The two remaining approaches are providing electronic resources, either licensed or freely available, and creating library gateways for important websites.

FUNCTIONALITY OF DIGITISATION

Every system that relies on sporadic data or occurrences is referred to as “digital.” Since computers can only discriminate between two values—0 and 1, or on and off—at their most fundamental level, they are digital machines. Digital encoding, or a string of zeros and ones, is required for all data that a computer handle. Analog stands in contrast to digital. The hands of a clock that revolve around the face continually is an example of an analog gadget. An all-day clock like that can show any time of day. Conversely, a digital clock can only display information a limited number of times (every tenth of a second, for example).

Print books are analogue forms of information, as previously stated. Before being converted into digital format, a book’s contents must be digitized. The act of transferring the information from tangible media—such as books, periodicals, manuscripts, cards, photos, vinyl discs, etc.—to digital formats is called digitization. A piece of information such as a book, journal article, sound recording, photograph, audio tape, video recording, etc. can be divided into smaller pieces by a process called digitization. Information in a computer system is fundamentally represented by bits. Information can be digitalized using a range of current technology, which translates information into these binary numbers. The components of a digital image, on the other hand, consist of a collection of pixels, or picture elements, arranged in a specific column and row ratio. A suitable piece of software can be used to obtain, print, and edit an image file, just like any other standard computer file. To make their contents searchable, textual images can also be OCRed. Using a digital camera or scanner, an image of the physical object is taken, then it is translated into a digital format so that computers may access and store it electronically. Optimizing the use of digitized documents requires a significant amount of labor, thus the digitization process goes beyond simply scanning actual artifacts. There are situations when the definition of “digitization” includes these post-scanning procedures. Sometimes, the term “digitization” is used narrowly to refer to the act of scanning alone.

Need for Digitisation

A paper that has been digitized in print or another physical format (such as audio recordings) becomes more accessible and helpful. A digitized and OCRed document may allow a user to perform a full-text search. To direct a reader

to relevant content both inside the text and to outside sites, hyperlinks can be made. Digitalization ultimately works to improve rather than replace the existing library collections and services.

Various factors, such as the intended user, financial resources, and document type, can influence the decision to digitize a document. Accessibility improvement is the main goal of digitization initiatives, while specific goals may vary depending on the organization. Keeping up with technology, exchange of knowledge, cost reduction, and preservation are other goals. A digitisation project's biggest planning and implementation obstacles have to do with technical limitations, financial restrictions, copyright issues, a lack of policy guidelines, and, finally, the choice of items to digitize.

Digital information can be presented in novel ways using emerging technologies, yet most users might not have access to cutting-edge gear and software. Software incompatibilities can make it difficult for organizations to share information. Access to rare and delicate items, which are sometimes confined to particular groups, can be expanded thanks to digitization. While it improves accessibility for multiple users, it doesn't fully substitute traditional preservation methods due to the constantly changing digital landscape. Libraries opt for digitization for various reasons, such as meeting user needs for convenient access to high-quality information. Digital preservation ensures consistent quality despite repeated use. Additionally, digital formats facilitate simultaneous usage by multiple users and enable access to distant users via the internet. Digitization also aids in archiving rare materials and provides security for valuable documents.

SELECTING CONTENT FOR DIGITAL CONVERSION

To initiate the digitization process, the first step involves selecting the documents for digitization. This selection process comprises identifying, choosing, and prioritizing the documents earmarked for digital conversion. For organizations generating content, strategies are devised to capture data that originates in digital form. Documents in digital format are easily transformed into different formats. A resolution to intellectual property rights (IPR) issues is necessary if the selected material comes from outside sources. When digitizing content that is not in the public domain, it becomes imperative to obtain authorization from publishers and data sources. In the selection process, it is critical to address IPR concerns early on. Gaining consent from individuals and publishers can be difficult, time-consuming, and may require negotiating and paying copyright fees. Furthermore, questions come up about whether or not to use Optical Character Recognition (OCR) on digital photographs. Certain papers that are scheduled for digitization might already be in digital format; therefore, if e-media is available, it is more economical to obtain it rather than having to convert them from scratch. Moreover, specialized tools and highly qualified workers are needed for the digitization of bulky materials, decaying collections, bound journal volumes, manuscripts, etc

The documents earmarked for digitization may encompass various formats such as text, line art, photographs, and color images. Careful consideration is given to factors like utility, quality, security, and cost during the selection process. Priority is often given to rare and highly sought-after documents and images,

regardless of their quality. Several factors are taken into account when selecting appropriate media for digitization:

Audio: Sound quality is examined, and necessary corrections are made with input from subject experts and computer sound editors.

Video: Video clips are typically edited on Beta max tapes before being transferred to digital format. Color tone and resolution are reviewed and adjusted during editing.

Photographs: A high resolution is needed for slides as well as photographic images during the crucial step of selecting photos. Careful thought is given to quality, future requirements, and copyright issues.

Documents: We examine and select documents for digitization that are rare, in great demand, or too delicate to handle. Documents may be evaluated for publication instead of digitization if significant literary value correction is required.

Enhancing access to materials and adding value are the ultimate goals of digitalization. Intellectual significance in terms of quality, authority, distinctiveness, timeliness, and demand should be the biggest factor taken into account when choosing which papers to digitize. Essential considerations include the quantity of existing and prospective consumers, the physical properties of the source materials, and their intellectual content.

Digitization Stages

Document Image Processing (DIP), Electronic Filing System (EFS), and Document Management System (DMS) are examples of software that helps with the four basic steps of digitization. The first stage, scanning, involves using electronic scanners to capture images from sources like photographs, text, or manuscripts, transferring them into a computer. These scanners read or scan images at predetermined resolutions and dynamic ranges. These data, which are referred to as “bit-map page images,” are stored with tags and converted to particular image formats that allow for retrieval at a later time using the scanning software. Image scanners are the principal and most widely used instrument for transforming conventional paper-based documents into digital formats, while images can also be obtained by fax cards, electronic cameras, or other devices.

SCANNING

Electronic scanners are employed to capture electronic images from various sources like photographs, text, manuscripts, or similar materials. A preset dynamic range and resolution are used by these scanners to scan the image. The final file is called a “bit-map page image,” and it is formatted using certain image formats and tagged for storage and eventual retrieval via scanning tools. Although it’s possible to acquire images through fax cards, electronic cameras, or other devices, image scanners are the primary and widely used component for converting traditional paper-based documents into digital format.

Scanning with a flatbed scanner involves several steps:

1. Place the image on the scanner’s glass.
2. Start the scanner program.

3. Specify the scan area.
4. Determine image type.
5. Boost image sharpness.
6. Change the image size.
7. Save the scanned image in a desired format, like GIF or JPEG.
8. Indexing is an essential part of the procedure.

Storing

The biggest issue with document images is the file size, which has a direct impact on storage requirements. Unlike text-based files, an electronic page image saves every area of the page, whether or not ink is present. File size is influenced by variables such as scanning resolution, digitized area size, and graphic file type. To manage this, scanned images are often transferred from the scanning workstation's hard disk to external storage devices with large capacities, such as optical discs, CD-ROMs/DVD-ROMs, or snap servers.

Retrieving

A document imaging system typically uses at least two files for document storage and retrieval. The first file is standard, comprising a text description of the image and a key to the second file. The document's location is stored in the second file. Using a search algorithm, users select a record from the first file. When a record is chosen, the application program queries the location index, finds the document, and shows it. Most document management systems have extensive search functionality, including the use of Boolean and proximity operators (AND, OR, NOT), as well as wildcards. Users can adjust their search strategies as needed. When the necessary photos are detected, the corresponding document images can be quickly obtained from the image storage device for display or printing.

DIGITIZATION: INPUTS AND OUTPUTS

Digitization involves converting a document into a digital format, a process that varies depending on factors like the purpose of digitization, target audience, financial resources, and more. There are four basic ways that can be used to shift from print to digital.

- Scanning images only
- Optical Character Recognition with Preserved Page Layout
- Using Acrobat Capture to preserve page layout
- Re-keying data

Exploring the Technology of Digitization

Digital photos, also known as "bit-mapped page images," are electronic representations of photographs made up of bits or pixels. Each pixel has a binary value of "0" or "1". These images faithfully reproduce the original document's typefaces, illustrations, layout, and presentation. However, unlike ASCII-formatted text files, the contents of bit-mapped page images cannot be directly searched or altered. Nonetheless, OCR tools such as Xerox's TextBridge

and Caere's OmniPage can be used to create an ASCII file from a bit-mapped page image, allowing for text extraction and processing. Bit depth/dynamic range, resolution, threshold, and image enhancement techniques are all used to monitor the quality of digital photographs as they are captured.

Bit Depth

The bit depth, or the amount of bits given to each pixel, defines the range of grayscale or color tones that can be represented. Dynamic range, on the other hand, refers to the entire spectrum of fluctuations between a document's lightest and darkest points, as determined by a densitometer. When capturing digital images, the density or bits per pixel can vary depending on factors such as the nature of the source material, the intended audience, and the capabilities of the display and printing systems. For example, libraries often use binary scanning, also known as bitonal or black and white scanning, for pages containing text or drawings.

Resolution

Image resolution is defined as the number of pixels within a certain region, which is commonly quantified in dots per inch (dpi) for image files or as the ratio of horizontal pixels to vertical pixels for monitor display resolution. Increasing the dpi level on a scanner produces higher resolution and image quality, but also larger image file sizes.

Threshold

The threshold setting in bitonal scanning determines the threshold point on a scale that normally ranges from 0 to 255, with gray values read as black or white pixels. Resolution and threshold are important elements in determining image quality in bitonal scanning. This approach is best suited to high-contrast items such as text and line drawings. Greyscale or colour scanning is required for documents with continuous tones or low contrast, such as images. In grayscale/color scanning, image quality is determined by both resolution and bit depth.

PICTURE ENHANCEMENT

The image enhancement method seeks to improve scanned images, but this can be at the expense of image authenticity and accuracy. Image enhancing is a time-consuming procedure that requires specific skills and frequently results in higher conversion expenses. Filters, tonal reproduction, curves and colour management, touch-up tools, cropping, image sharpening, contrast adjustment, and translucent background capabilities are all common image enhancement features found in scanning or image editing software. To enhance quality on grayscale scanned pages, text/line art and halftone sections can be deconstructed and filtered independently.

COMPRESSION

Image files are generally greater in size than textual ASCII ones. To achieve cost-effective storage, processing, and network transmission, image files must be compressed. For example, a black and white image of a text page scanned at 300 dpi could be 1 MB in size, yet a text file with the same information could be only 2-3 KB. Image compression is the process of lowering the size of an image

by compressing repeated information, such as many rows of white bits, into a single code. Compression algorithms are widely divided into the following two categories:

Lossless Compression

During the compression process, repeated information is turned into a mathematical technique that can be decompressed without losing any details of the original image. No information is lost during compression, resulting in perfect fidelity when decompressed. Lossless compression is most commonly used with bitonal images.

Lossy Compression

Lossy compression, on the other hand, discards or suppresses features that are judged insignificant or have a minor impact on image quality. This compression method is called “lossy” because decompressing an image compressed with lossy techniques does not provide an exact reproduction of the original image. Grayscale/color scanning often uses lossy compression.

While compression is required in digital imaging for storage and transmission efficiency, producing an uncompressed, accurate reproduction of images is critical. This is especially crucial when moving photos between platforms or using various operating systems.

DIGITISATION: CONCEPT, NEED, METHODS AND EQUIPMENT

Uncompressed photos are often chosen over compressed images for a variety of reasons. As a result, it is advised that scanned images be saved as uncompressed images or, at most, lossless compressed images. Furthermore, it is recommended to use generally accepted compression protocols rather than proprietary ones, even if the latter provide more efficient compression and higher quality. When deciding on compression strategies, it is critical to examine the original documents’ properties. For example, ITU G-4 is intended for text compression, but JPEG, GIF, and Image PAC are intended for image compression. It is critical to provide flawless picture migration between platforms and hardware mediums. It is worth mentioning that highly compressed files are more prone to corruption than uncompressed files.

OCR (Optical Character Recognition)

OCR (Optical Character Recognition) programs are software applications that convert scanned textual page images into word processing files. OCR, or text recognition, is the process of electronically identifying text within a bit-mapped page image or series of images and creating a file containing that text in ASCII code or a specific word processing format while retaining the image. The goal of OCR is to make each word in a scanned document understandable and searchable without the need for manual data entry. Once a bit-mapped page image has undergone OCR, the document can be edited and controlled depending on its contents, utilizing the text present within the document. OCR does not directly convert an image into text; instead, it generates a separate file containing the recognized text while preserving the original image. Currently, four predominant OCR technologies exist in the market: matrix matching, feature extraction, structural analysis, and neural networks.

- 1. **Matrix/Template Matching:** This method compares each character in the text to its template. Such systems are frequently restricted to recognizing a limited number of fonts or necessitate training to identify a specific font.
- 2. **Feature Extraction:** This approach identifies characters based on their structural features such as angles, points, and breaks, using a set of predefined rules. It claims to be capable of recognizing characters from all fonts.
- 3. **Structural Analysis:** This technique identifies characters based on variations in density or darkness across the image.
- 4. **Neural Networking:** In this approach, neural networking, a type of artificial intelligence inspired by the human brain, is integrated with classic OCR and pattern recognition methods. This allows a system to learn from its successes and failures, a process known as “Intelligent Character Recognition” (ICR). Handwritten text and other difficult source materials can be recognized using neural network-based systems, which consider characters in the context of whole words. To improve performance, modern ICR integrates neural networking and fuzzy logic.

OCR Technology

Many software packages now provide the capability to retain the original page layout after OCR processing, although the specifics of this process vary depending on the software used. For example, Caere’s Omnipro has two ways for keeping page layout: True Page Classic and True Page Easy. True Page Classic places each paragraph in a separate frame in a word editor, which may necessitate resizing paragraph boxes for later editing. Conversely, True Page Easy allows editing without the need for resizing, albeit with a higher risk of text spillage over the page. Similarly, Xerox Text Bridge provides a capability called DocuRT, which is identical to True Page Easy. The OCR process disassembles the page, performs OCR on the individual components, and then reassembles them to allow for manipulation in a word processing package, retaining elements such as tabs, columns, tables, and graphics.

OCR is commonly considered to be less accurate than manual data entering. With a 98% accuracy ratio, a page containing 1800 characters might have an average of 36 errors. As a result, post-OCR cleanup is required unless the original scanned image is intended to be viewed as a page and OCR is only used to produce a searchable index for fuzzy retrieval engines such as Excalibur, which are highly tolerant of OCR faults.

File Formats used in digital libraries

Format Name	Extension	Format Type	Medium Confidence	High Confidence	Total occurrence in policies
Tagged Image File Format	TIFF, TIF	image	27	88	115
Waveform Audio File Format	WAV	audio	33	47	80

Portable Document Format	PDF	document	25	49	74
JPEG	JPG, JPEG	image	28	42	70
Plain text document	TXT, ASC	document	17	52	69
JPEG 2000	JP2	image	23	45	68
Quicktime	MOV, QT	video	47	20	67
Extensible Markup Language	XML	document	16	47	63
Audio Interchange File Format	AIF, AIFC, AIFF	audio	14	45	59
Portable Network Graphics	PNG	image	14	39	53
Graphics Interchange Format	GIF	image	22	31	53
HyperText Markup Language	HTML, HTM	document	18	33	51
Microsoft Word	DOC	document	38	8	46
Microsoft Powerpoint	PPT	presentation	38	6	44
Microsoft Excel	XLS	spreadsheet/ database	39	5	44

Digitalization Tools

Digital imaging is a connected system made up of hardware, software, picture databases, and access subsystems, each having its own set of components. Digitization tools employ both central and peripheral systems. An image scanning setup could be a solo workstation where chores are primarily conducted, or it could be a network of workstations where imaging jobs are distributed across numerous stations. This network typically consists of a scanning station, a server, and one or more editing and retrieval stations. A standard scanning workstation for a small production-level project may have the following components:

Hardware (Including scanners, computers, peripherals for data storage and output)

- Software (For image capture and editing)
- Network (For data transmission)
- Display and Printing Technologies

Digitisation: Concept, Need, Methods and Equipment

Dspace, which was built through a collaboration between Hewlett Packard (HP) and the Massachusetts Institute of Technology (MIT), is still being developed as institutional repository software. Despite ongoing progress, Dspace has garnered widespread adoption, with numerous institutions worldwide installing, assessing, and utilizing the platform. The most recent stable release, version 1.2, can be downloaded from the Dspace website. Dspace facilitates the capture, storage, indexing, preservation, and redistribution of a university's research faculty's intellectual output in digital formats. It may store a variety of digital resources, including text, photos, videos, and audio files. Articles, preprints, technical reports, working papers, conference papers, e-theses, datasets (statistical, geospatial, MATLAB, etc.), images (visual, scientific, etc.), audio and video files, learning objects, and reformatted digital library collections are all possible types of content. Backend technologies used include Apache, Tomcat, OpenSSL/mod_ssl, Java 1.3, JSP 1.2, Servlet 2.3, PostgreSQL 7, JDBC (RDBMS), CNRI Handle System 5 (permanent IDs), and Lucene 1.2 (index/search capability).

Essential

Dspace is built on the Java programming language and the open-source PostgreSQL database system. It also requires the installation of other Java-based components, such as Tomcat, a Java-based server, various Java code libraries, and Ant, a Java compiler. Ideally, Dspace should be installed on a Linux or Unix workstation, and the setup process often necessitates the assistance of an experienced system administrator.

E-prints

GNU Eprints 2.x is a free software package for creating online archives (<http://software.eprints.org>). It automatically develops an archive for research publications, reflecting its scholarly communication roots. While originally designed for research papers, Eprints can be adapted to suit a variety of content and objectives. GNU Eprints, developed by the Intelligent Agents, Multimedia Group at the University of Southampton's Electronics and Computer Science Department, is licensed under the GNU General Public License.

Essential

- Computers with GNU/Linux or equivalent operating systems are suitable. While faster processors are desired, even an Intel Pentium II CPU will deliver satisfactory results
- GNU/Linux, a free and powerful UNIX-like operating system, serves as the development platform.
- An Apache WWW server is required.
- Perl programming language and extra modules are required, as well as the MySQL database management system.

Greenstone Digital Library

Greenstone Digital Library is open-source software released under the GNU General Public License that makes it easier to manage and create digital library

collections. It takes an innovative method to organizing and sharing knowledge online or on CD-ROM. Greenstone, which began as the New Zealand Digital Library Project at the University of Waikato, is being developed in conjunction with UNESCO and the Humanities Library Project. The New Zealand Digital Library website features a number of example collections produced with Greenstone that are available for public browsing. Greenstone is compatible with Windows and Unix platforms, and it includes precompiled binaries for Windows and Linux, as well as complete source code for compilation with Microsoft C++ or gcc. It works well with other freely accessible software, such as the Apache Web server and PERL.

Ganesha Digital Library

Greenstone Digital Library is open-source software released under the GNU General Public License that makes it easier to manage and create digital library collections. It takes an innovative method to organizing and sharing knowledge online or on CD-ROM. Greenstone, developed in collaboration with Ganesha Digital Library version 4.0 (GDL), available at <http://gdl.itb.ac.id/>, is an open-source software developed within the Indonesian Digital Library Network. GDL allows knowledge sharing between institutions or people and provides access to the immense bank of knowledge within Indonesia's 'giant memory' via the IndonesiaDLN digital library network. An image scanning system's standard architecture consists of either a solo workstation where all operations are conducted locally or a network of workstations where imaging tasks are dispersed over numerous stations. This network configuration typically includes a scanning station, a central server, and one or more stations for editing and accessing the scanned images. A scanning workstation for a small-scale project could have the following components:

- Physical equipment (e.g. scanners, computers, storage devices, and output peripherals).
- Software applications for tasks like capturing and editing images
- Network infrastructure for transmitting data
- Technologies for displaying and printing images

CONCLUSION

Digitization is poised to transform how libraries access, store, distribute, and safeguard information. Practices, standards, and technologies vary among institutions, reflecting differing priorities on access versus preservation. While preserving historical resources is a key objective for many digitization projects in the US, the overarching goal is often to enhance collection accessibility, thereby fostering public awareness, education, and research. Large university libraries and collaborative digital initiatives are actively researching existing approaches, challenges, and technical hurdles. These digital libraries aim to serve broad populations or build comprehensive collections, with a particular focus on organizing and providing access to older materials. Digitizing older documents offers advantages such as improved accessibility and searchability, though the efficacy of digital preservation remains a subject of debate. While the idea of universal standards is appealing, current standards function more as guidelines due to the diverse needs and stages of digitization projects

across libraries. Some states are striving to standardize project methodologies to enhance interoperability, with tools like “crosswalks” aiding in format translation between systems. Digitization is reshaping public perceptions of libraries, but numerous unresolved issues persist, with various organizations working toward solutions. The hope is for increased standardization rather than a proliferation of disparate standards.

References

1. (The) University of California Libraries (2003), “Vision statement. Regents of the University of California”, available at: http://libraries.universityofcalifornia.edu/about/vision_statement.html (The) Visual Resources
2. Alexandria Library (2001), “Local history/special collections”, available at: www.alexandria.lib.va.us/lhsc_online_collection_guides/archive/archive.html Arms, W.Y. (2003), *Digital Libraries*, MIT Press, Cambridge, MA.
3. Broncolini, K. (2000), “Selecting research collections for digitization: applying the Harvard model”, *Library Trends*, Vol. 48, Spring, pp. 783-98. Brown University Library (2003), “E-resources”, available at: www.brown.edu/Facilities/University_Library/eresources/index.html
4. Cornell University, the Digital Library Research Group (2003), “The Fedora project: an open-source digital repository management system”, available at: www.fedora.info/
5. Digital Library Federation (2002), “Digital library standards and practices”, available at: www.diglib.org/standards.htm Sendorsed FEDORA Project (2004), available at: <http://fedora.redhat.com/>
6. International Conference on Digital Libraries 2004: Knowledge creation, preservation, access and management. 24-27 February 2004, New Delhi. Vols. 1 & 2.... New Delhi, TERI, 2004. xxiv + 1098p.
7. Minow, M. (2002), “Library digitization projects and copyright”, available at: www.llrx.com/features/digitization3.htm S108
8. Nicholls, B. (2003), “Advanced software and technologies”, *Byte.com*, October 5.
9. Scally, P.H. (1999), “Digital technology projects already thriving in public libraries”, *Public Libraries*, Vol. 38 No. 1, pp. 48-50.
10. Vyas, S.D. and Singh, D.K. Digital Libraries: Problems, Issues and challenges. in *Proceedings of the National Conference on Information Management in e-libraries 26-27 February 2002* edited by S. Parthan and V.K.J. Jeevan. New Delhi, Allied publishers Ltd. pp 304-311.

Cultural Hybridity and Identity in R.K. Narayan's Novels: A Global Perspective

Vishnu Ram Gehlot* & Dr. Jaydeep Pandya**

INTRODUCTION

R.K. Narayan's contribution to literature has been significant in portraying the intricacies of cultural hybridity and identity in a global context. His novels delve into the complexities of cultural intersections and the formation of identity, providing valuable insights into the impact of cultural exchange on individuals' sense of self and belonging. This study aims to further explore and analyze the global perspective evident in Narayan's works, shedding light on the nuanced understanding of cultural identity in today's globalized world. Through a comprehensive examination of Narayan's novels, this research work seeks to contribute to the broader discourse on cultural hybridity and identity formation, offering a deeper understanding of the cultural complexities presented in his literary creations.(Singh, 2020)(Parekh, 2002)(Saha, 2007)(Trivedi, 2007)(Maheshwari & Nagaraj, 2020)(Sanga, 2002)(Narayan, 1983)(Alam, 2006)(Kar, 2010)(Liu & Naipaul, 2005)(Rao, 1989)(Varghese, 2006)(Singh, 2023)(Gupta, 2023)(Vyas, 2020)(Takhar et al., 2012)(Palekar, 2012)(Manalansan, 2010)(Raj & Sreekumar, 2013)

R.K. Narayan, an iconic Indian author, is known for his captivating novels that explore cultural hybridity and identity from a global perspective. Narayan's literary works delve into the complexities of cultural interaction, migration, and the blending of traditions, shedding light on the multifaceted nature of identity in a rapidly changing world. In this research article, we will delve into the intricate layers of cultural hybridity and identity as portrayed in R.K. Narayan's novels, examining the impact of globalization and the interconnectedness of cultures. Through a comprehensive analysis of Narayan's characters, settings, and narratives, we aim to unravel the nuanced relationships between cultural identity,

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tradition, and modernity in his compelling literary creations. Furthermore, this study seeks to highlight the significance of Narayan's novels in shaping our understanding of cultural hybridity and identity in a global context. By exploring the themes of cultural hybridity and identity in R.K. Narayan's novels, we gain valuable insights into the intricate dynamics between globalization and the preservation of cultural heritage. R.K. Narayan's novels provide a rich tapestry of characters and settings that reflect the intricate dynamics of cultural hybridity and identity. Through his literary works, Narayan captures the collision and confluence of traditions, the complexities of migration, and the intermingling of diverse cultural elements. His characters navigate the shifting landscapes of modernity while grappling with the preservation of their cultural roots. In "The Guide" and "The Vendor of Sweets," Narayan beautifully portrays the tension between tradition and modernity, offering a nuanced exploration of identity within the context of a rapidly globalizing world. Moreover, his vivid depictions of South Indian life and the interactions between individuals from different cultural backgrounds shed light on the multifaceted nature of identity and the intricate web of influences that shape it.

As we delve deeper into Narayan's literary canvas, we uncover the imprints of globalization on the traditional framework of his narratives. The amalgamation of Eastern and Western influences in his novels reflects the evolving nature of cultural identity, presenting a compelling study of the ways in which globalization intersects with local traditions. By examining the interconnectedness of cultures in Narayan's works, we gain a deeper understanding of the impact of globalization on individual and collective identities, as well as the challenges and opportunities it presents for the preservation and evolution of cultural heritage.

In the following sections, we will closely analyze specific characters, themes, and settings from R.K. Narayan's novels to elucidate the profound insights they offer into the intricate interplay of cultural hybridity, globalization, and identity. Through this exploration, we aim to highlight the enduring relevance of Narayan's work in fostering a global perspective on cultural dynamics and enriching our appreciation of the complexities inherent in the formation of identity within a rapidly changing world. Additionally, this analysis will shed light on the role of literature in capturing and preserving cultural heritage, as Narayan's works serve as a testament to the powerful role that literature plays in documenting and articulating the complexities of cultural identity in the face of globalization. These insights provide a valuable perspective on the ways in which literature can serve as both a mirror and a catalyst for navigating the complexities of cultural identity in an increasingly interconnected world. The analysis of R.K. Narayan's novels reveals a nuanced exploration of identity and the impact of globalization on cultural heritage. It underscores the interconnectedness of cultures and the need to embrace diversity and adaptability in a globalized world. It emphasizes the importance of literature as a tool for understanding and navigating the complexities of cultural identity in the face of globalization. R.K. Narayan's novels uniquely capture the intricacies of cultural hybridity and identity, presenting a rich tapestry of characters and settings that mirror the evolving dynamics of globalization. Through his masterful storytelling, Narayan not only portrays the collision and confluence of traditions but also delves into

the individual struggles of his characters as they navigate the complexities of a rapidly changing world.

In “The Guide” and “The Vendor of Sweets,” Narayan adeptly illustrates the tension between tradition and modernity, offering nuanced insights into the multifaceted nature of identity within the context of a globalizing society. The characters in these novels grapple with the challenges of preserving their cultural roots while simultaneously embracing the forces of modernization, portraying a microcosm of the broader cultural shifts occurring in the world.

Furthermore, Narayan’s vivid depictions of South Indian life and the interactions between individuals from different cultural backgrounds serve as a testament to the intricate web of influences that shape cultural identity. As we immerse ourselves in the narratives of his novels, we uncover the profound imprints of globalization on the traditional framework, highlighting the evolving nature of cultural identity and the interplay of global and local influences.

Through our analysis of specific characters, themes, and settings in R.K. Narayan’s works, we aim to illuminate the enduring relevance of his literature in fostering a global perspective on cultural dynamics. By delving deeper into the complexities inherent in identity formation within a rapidly changing world, we continue to unravel the profound insights offered by Narayan’s literary creations. Applying Narayan’s exploration of cultural hybridity, adaptation, and identity in the context of globalization to our own understanding allows us to appreciate the interconnected nature of human experiences and the importance of embracing diversity in our increasingly interconnected world. # Analyzing Cultural Hybridity and Identity in R.K. Narayan’s Novels

UNVEILING THE SUBTLE NUANCES

Narayan’s literary canvas is a tapestry of cultural intricacies, seamlessly weaving together the dynamics of tradition, modernity, and globalization. His nuanced portrayal of characters and settings provides a profound insight into the multifaceted nature of identity within a global context. Through our continued analysis of specific characters, themes, and settings in R.K. Narayan’s works, we aim to unveil the subtle nuances that underpin the interplay of cultural hybridity, globalization, and identity.

CHARACTERS AS REFLECTIONS OF GLOBAL INTERCONNECTEDNESS

The characters in Narayan’s novels serve as compelling reflections of the global interconnectedness that shapes cultural identity. Whether it is the enigmatic Raju in “The Guide” or the introspective Jagan in “The Vendor of Sweets,” each character grapples with the complexities of reconciling tradition with the forces of modernization. Their internal struggles mirror the broader societal shifts and the evolving landscape of cultural hybridity in a rapidly changing world. As we delve deeper into the intricacies of these characters, we gain a profound understanding of the individual experiences that contribute to the collective tapestry of cultural identity and adaptation.

THEMES OF TRADITION AND MODERNITY: A DELICATE BALANCING ACT

Narayan’s exploration of the tension between tradition and modernity resonates deeply with the challenges faced by individuals navigating the complexities of

cultural identity. Through his narratives, he presents a delicate balancing act, where characters confront the pressures of preserving their cultural heritage while embracing the inevitable changes brought forth by globalization. The themes of tradition and modernity that permeate his novels invite readers to contemplate the evolving nature of identity and the adaptive resilience of cultural traditions in the face of global influences.

SETTINGS AS VESSELS OF CULTURAL EVOLUTION

The vivid depictions of South Indian life in Narayan's novels provide an immersive experience that unravels the interwoven influences shaping cultural identity. His settings become vessels of cultural evolution, encapsulating the interactions, conflicts, and harmonies between individuals from different cultural backgrounds. The rich tapestry of settings reflects the broader landscape of cultural hybridity, offering a panoramic view of the interconnectedness of cultures and the ways in which they inform and transform individual and collective identities.

EMBRACING LITERATURE'S ENDURING ROLE

Narayan's works stand as a testament to the enduring role of literature in capturing and preserving cultural heritage. As we navigate the complexities of cultural identity in an increasingly interconnected world, his literature serves as both a mirror and a catalyst for understanding the intricate dynamics of globalization and the preservation of diverse cultural traditions. Through our continued exploration of Narayan's literary creations, we aim to appreciate the profound insights they offer into the enduring relevance of embracing diversity and adaptability in shaping a cohesive global society.

In conclusion, our ongoing analysis of R.K. Narayan's novels allows us to immerse ourselves in the profound exploration of cultural hybridity, adaptation, and identity within the context of globalization. As we unravel the complexities and subtleties of his literary canvas, we continue to embrace the interconnected nature of human experiences, fostering a deeper appreciation for the enduring role of literature in navigating the intricate dynamics of cultural identity in a rapidly changing world. The literary works of R.K. Narayan serve as a compelling exploration of the evolving nature of cultural identity in the face of globalization. In this context, Narayan's literature invites readers to contemplate the evolving nature of identity and the adaptive resilience of cultural traditions in the face of global influences. In doing so, his novels underscore the importance of embracing diversity and fostering intercultural dialogue as we navigate the complexities of a globalized world. Furthermore, Narayan's literary works prompt us to reflect on the power of literature as a transformative force. In the age of late imperialism, cultural encounters are characterized by complex dialogues that reveal the intertwined nature of individuals and institutions within and outside of established parameters of nations. As individuals and societies engage in these dialogues, literature serves as a powerful tool for informing and transforming their identities.

References

1. Alam, Fakrul. Sexuality and the Fiction of R. K. Narayan. 5 Jun. 2006, <https://www.tandfonline.com/doi/full/10.1080/02759527.2006.11932445>.
2. Gupta, G., M.. Representing Gandhi: A Study of Mahatma Gandhi as a Character in Selected Novels from Colonial and Post-Colonial Times. 20 Aug. 2023, <https://doi.org/10.21659/rupkatha.v15n3.07>.
3. Kar, Angshuman. Narayan's A Tiger for Malgudi and Ecocriticism. 7 Aug. 2010, <https://www.tandfonline.com/doi/abs/10.3200/ANQQ.21.2.65.71>.
4. Liu, Yu-Yen, and V S Naipaul. Negotiating the Changing World: Migrancy and Identity in V. S. Naipaul's Fiction. 5 Nov. 2005, <https://www.tandfonline.com/doi/full/10.1080/02759527.2005.11932390>.
5. Maheshwari, Uma, and P Nagaraj. "Socio-Economic Global Cultural Flow with Reference to Select Indian English Novels." *Shanlax international journal of English*, vol. 9, no. S1-Dec2020, 22 Dec. 2020, p. 37-39. <https://doi.org/10.34293/english.v9is1-dec2020.3613>.
6. Manalansan, F, Martin. (Re)locating the gay Filipino: resistance, postcolonialism, and identity.. 18 Oct. 2010, https://www.tandfonline.com/doi/abs/10.1300/J082v26n02_03.
7. Narayan, K., R.. "A Tiger for Malgudi." *The Missouri review*, vol. 6, no. 3, 1 Jan. 1983, p. 139-154. <https://doi.org/10.1353/mis.1983.0025>.
8. Palekar, Shalmalee. The Nachya in Natrang: queer(ing) bodies in representations of Tamasha in Marathi cinema. 15 Nov. 2012, <https://www.tandfonline.com/doi/full/10.1080/10304312.2012.731260>.
9. Parekh, Naidu, Pushpa. "Becoming Spiritual in (Post)Colonial Contexts: R. K. Narayan and the Paradoxes of Myths, Mimicry and Moksha." *South Asian review - South Asian Literary Association/South Asian review*, vol. 23, no. 1, 1 Dec. 2002, p. 169-188. <https://doi.org/10.1080/02759527.2002.11932235>.
10. Raj, Jalarajan, Sony, and Rohini Sreekumar. Colonial Rebels in Indian Cinema. 1 Jul. 2013, <https://doi.org/10.1177/0973258613512563>.
11. Rao, Narayana, S, K. The Raj in Fiction: A Study of Nineteenth-Century British Attitudes Towards India. 5 Nov. 1989, http://muse.jhu.edu/content/crossref/journals/modern_fiction_studies/v035/35.2.rao.html.
12. Saha, Nandini. "The World of Nagaraj." *Journal of Commonwealth literature*, vol. 42, no. 2, 1 Jun. 2007, p. 101-112. <https://doi.org/10.1177/0021989407078596>.
13. Sanga, C, Jaina. R. K. Narayan and Malgudi's Indian Universe. 5 Dec. 2002, <https://www.tandfonline.com/doi/full/10.1080/02759527.2002.11932234>.
14. Singh, Dalbir. Goddess Named Gold. 6 Sep. 2023, <https://www.ijfmr.com/papers/2023/5/6190.pdf>.
15. Singh, Siddhartha. Nautanki: Evolution, Issues and Challenges. 30 Dec. 2020, <https://doi.org/10.21659/rupkatha.v12n6.16>.
16. Takhar, Amandeep, et al. Bollywood Cinema's Global Reach. 14 May. 2012, <https://doi.org/10.1177/0276146712441799>.
17. Trivedi, Harish. "R. K. Narayan at 100." *Journal of Commonwealth literature*, vol. 42, no. 2, 1 Jun. 2007, p. 1-6. <https://doi.org/10.1177/0021989407078573>.
18. Varghese, J., V.. Migrant narratives. 1 Jun. 2006, <https://doi.org/10.1177/001946460604300204>.
19. Vyas, Aparna. A Cultural Psychological Reading of Dalit Literature: A Case Study of 'Joothan' By Om Prakash Valmiki. 31 Oct. 2020, <https://doi.org/10.26812/caste.v1i2.188>.

Digital Globalisation and Media

Ravi Prakash Patel* & Dr. Dilip Upadhyay**

INTRODUCTION

In the 25 year since digital globalization starts after 1990s, as the entrepreneur research programme in many universities and organization, research aims to provide prominent workers in vocational, public and in many social sectors with the facts and insights on which to base management and policy decision. These type of research combined the disciplines of economics and management, employing the analytical tools of economics with the insights of prominent field workers. Our “micro - to - macro” methodology examines micro economics environment trends to better understand the broad macro economics forces affecting vocational strategy and public policy . Current research focuses on six themes – productivity and growth, natural resources, labour markets, the evaluation of financial markets, the economic impact of technology and innovation and urbanization.

Recent reports have assessed global flows : the economies of Brazil, Mexico, Nigeria and Japan. China’s digital transformation; India’s path from poverty to empowerment; affordable housing, the effects of global debt, and the economies of tackling obesity.

WHAT IS GLOBALISATION ?

Globalisation is a term used to express how vocational and entrepreneur with new ideas and techniques have made the whole wander into a wide range of connectivity and free to any type of barriers i.e interdependence place. Globalisation also captures in its scope the economic and social changes that have come about as a result.

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It enables the coming together of peoples, corporations and resources from different countries. The unique quality of globalization have permitted persons with diverse background to interact freely. It is the system among which whole world is passengers like a train or buses. It is vehicle that has helped global trade scale new heights in the last few decades.

DIGITAL GLOBALISATION

There are three types of digital globalization –

1. Political digital globalization
2. Economic digital globalization
3. Cultural digital globalization

After happenings of information technology revolution started in the early 1990 in the major of part of the world. Globalisation provided cheap and remote access interactivity in the remote areas of the earth like mountain area like Afganistan, Nepal, South Africa nations etc and forest cultivated areas Ghana, Jayare Besin in the South African nations then world changed digitally connected globalization from one point of earth to another part of earth. Where people reachness were impossible to reach everywhere in the world. This is the Digital Globalisation.

HOW DIGITAL GLOBALISATION AFFECTED WORLD ?

Digital globalisatin affected whole world in three terms –

1. Political Globalisatin – For example democratic introductory is the base for new 21st century. In the areas where dictatorship borns through political globalization, people from other country start a campaign to support the reform revolution in that country where dictatorship is born. Country like Mayanmar, China, Afganistan, Pakistan etc.
2. Economic Digital Globalisation – After invention of the internet whole world is under a single umbrella for trade and commerce activities. Through the help of economic globalization, today a person from staying in Afganistan may purchase a goods available in india without going or visiting in India. In this, Amazon Flipkart, Alibaba etc ecommerce website are playing a pivotal role to reach from one place to another on the earth without interfaring boundaries of nations on cheap rate. Before this goods was carried and kept in showroom but customers may deny then huge resources was wasteful. After digital globalization customers started to choice on e-commerce website and like goods and services are available on cheap rate.
3. Cultural Digital Globalisation – This is also a the part of digital globalization, more than 500 crores peoples are users of many different social media website like Twitter, Facebook, Linkdin, Whatsapp etc newspaper website of different nations eg The Dawn, The News Pakistan, London Times of Britain, New Zealand Times, Washigton Post of USA, New York Times etc a person from india may read news paper of different nations and may keep their choices of cultural and motivation through social media. Social media provides pivotal role to reach cultural of a nations in to another nations. Through cultural digital globalization Nepalese are going in Australia, Belzian people, Afgan people can choose the cultural another nations.

Role of Media in Digital Globalisation

Media provides a major role in digital globalization, we may say media and digital globalization are interrelated and interdependent. Now a days whole world is a village, nobody is out of reach of effects of digital globalization and digital media affects.

CONCLUSION

In latest 1990 globalisation start and richness of internet activities in the major part of the earth. Digital globalization made a revolutionary stage than many people from different countries can study, trade from different places without going there. At last I will say media are helping and reforming peoples life through the help of digital globalization.

Sources

1. Journals
2. Online Newspaper
3. E-Commerce Websites
4. Social media Websites and Newspaper

Digital Globalization and Its Impact on the Indian Education System: A Comprehensive Analysis

**Mr. Trivedi Vishal Rajendra Kumar* &
Dr. Bhawesh Kumawat****

INTRODUCTION

The fast progression of advanced innovation and globalization has altogether changed different parts of society, including instruction. With regards to India, a country with a different instructive scene, the effect of computerized globalization on the school system is significant and multi-layered. This examination paper plans to give an extensive investigation of the effect of computerized globalization on the Indian school system. By analysing different aspects, including admittance to instructive assets, educating and learning practices, and strategy suggestions, the paper looks to explain the open doors and difficulties introduced by advanced globalization in training. Through a blend of existing writing, contextual analyses, and observational information, the paper offers important experiences for policymakers, teachers, and partners looking to explore the computerized change of training in India.

The combination of computerized innovation and globalization has introduced another time of change across different areas, and instruction is no exemption. In India, a nation known for its different instructive scene and rich social legacy, the effect of computerized globalization on the schooling system is significant and diverse. This exploration paper intends to give an exhaustive examination of the effect of computerized globalization on the Indian school system.

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Computerized globalization envelops the union of advanced advancements with worldwide monetary and social patterns, bringing about expanded interconnectedness and admittance to data across borders. With regards to schooling, this peculiarity has prompted huge changes in instructing and learning rehearses, admittance to instructive assets, and strategy systems.

One of the critical parts of advanced globalization in schooling is the far-reaching reception of computerized advancements in educating and learning. The expansion of web empowered gadgets, internet learning stages, and advanced content has changed customary educational methodologies, offering new open doors for intelligent and customized growth opportunities. Moreover, computerized advancements have worked with joint effort among understudies and teachers, empowering consistent correspondence and information sharing past geological limits.

Besides, computerized globalization plays had an urgent impact in growing admittance to schooling in India. Web based learning stages and advanced assets have democratized admittance to instructive substance, especially in remote and underserved regions. This has enabled students from assorted foundations to seek after schooling and gain new abilities, along these lines adding to financial turn of events and strengthening.

Notwithstanding, close by the open doors, computerized globalization likewise presents a few difficulties for the Indian schooling system. Issues like the advanced separation, inconsistent admittance to innovation, and worries about information protection and security should be addressed to guarantee impartial and comprehensive admittance to instruction for all fragments of society.

COVID-19's Staggering Impact on Global Education

Number of Learners Impacted by national school closures worldwide



Figure 1 It refers to learners enrolled at pre-primary, primary, lower-secondary, and upper-secondary levels of education as well as at tertiary education levels.

Through an extensive examination of different aspects, including admittance to instructive assets, instructing and learning practices, and strategy suggestions, this exploration paper looks to give experiences into the open doors and difficulties introduced by computerized globalization in the Indian school system. By orchestrating existing writing, contextual analyses, and experimental information, the paper means to illuminate policymakers, teachers, and partners

about the ramifications of advanced globalization and to recognize procedures for tackling advancing comprehensive and quality training in India potential.

Lately, the fast progression of advanced innovation and globalization has essentially changed different parts of society, including training. This change is especially striking in India, a country with a rich and different instructive scene that is going through tremendous changes because of computerized globalization. This exhaustive examination looks to investigate the diverse effect of computerized globalization on the Indian school system.

Computerized globalization alludes to the reconciliation of advanced advances with worldwide financial and social patterns, bringing about expanded interconnectedness and admittance to data across borders. With regards to training, this peculiarity has prompted significant changes in educating and learning rehearses, admittance to instructive assets, and strategy systems.

The far and wide reception of computerized advances in training has reformed customary educational methodologies. Web based learning stages, computerized content, and cooperative instruments have become progressively predominant, offering new open doors for intuitive and customized opportunities for growth. Understudies and teachers presently approach an abundance of instructive assets and devices that rise above topographical limits, considering more powerful and drawing in instructive encounters.

Besides, computerized globalization plays had a crucial impact in democratizing admittance to schooling in India. Online stages and computerized assets have made schooling more available to students in remote and underserved regions, separating hindrances to passage and engaging people from assorted foundations to seek after training and procure new abilities. This democratization of schooling can possibly fundamentally affect financial turn of events and strengthening in India.

Notwithstanding, close by the amazing open doors, advanced globalization additionally presents a few difficulties for the Indian schooling system. The computerized partition, for instance, stays a steady issue, with differences in admittance to innovation and computerized education levels across various districts and financial gatherings. Also, worries about information protection and security have become progressively important in the computerized age, requiring strong administrative structures and moral contemplations in the utilization of advanced innovations in schooling.

Through a complete examination, this exploration paper means to dive further into the different elements of computerized globalization's effect on the Indian schooling system. By orchestrating bits of knowledge from existing writing, contextual investigations, and experimental information, the paper will give a nuanced comprehension of the open doors and difficulties introduced by computerized globalization. Moreover, the exploration will look to illuminate policymakers, teachers, and partners about the ramifications of advanced globalization and recognize methodologies for tackling advancing comprehensive and quality training in India potential. At last, the objective is to add to the continuous talk on instructive change and improvement in the computerized age, guaranteeing that the advantages of advanced globalization are utilized to make a more impartial and open school system in India.

CONCLUSION

The examination introduced in this paper features the significant effect of computerized globalization on the Indian schooling system. Through an assessment of different aspects, including instructing and learning rehearses, admittance to instructive assets, and strategy suggestions, it becomes obvious that advanced globalization has achieved groundbreaking changes with the two valuable open doors and difficulties.

One of the key open doors introduced by advanced globalization is the democratization of training. Internet learning stages and advanced assets have made schooling more open to students across geological limits and financial foundations. This can possibly engage people and add to financial advancement in India.

Also, advanced innovations have altered instructing and learning works on, offering new open doors for intuitive and customized opportunities for growth. Instructors currently approach an abundance of instructive assets and devices that improve the viability of guidance and work with coordinated effort among understudies.

Notwithstanding, close by these open doors, advanced globalization additionally presents provokes that should be tended to. The computerized partition stays a critical boundary, with variations in admittance to innovation and advanced proficiency levels across various districts and financial gatherings. Also, worries about information protection and security require cautious thought to guarantee the moral utilization of computerized advances in training.

All in all, advanced globalization has reshaped the scene of training in India, offering new open doors for access, joint effort, and development. In any case, tending to the difficulties presented by computerized globalization will require purposeful endeavours from policymakers, teachers, and partners. By saddling the capability of computerized innovations while tending to the related difficulties, India can fabricate a more impartial, comprehensive, and quality schooling system for all.

References

1. UNESCO. (2019). UNESCO Institute for Statistics: Education. Retrieved from <https://datacatalog.worldbank.org/dataset/unesco-institute-statistics-education>.
2. Government of India, Ministry of Human Resource Development. (2016). Digital Initiatives in Higher Education. Retrieved from <https://mhrd.gov.in/digital-initiatives>.
3. Sharma, P. (2018). Digital Transformation in Indian Education: Opportunities and Challenges. *Journal of Educational Technology*, 12(2), 45-62.
4. Singh, R., & Kapoor, A. (2020). Bridging the Digital Divide: Strategies for Enhancing Digital Literacy in India. *International Journal of Information Technology*, 8(1), 112-129.
5. Gupta, S., & Kumar, V. (2019). Impact of Digital Globalization on Education: A Case Study of Indian Schools. *International Journal of Educational Development*, 15(3), 321-335.
6. Government Of India, Ministry Of Education (1953). Report Of the Secondary Education Commission.

7. Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User Acceptance Of Information Technology: Toward A Unified View. *MIS Quarterly*, 27(3), 425-478.
8. Schilling K, Wiecha J, Polineni D, Khalil S. An Interactive Web-Based Curriculum On Evidence-Based Medicine: Design And Effectiveness. *Fam Med*. 2006; 38(2):126–32.
8. Warnecke E, Pearson
9. Jonassen, D.H. And Grabowski, B.L. 1993. *Handbook Of Individual Differences. Learning & Instruction*, Hillsdale, NJ: Lawrence Erlbaum Associates.
10. Kolb, D.A. And Fry, R. 1975. "Toward An Applied Theory Of Experiential Learning". In *Theories of Group Process*, Edited By: Cooper, C. 33–58. New York: Wiley.
11. Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students*, Fourth Ed. Pearson Education Limited, Harlow, England, P. 624
12. Agarwal, P. (2006). Higher education in India: The need for change (No. 180). Working paper.
13. Aithal, P. S., & Aithal, S. (2019). Analysis of higher education in Indian National Education Policy Proposal 2019 and its implementation challenges. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 3 (2), 1–35.
14. Aithal, P. S., & Aithal, S. (2020). Analysis of the Indian National Education Policy 2020 towards Achieving its Objectives. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5 (2), 19–41.
15. Arun, R., Suresh, V., Madhavan, C. V., & Murthy, M. N. (2010). On finding the natural number of topics with latent dirichlet allocation: Some observations. In *Pacific-Asia conference on knowledge discovery and data mining* (pp. 391–402). Springer, Berlin, Heidelberg.

Digital Reading Habits of Children

Malek Sahista * & Surabhi Joshi**

INTRODUCTION

"A reader lives a thousand lives before he dies . . . The man who never reads lives only one."

– George R.R. Martin

It is important that children read every day, as it helps them build background knowledge, enhances vocabulary, exposes children to new cultures and concepts. Reading improves concentration, curiosity, and inner calmness of a child. Reading not only helps develop a child's intelligence but also helps develop a child's imagination through different sources available therefore making a child more confident.

In this tech-savvy world there are many other options like smartphones and tablets available for reading. Technology has significantly impacted the reading habits of children. From their early reading years exposure to digital media has changed to behavior reading. With this, it is no surprise that youngsters have started to read more digitally. This shift in reading habits has prompted much discussion about the future of reading and what it means for traditional print media.

WHAT IS DIGITAL READING?

Digital reading is the activity of reading a book or an article using an electronic device like a smartphone, tablet, or eBook reader. There is no print format for these books. They are found particularly in PDF, HTML, or pub formats. In the

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age of the internet, digital reading is the new norm. For example, children might need help searching for the right information from rows of books in the library. Now, they can perform a simple online search, identify a PDF-based eBook with the answer, download it, read it, and delete it.

Amazon KDP is a prime example of digital reading. People can purchase their favorite books in a digital format, which is cheaper than printed books. Plus, they can read the book using their portable devices easily. Digital eBooks have the same benefits of reading books, but the only difference is that they are more flexible than traditional books.

DIGITAL EXPOSURE IN TENDER AGE

Good reading skills benefit students academically. This develops vocabulary, increases attention span, and promotes stronger analytical thinking. Compared to Twenty years ago, the digital media environment has flourished.

In the year 2000, Children were growing up with both traditional and electronic media. Hard bound Touch and feel books were the first book of memories and then comes the classic Little red hen... my first alphabet book with glossy papers and eye-catching illustrations.... were treasured at that time. In primary school Enid Blyton...Harry Potter ...the list will go on. Visits to a public libraires in summer vacation were the mammoth and most awaited task in those days.

Slowly paradigm shift has come into reading culture. The daily life, culture- and media consumption of our children, has been radically transformed through the introduction of digital devices and services. Reading is no longer limited to physical books and other printed media, and is increasingly performed online via blogs, electronic books computer games, and social media.

This new interactive media, such as entertainment gadgets work devices (personal computers and laptops), multi-functional devices (smartphones) has changed the reading culture. All rhymes and stories are illustrated in such a way that children remember them as they were edited. Primary schools are now using smart boards for their studies and that has also increased fascination towards digital reading.

BI-LITERATE BRAINS

Maryanne Wolf, author of "Reader, Come Home: The Reading Brain in a Digital World." Wolf, the first to use the term "Bi-literate brain,"

This would mean young readers would develop the capacity for reading in two languages, print and digital. She hypothesizes that children could learn to read each medium and switch easily between the two. In short, children would learn to read like bilingual readers do. Correct posture to read on screen helps them to have maximum benefit. Discuss with them the benefits of digital reading but in a correct manner with less distraction. Children who are reading from screens want to quickly grab information and go. They avoid. long paragraphs and instead are drawn to lists, bullets, and short bits of information. So, Parents or educators need to explain them the correct method of in depth reading.

THE F SHAPED PATTERN

There are mostly four reading patterns like spotted patten, layer cake pattern, F pattern, Commitment pattern. From this F-shaped scanning pattern is one of

the most common ones. Readers, searching for a quick answer to their query, focus on several first sentences of a text. In cases where they do not find their answer or the text is not engaging enough, they don't continue in word-by-word reading and start scanning the rest of the content. Readers start moving down the page, fixing their eyes on the left side of the content. They read some of the initial words per line to figure out whether the text has anything relevant to offer. After a while, they start to read again but usually stop around the middle of a line. This shorter horizontal area reminds a lower bar of a letter. This is called F Shaped Pattern for Digital reading. Basic characteristics of the F-shaped reading pattern is the first lines of the texts attract the most. The first few words on the following lines receive more gazes than the rest of the sentence. Most of the text is skipped.

This is how new generation kids are reading now a days. Digital E-books have had a significant impact on children's literacy skills. With the interactive tools they offer, such as built-in dictionaries and text-to-speech options, e-books can help children improve their vocabulary and reading comprehension. No doubt their English reading speed and style is increasing but grammar part is getting weak.

INFLUENCE OF GLOBALIZATION

Professor Arun C Mehta who worked in NIEPA, (The National Institute of Educational Planning and Administration) has written article about "Impact of Globalization on Education in India 2023" in School Education in India, Samara Shiksha. In this article he has mentioned that Smart classrooms, e-learning platforms, and digital resources have transformed the teaching and learning experience. Technology has made education more interactive, engaging, and accessible to students nationwide.

Children are now exposed to different cultures of the world in a single click. Exposure to each and every corner of the world is available. There is no language barrier due to Multilanguage translation applications. The world's best literature and stories have reached them at a much less price than books. Indian Mythology stories has changed its forms and shape, moral stories and Panchatantra has come in new digital Avatar. As Indian Children embraces global influences, there is a risk of diluting the country's unique cultural heritage.

ADVANTAGES AND DISADVANTAGES OF DIGITAL READING

Smartphones and other digital devices have brought a revolution in the context of accessibility and availability.

Easy Accessibility: eBooks, PDFs, blogs, articles, digital libraries, discussion forums, etc., provide a knowledge and in-depth insight about different subjects and topics. Due to easy accessibility children are less bothered to read on time and understand as well as memorize because it is always available with a single click.

High Convenience: There is no hassle of carrying heavy books. Children can just carry their smartphone, laptop, tablet, or any such compact digital device instead of heavy books but in parallel to this there is huge disadvantage of distraction with digital media.

Immersive & Interactive: eBooks can be fabricated in ways that they turn out to be more immersive and interactive than traditional books. For example, KITABOO offers features such as text highlighting, annotation, and bookmarking that are unique to digital books only. Such interactive add-ons make online reading immersive and enhance the overall experience. Due to this unique feature in digital reading children pay less attention to in depth subject reading and just mark online pointer.

Pocket-Friendly: Traditional books are expensive. And digital is available on a single platform whatever gadget children have. The impact of this is their eyes are always exposed to screen which can create health issues from very young age.

PSYCHOLOGICAL EFFECT OF DIGITAL READING HABITS

Lack of Motivation

Digital book is fascination of free download from wi-fi. If you ask a child How many eBooks have you stored on your phone?? In answer to this question, most of them will say downloaded many eBooks, however, still need to use them. This is the biggest disadvantage of having an eBook instead of a paper book. When we purchase a paper book, every time we see it on our study table or whenever we see it, we will get the motivation to read it, but in the case of eBooks, we usually do not care about them. The primary reason eBooks do not motivate people is that there are many annoying/ disturbing things on devices like mobiles and laptops, which generally attract people more than reading.

No Feel

We have been reading and learning from paper books since childhood, and hence we think or feel of physical paper books as the primary method of study. Furthermore, the younger generation uses mostly digital eBooks, they usually do not feel in their hands.

No Effort

children store eBooks either on Smartphones or on laptops. For both the things internet is required. If any doubt or any information is needed, they just need to search for keywords and get many options. In contrast, in a physical book to get child need to go deep into the subject and find the desired answer after a lot of effort, which makes them remember the answer properly.

PARENT-CHILD CONFLICT

Parent always want child to read in a traditional manner, in a day light and expect that if difficulty arise, child should contact them but with digital reading they have all the solutions and comfort of reading makes them alone from other peer group as well as parent.

SOME HELPFUL SOLUTION

We live in an era where we all depend on digital things. We are trying to advance everything with the latest technologies. We are growing in the field of

technology. Likewise, we have invented so many tools and platforms that are helpful for the education system, and in this sequence reading digitally is one of the most popular among students. These are a few helpful solutions to read digitally in a correct manner.

Choose high-quality digital content: When it comes to digital reading, not all apps or websites are created equal. Take the time to research and select high-quality digital content that aligns with your child's age and interests. Look for apps that offer interactive features, age-appropriate text, captivating visuals, and opportunities for active engagement.

Set limits and establish a routine: As with any screen time activity, it is crucial to set limits and establish a routine for digital reading. Designate specific times for digital reading sessions, ensuring they are balanced with other activities such as physical play and traditional book reading. Set clear boundaries on duration and encourage breaks to promote healthy screen habits.

Explore a variety of digital formats: Digital devices offer a many of reading options, including e-books, audiobooks, and interactive story apps. Encourage children to explore various digital formats, allowing them to discover what captures their interest and engages them the most. This diversity can keep the reading experience fresh and exciting.

Encourage offline connections: While digital reading is valuable, it is essential to balance it with offline experiences. Children should be motivated to read physical books, visit libraries, attend storytelling sessions. This integration helps build a holistic approach to reading and enhances creativity.

CONCLUSION

Both reading and digital tech are world-expanding human inventions, and laptops and smartphones have given humans unending opportunities to read more you can access pretty much anything in print within a few seconds. Research tells us that a child's brain is 80% developed by the age of three and 90% by five. At this tender age if a parent reads with a child, it opens a world of possibilities for kids. Their vocabulary, imagination and curiosity expand as they learn to read. Books with rhymes, rhythms, and repetition captivate their attention. Reading books fosters brain connections, essential for the development of language, social skills, and emotional well-being. Slowly parents can give digital exposure to them under the guidance.

With digital reading, we can access an infinite library of books at our fingertips. We can download and read books instantly on our phones, tablets, or e-readers without carrying heavy physical books. This convenience has made reading more accessible, increasing people's reading opportunities. Additionally, digital reading has enabled access to books in languages that might not have been available in print. Now in this digital era we need to train our brain in a way to go with screen reading without losing the essence of paper reading.

References

1. Information Sources, System and Services ;Master of Library and Information Science – BAOU
2. On emotional intelligence – HBR's 10 must reads (Harvard Business review press)

3. <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>
4. <https://www.unicef.org/uzbekistan/media/711/file/SOWC:%20Children%20in%20a%20Digital%20World.pdf>
5. <https://teacherinexile.com/the-biliterate-brain-the-reading-brain-of-the-future/>
6. <https://www.thebookwarehouse.com.au/reluctant-readers/books-v-screens-which-is-better-for-your-child/>
7. <https://theremnantarchive.com/how-the-young-in-india-read-from-paper-to-cyberspace/>
8. <https://readingpartners.org/blog/4-lessons-dr-seuss/#:~:text=A%20big%20reason%20for%20this,books%20teach%20important%20life%20lessons.>
9. <https://www.penguinrandomhouse.com/articles/james-clear-make-reading-a-habit/>
10. <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>
11. <https://www.atia.org/home/at-resources/what-is-at/>
12. <https://www.sightsaversindia.org/wp-content/uploads/2023/10/LA-KAP-Report-Sightsavers-Final.pdf>

Digitization and Education in India

Shreya Biswas*

INTRODUCTION

As Noam Chomsky stated, “The internet could be a very positive step towards education, organisation and participation in a meaningful society”¹. Now there isn’t probably anything left untouched by the internet. From what we are munching, what clothes we are putting on, with whom we are socialising to the academic courses that we are pursuing, the presence of internet and digitization is all-pervasive. There is simultaneity of both positives and negatives of this massive digitization which has impacted the lives of millions across the globe in Brobdingnagian proportions. This article aims to focus on the role and impact of digital globalisation on education in India.

CONTENT

So at the very outset let us have a quick understanding of this term “digitization” which is the buzz word of the 21st century. According to Gartner’s IT Glossary, the process of conversion from analog to digital form is termed as digitization². There are a whole lot of instances of digitization around us. With the help of digitization, handwritten or typewritten texts are converted into digital form (Bloomberg, 2018). Similarly conversion of paper documents into digital documents such as conversion of invoices and contracts into an electronic format is another instance of digitization (Bloomberg, 2018). And this comes with a plethora of advantages including easy accessibility of information which can be easily shared and archived thereby contributing to increase in efficiency and deftness. For instance, digitization has completely changed the ways libraries used to function previously thereby changing the face of research as well

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(Bertrand, 2010:112). Much of the past literature is now accessible and available and is published in digital form (Bertrand, 2010:112).

After a brief introduction to the meaning and definition of digitization, let us now have a sneak peek into how the information technologies have become appurtenant to the academic sector. The digital transformation resulting from the merging of different technologies has resulted in a close nexus between social and economic development with that of technology (Bertrand, 2010: 101-102). Global, technology based education is the need of the hour that would be “problem- oriented” and “learner- centered” thereby catering to “the reality of life in an interconnected and globalizing world” (Bertrand, 2010:102). The steady improvement in communication and technology has a sweeping impact on the quantity of data available to be transmitted(Bertrand, 2010:106). On the contrary the traditional face- to - face educational system has conked out to deliver befitting response to the globalizing society’s pressing needs(Bertrand, 2010:106).

In this era of wireless communication, due to the prevalence of “instant messaging and real time diffusion of information”, there is global dispersal of knowledge. (Bertrand, 2010:108). Geographical proximity can no longer create any hindrance for the access to quality education in this world of global interconnectedness (Bertrand, 2010:109). Geocentric knowledge which was hitherto tied to a specific location is now steadily getting replaced with one which is fast, portable and digital leading to instantaneous dissemination of knowledge unrestrained by time and space(Bertrand, 2010:109). Online curriculum at the world’s top notch institutes signifies a changing paradigm of higher education (Bertrand, 2010:106).

In today’s era of ‘digitised knowledge economy’, online presentation of the output of academics has become the norm of the day. (Lupton, 2015: 68). In many cases the “academic personae” of the scholars may have been crafted for academics by the concerned academic institutes (for instance, the curriculum vitae of scholars and faculties present in the respective websites), the academic work that get published in online platforms like Amazon and Google Books, even the reviews of their work are mostly posted online and so does the other academics who refer to their write-ups online(Lupton,2015: 68).As a result there is a panoramic online presence of many academics which in many cases are not even shaped by them (Lupton, 2015: 68). Blogging, tweeting, creating Facebook pages, You tube channels, WhatsApp groups , editing Wikipedia entries , “engaging in professional networking through websites like LinkedIn, Research Gate, Academia.edu”, use of online research resources from platforms like Google Scholar, JSTOR, Scopus, Internet Archive , RefSeek are prime exemplars of use of digitization for the academic purposes (Lupton, 2015: 68).Digitization has opened up new horizons for the academicians where they can share their research findings with the fellow scholars and connect with the ones doing research on similar lines(Lupton, 2015: 70). There are numerous online learning platforms like ‘Unacademy’, ‘NEPTEL’, ‘Physics Wallah’, ‘BYJU’S’, ‘UpGrad’, providing online material and live classes for a plethora of competitive exams.

In order to keep tandem with the rapid pace of globalisation, ‘Digital India’ project is skilfully developed to advocate universal digital literacy, cross- border mobility of knowledge quick accessibility of digital resources like open-access

publishing and re-skilling the existing workforce to make them concordant with the newfangled technologies (Singh, 2019:408). Increased cross-border mobility owing to rapid development of means of communication and use of ICT facilitates better learning through multi-cultural contributions across the corners of the world. (Das, 2021: 169). Digitized education espouses the cause of greater degree of coverage for their target audience; it keeps a tab on activity and performance measurement and augments the reduction of carbon footprints (Mahale, Hebbar, 2022; 222-223). Similarly the step of linking villages by optical fibre is another positive initiative in this regard (Singh, 2019:408). Digitization of education has proved to be a bonanza for those who can't afford to conform to "the old paradigm of requiring full-time physical presence for learning to take place" (Bertrand, 2010:114). That's why now a day's one gets to witness the proliferation of distant education and several programmes being offered under open distance learning system (Singh, 2019:408).

One such pivotal programme launched by Government of India is 'SWAYAM' (Study Webs of Active- Learning for Young Aspiring Minds) which provides a common platform for the most prestigious and esteemed educational institutes of India to pool their knowledge and offer courses by the honourable faculties across various disciplines from high school to post- graduation level(Singh, 2019:408). This programme is designed to augment the quality, equity and accessibility of higher education in India through Massive Open Online Course (MOOC) (Singh, 2019:408). The University Grants Commission has come up with an ingenious idea of credit framework for these courses thereby enabling the educational institutes to transfer credit for these aforementioned courses through Swayam- "twenty percent credit with easy credit transfer complementing academic programme" (Singh, 2019:409).

Besides 'Swayam', some other notable initiatives have also been made functional by the Ministry of Education under 'National Mission in Education through ICT' to exacerbate the use of ICT and enhance the quality of education using digital technologies. For instance, 'SWAYAMPRAKASHA' provides quality educational programs extensively throughout the day, similarly 'National Digital Library', 'e-PG Pathshala', 'Shodhganga'; 'e-ShodhSindhu' provides free access to books, journals and research theses³. On the other hand, programmes like e-Yantra, FOSSEE, Spoken Tutorial, Virtual Labs, National Internship Portal; National Educational Alliance for Technology accelerates the process of hands on learning⁴. Likewise VIDWAN, IRINS, Shodh Shudhhi (PDS), Academic Bank of Credits (ABC) helps in tracking and monitoring the progress by keeping a tab on research outcomes and also facilitates credit redemption⁵. One can see the pre-eminence on the integration of digital infrastructure and technologies in NEP 2020 to cater to the changing requirements of education in this tech-driven world. In order to standardise the process of teaching – learning method and to disseminate the knowledge amongst the audience in no time, NEP promotes the use of digital platforms like SWAYAM and DIKSHA (Gaur, 2023:04).

The National Educational Technology Forum (NETF) aims to provide an common platform to usher in the discussions with regard to the application of technology thereby assisting in the use of technology in education, building institutional and institutional capacities in ET and spearheading the way towards innovation and research (Gaur , 2023 ,04). Besides higher education,

government has been quite perfervid in advocating the use of ICT (Internet and Communication Technologies) and digital technologies in schools as well by envisaging digital infrastructures like digital boards, digital classrooms(e-classrooms) , machine learning artificial intelligence, use of online materials such as e- textbooks streaming audio and video files (Singh, 2019:409). NEP 2020 emphasised on the recruitment and training of virtuoso online educators who would be capable enough to handle digital infrastructure and deliver sound quality e- learning in the light of rapidly evolving technology (Gaur, 2023: 05).

Massive Digitization comes with certain conditions as well. Unmindful use of ICT without proper planning and execution on the part of policy makers will have its own ethical, moral as well as legal repercussions. One such is the menace of fraudulent practices like “awarding fake degrees by the way of internet based education, training and learning, and web portals” and cyber bullying as well (Singh, 2019:415). The issue of digital -divide is real so much so that in many cases “only the affluent can avail of best performing” digital gadgets where as many remain deprived of or unserved in benefitting from digital devices owing to their social and economic situation (Singh, 2019:411). In order to ward off such evils the policy makers need to pay utmost attention to the education and social policy so that the whopping use of technologies can never undermine the human values (Singh, 2019:419). With the availability of gadgets, digital tools and bandwidth for those deprived sections, can actually lead to the bridging of this digital divide. The potential of ICT can only be utilised to the fullest only when there would be well- trained educators to deal with high-tech tools coupled with adequate digital infrastructure to facilitate a holistic teaching-learning process (Gaur, 2023: 06).

The world has witnessed the indispensability of digital infrastructure during the pandemic when the entire human race kept themselves boxed within the confines of the four walls. From connectivity to efficiency, watchful digitization has uncountable advantages at its disposal leading to the stupendous development of a nation. Digitization and the use of artificial- intelligence is sky-rocketing in an unprecedented scale in every facet of our lives. If the imprudent use and dependence on digitization and artificial –intelligence is not kept under check, then that day is not far when humans would be ruled over by the humanoids controlling every aspect of their lives as portrayed by Spike Jonze in his movie “Her”.

Endnotes

1. Brainy Quote. (2001-2024). https://www.brainyquote.com/quotes/noam_chomsky_447294 (accessed on 30th March 2024)
2. Bloomberg, J. (2018, April 29). *Digitization, Digitalization, And Digital Transformation: Confuse Them At Your Peril.* <https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/> (accessed on 30th March 2024)
3. Department of Higher Education, Ministry of Education, Government of India. *Technology Enabled Learning.* <https://www.education.gov.in/technology-enabled-learning-0> (accessed on 31st March 2024)

4. Department of Higher Education, Ministry of Education, Government of India. *Technology Enabled Learning*. <https://www.education.gov.in/technology-enabled-learning-0> (accessed on 31st March 2024)
5. Department of Higher Education, Ministry of Education, Government of India. *Technology Enabled Learning*. <https://www.education.gov.in/technology-enabled-learning-0> (accessed on 31st March 2024)

References

1. Lupton, D. (2015). *Digital Sociology*. London and New York: Routledge
2. Bertrand, W. (2010) "Higher Education and Technology Transfer: The Effects of Technosclerosis on Development" in *JSTOR*, Vol.64, No.1, pp. 101-119. Retrieved from <https://www.jstor.org/stable/24385188> (accessed on 26th March 2024)
3. Das, S. (2021) "Impact of globalization on Education" in *International Journal of Humanities & Social Science Studies(IJHSSS)*, Vol. VII, Issue.V ,pp. 166-172. Retrieved from <http://www.ijhsss.com> (accessed on 26th March 2024)
4. Singh, K. (2019) "Digitalizing Education in India" in *JSTOR*, Vol. 61, No.4, pp. 407-419. Retrieved from <https://www.jstor.org/stable/10.2307/27097380> (accessed on 25th March 2024)
5. Mahale, P & Hebbar. C.K. (2022) "Impact of Digital India on Education System" in Research Gate. Retrieved from https://www.researchgate.net/publication/367608586_IMPACT_OF_DIGITAL_INDIA_ON_EDUCATION_SYSTEM (accessed on 26th March 2024)
6. Gaur , S. (2023) " NEP 2020 and the Infrastructure for ICT – based Teaching Learning" in *International Journal for Multidisciplinary Research (IJFMR)*. Retrieved from www.ijfmr.com (accessed on 26th March 2024)
7. Brainy Quote. (2001 – 2024) .https://www.brainyquote.com/quotes/noam_chomsky_447294(accessed on 30th March 2024)
8. Bloomberg, J. (2018, April 29). *Digitization, Digitalization, And Digital Transformation: Confuse Them At Your Peril*. <https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/> (accessed on 30th March 2024)
9. Fusaro, F. (2023, March 10). *Digitization, digitalization and digital transformation explained – understanding differences incl. examples* <https://morethandigital.in/fo/en/digitization-digitalization-and-digital-transformation-explained-understanding-differences-incl-examples/> (accessed on 30th March 2024)
10. Department of Higher Education, Ministry of Education, Government of India. *Technology Enabled Learning*. <https://www.education.gov.in/technology-enabled-learning-0> (accessed on 31st March 2024)

Exploring Digitization Techniques and Their Impact on Library Services: A Comprehensive Analysis

Dr. Renu*

1. INTRODUCTION

Libraries play a vital role in preserving and providing access to knowledge and information. With the advent of digital technologies, libraries are increasingly adopting digitization techniques to convert physical documents into digital formats. This paper explores the various digitization techniques used by libraries, their benefits, challenges, and the impact on library services.

2. DIGITIZATION METHODS

- 2.1 **Scanning:** Scanning is one of the primary digitization methods used by libraries. It involves using specialized scanners to create digital replicas of physical documents, including books, manuscripts, photographs, and maps.
- 2.2 **Optical Character Recognition (OCR):** OCR is a technology that converts scanned images of text into editable and searchable text files. Libraries utilize OCR software to make digitized documents text-searchable and accessible.
- 2.3 **Metadata Creation:** Metadata plays a crucial role in organizing and retrieving digital documents. Libraries create descriptive metadata, including title, author, subject, and keywords, to facilitate efficient search and retrieval processes.
- 2.4 **Digital Preservation:** Digital preservation ensures the long-term accessibility and usability of digitized documents. Libraries employ preservation strategies such as data backups, format migration, and metadata management to safeguard digital collections.

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3. BENEFITS OF DIGITIZATION

- 3.1 **Enhanced Accessibility:** Digitization improves access to library collections by providing online access to users worldwide, transcending physical barriers.
- 3.2 **Improved Search ability:** Digitized documents with OCR enable users to search for specific keywords or phrases within documents, enhancing the research and discovery process.
- 3.3 **Preservation of Fragile Documents:** Digitization helps preserve fragile or deteriorating documents by creating digital surrogates that can be accessed without handling the original materials.

4. CHALLENGES OF DIGITIZATION

- 4.1 **Copyright Issues:** Libraries must navigate copyright laws and permissions when digitizing copyrighted materials to ensure compliance and ethical use of digitized content.
- 4.2 **Technical Limitations:** Digitization processes require specialized equipment, software, and expertise, posing technical and financial challenges for libraries, especially smaller institutions.
- 4.3 **Long-term Preservation:** Ensuring the long-term preservation of digital collections requires ongoing maintenance, format migration, and adherence to digital preservation best practices.

5. IMPACT ON LIBRARY SERVICES

Digitization has a profound impact on library services, transforming traditional library practices and user experiences. Online access to digitized collections expands the reach of libraries beyond their physical locations, attracting diverse users and supporting lifelong learning and research endeavors.

6. CONCLUSION

The digitization of documents in libraries represents a significant shift towards leveraging digital technologies to enhance information access, preservation, and user experiences. While digitization offers numerous benefits, libraries must address challenges such as copyright concerns, technical requirements, and long-term preservation strategies. By embracing digitization techniques and leveraging digital resources, libraries can continue to evolve and fulfill their mission of preserving knowledge and serving the information needs of diverse communities.

Impact of Digital Globalization on Indian Education System

Dr. Devender*

INTRODUCTION

Indian education has a rich history that dates back thousands of years. In ancient India, education was provided by gurus or teachers who imparted knowledge to their students through the oral tradition. This system of education emphasized the holistic development of students and was rooted in traditional Indian knowledge systems. During the colonial period, the British introduced a Western education system in India. Today's some big benefits of globalization in education include greater awareness of other cultures, better transnational collaboration, reduced discrimination and racism, the spread of technology and innovation, and higher standards of living across the globe. Due to globalization, the quality of education has improved. Various countries got the opportunity to witness the best education systems worldwide. The concept of globalization has embedded the practical aspect of understanding other cultures and empathy among students. Digital learning tools like Kahoot, Google Classroom, Mind map, Seesaw, Edu clipper have a great impact in making teaching-learning more interesting to the learners. Free online resources and several MOOCs platforms enable teachers and learners to enhance their skills continuously affordably and flexibly. Personalized Learning: With digital technologies, educators can customize learning experiences for each student based on their learning style, preferences, and pace. This has made learning more engaging and effective, as students can learn at their own pace and in their preferred way. Digital education very simply refers to the use of technology in education as it uses digital tools, online platforms, and interactive content to give everyone access to high-quality education, bridge geographical gaps, and raise a

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generation with a wide range of skills for a globally connected world. Lack of Physical Interaction: One of the major disadvantages of digital education is the lack of physical interaction, which can make it more challenging for children to communicate with their teachers and peers.

RESEARCH OBJECTIVE

1. To explain the current scenario of digital globalization on Indian education system.
2. To analyse the impact of digital globalization on Indian education system.

Challenges of Digital Globalization on Indian Education System

The challenges of digital globalisation on Indian education system are as follows:-

- Digital Lack of Motivation in Students
- Digital Literacy and Technical Issues
- Digital Course Structure and Quality
- Digital Infrastructural Problems
- Digital Acceptance by Teachers
- Digital Lack of In-person Interaction
- Digital Lack of Education Tech and Online Learning Options for Special Needs of Students
- Lack of Discipline way of Digital
- Financial Hurdles for Digital Education
- Lack of Accredited Digital Degrees From All Institutes and Universities

Addressing these challenges will require digital significant investment in digital infrastructure, digital teacher training, and digital curriculum development. It will also require a shift towards a more student-centric digital education system that emphasizes critical thinking, digital problem-solving, and digital vocational education. Furthermore, addressing gender disparities in the digital education system will require targeted efforts to promote digital education and increase access to digital education for marginalized communities.

After Now Analysis of Challenges of Digital Educations Review

Digital education very simply refers to the use of technology in education as it uses digital tools, online platforms, and interactive content to give everyone access to high-quality education, bridge geographical gaps, and raise a generation with a wide range of skills for a globally connected world. The history of online education in India can be traced back to the early 2000s when several e-learning platforms were launched. These platforms provided access to online courses and materials, but the uptake was slow due to the limited reach of the internet. With digital instruction, students learn at an early age to accept greater personal responsibility while also improving communication and teamwork. As a company, we must ensure that our occupational vocational and advanced training efforts keep pace with digital transformation. Digital

education is the innovative use of digital tools and technologies during teaching and learning, and is often referred to as Technology Enhanced Learning (TEL) or e-Learning. By simply having an internet connection and a device, students can now join virtual classes, retrieve study materials, and interact with educational resources. Flexibility and Convenience: One of the most significant advantages of digital education is its flexibility. Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. The programme was launched on July 1, 2015 by Hon' Prime Minister Shri Narendra Modi. Digital learning can take form in a blog, a video, a real-time lecture or seminar or even just an audio file. Digital learning will include at least one piece of technology such as a computer, laptop or mobile phone. Digital learning makes it possible for students to communicate and study with a greater variety of materials without having to rely solely on the limited resources available in a traditional classroom setting. Students can study and explore information more easily with the aid of basic digital skills and technology. Digital learning caters to individual learning styles and paces, offering a personalized approach that traditional classrooms may struggle to achieve. Adaptive learning platforms and Artificial Intelligence (AI) algorithms analyze students' progress and tailor content to their strengths and weaknesses. Increased student engagement – Digital technology has made education more interactive and engaging. For instance, the introduction of gamification in education has made learning fun and interactive. It has also made it easier to understand and remember difficult subjects. The term Digital Learning Resources (DLRs) refers to digital resources such as applications (apps), software, programs, or websites that engage students in learning activities and support students' learning goals. Also known as the Net generation, technology-savvy students who have grown up immersed in technology and whose way of learning is shaped by this. Videoconferencing for Schools in the Digital Age. In conclusion, digital learning offers numerous benefits to students, such as accessibility and an interactive learning experience. It has the potential to transform education and help overcome traditional barriers. However, it also presents challenges such as access to technology and cybersecurity concerns.

NEED FOR THE STUDY IDENTIFIED IMPACT OF DIGITAL GLOBALIZATION ON INDIAN EDUCATION SYSTEM

In the context of Indian digital globalization has impacted upon the education system in complex and conflicting ways. There is an increased emphasis on preparing global citizens who are ready to face the highly competitive world. There is a huge upsurge in the demand for online learning, growing popularity of 'international' digital schools, need for curriculum restructuring and inclusion of ICTs etc. While the basic aims of education are to enable children develop their potentials, define and pursue a meaningful purpose; digital globalization has put an extra pressure on the education system to create 'winners' who are ready to battle in the race for the survival of the fittest. It has led to the preparation of a curriculum that has to be internationally acceptable digital ways. There is also a huge demand for learning digital globalizations, schools with an international appeal with unconventional syllabi that focus on overall development of personality instead of rote learning, newer means of teaching

learning pedagogy etc. School facilities have also come under the scanner as there is a demand for quality in available infrastructure that can aid in preparing a different class of people who are ready for a digital global world. In the contemporary context, students are seen as customers as well as partners in the process of digital learning.

The digital education system in India is much more improved these days and is one of the leading ones in the world. Education is the base for economic growth as well as social transformation for any country. It is also one of the biggest contributors to the economic growth of the nation. Digital Globalization is a driver of change that cannot be ignored. It is a trajectory that inextricably links both the digital higher education. The course of digital globalization will continue as long as people are driven to look across borders for resources, ideas, efficiencies and services. Digital Higher education institutions that fail to adapt to that reality do so at their own peril. A review of the status and trends of digital globalization of digital higher education is important and timely.

POSITIVE IMPACTS OF DIGITAL GLOBALISATION ON INDIAN EDUCATION SYSTEM:-

Indian Universities are the victims of digital education globalization but at the same time they also became the agents of digital education globalization. They are linked to various knowledge and production centre of the world. Digital Education Globalization affects the universities by linking them to the international supply of knowledge, labour and way of conducting business. Universities have to compete globally and therefore must respond to global forces. In this way, digital education globalization can enhance institutional autonomy in the whole world. The study also looks at the level and nature of digital flows of ideas and knowledge exchanged between each country with respect to its impact and interaction with higher education systems, institutions and communities. It will aim to capture the influence (positive and negative) of the respective flows. The Positive impacts of digital globalization on Indian education system are as follows:-

1. It makes students more excited to learn. Help students with busy schedules, freedom to work at home at their own time. Train student to learn new technological skills they can use later in the work place. Decrease paper and photocopying costs, promoting concepts of "green revolution"
2. Some big benefits of digital globalization in education include greater awareness of other cultures, better transnational collaboration, reduced discrimination and racism, the spread of technology and innovation, and higher standards of living across the globe.
3. The positive effects of digital education globalization include economic advancement and the reduction in poverty, creation of jobs, greater access to technology, cultural diversity and tolerance, emergence of new social movements and greater transparency.
4. It improves the student's ability to acquire and digital utilize knowledge. Plus, the introduction of digital globalization in education has made students great team players who can work closely in teams, thereby making them ready for the future. Digital Globalization has also enhanced the ability to

manipulate symbols.

5. Digitalization expands the possibilities of flexibility in education, promotes openness, increases student involvement in the learning process, improves the interaction of universities, and increases the speed of innovation.
6. This impact can be viewed both from the positive side and from the point of view of social risks of transforming higher education institutions under the influence of digitalization, and expressing situations of uncertainty in changing the configuration of relations between the subjects of the new educational reality.
7. Modern digitalization of education involves the process of system integration of computer tools, information and communication technologies in order to obtain new system-wide properties that allow for more efficient organization of productive activities of a person, group, society, and challenges and changes in the system.
8. The digital Education method of learning gives students the ability to access information beyond classroom training. They can have instant access to fresh information which can supplement their classroom learnings. Hence, it helps students learn more and retain better.
9. Digitalization Education system can significantly enhance governance and public services in Third World countries. E-government initiatives can streamline bureaucratic processes, reducing corruption and improving transparency.
10. Digital Education technologies streamline processes, reduce paperwork, and automate tasks, leading to improved efficiency in government services, businesses, and various sectors.
11. Globalization has undeniably transformed education in India, bringing opportunities for collaboration, technological advancements, and exposure to global perspectives. However, it also poses challenges such as cultural assimilation, inequality, and standardization.

NEGATIVE IMPACTS OF DIGITAL GLOBALISATION ON INDIAN EDUCATION SYSTEM

The negative impacts of digital globalisation on Indian education system are as follows:-

1. Negative side of this digital globalisation on Indian education system is that it could fade our traditional values and ethics.
2. Another negative impact of this digital globalisation on Indian education system is that it increasing the gap between the rich and poor for where rich people are becoming richer and poor are becoming poorer. Global digital learning has become beyond the reach of poor students.
3. Commodification and commercialisation of digital education increased in our country due to globalisation.
4. As a result of outsourcing, digital globalisation may deprive an entire country of getting proper jobs and resources. This is because digital globalisation takes jobs away from one country and provides it to another country.

5. Digital Globalization has undeniably transformed education in India, bringing opportunities for collaboration, technological advancements, and exposure to global perspectives. However, it also poses challenges such as cultural assimilation, inequality, and standardization.

CONCLUSIONS AND RECOMMENDATIONS

This article also features recommendations about future digital educations knowledge-sharing activities. Hopefully, more digital educational organizations such as from kindergarten to higher education and schools will actively promote the social emotional wellbeing of Kazakhstan's young people and their families. There is sufficient research evidence in the area of digital education system in India. Carminative results of this research work point to a need. Summing up the results of the study, one can conclude that modern digitalization of education involves the process of Indian education system integration of computer tools and online learning, information and communication technologies in order to obtain new system-wide properties that allow for more efficient organization of productive activities of a person, group, society, and challenges and changes in the Indian education system. Education under the influence of digitalization in the context of globalization has not only negative sides but also positive sides that lead to systemic transformations. Digitalization in education in the aspect of globalization plays a big role in the life of a modern person. However, only if certain conditions are met, such as improving Internet communications, developing and expanding Internet resources available for free use, improving teaching methods and technologies, digitalization of education will be able to reach a higher level and if not replace the traditional analog education system then become a good addition for it. This was fully confirmed by the results of the study. The priority concern for the country remains particularly with improving the digital quality of education and making digital education effective, enjoyable and relevant to the children. University and Schools have to aim at providing children fruitful experiences that enable them to realize fully their innate talents, develop capacities and empower all children in their digital learning, across differences of castes, religion, gender and disability. It's only when the country will be able to provide quality digital education to the children across the socio-cultural milieu; it will be able to truly achieve the potentials of a globalized world. Digitalization expands the possibilities of flexibility in education, promotes openness, increases student involvement in the learning process, improves the interaction of universities, and increases the speed of innovation. However, it is necessary to calculate the possible negative consequences of this transformation.

References

1. Pettersson F. On the issues of digital competence in educational contexts — A review of literature. *Education and Information Technologies*. 2018;23:1005-1021. <https://doi.org/10.1007/s10639-017-9649-3>
2. Williams, J. (2022). Globalisation and the Ideologies of Children's Rights. In *Globalisation, Ideology and Social Justice Discourses* (pp. 13-34). Springer, Cham.
3. Gnatyshina EV, Salamatov AA. Digitalization and the formation of digital culture: Social and educational aspects. *Bulletin of Chelyabinsk State Pedagogical University*.
4. Gushchin AV. Conceptual foundations for creating information and technological support for higher pedagogical education. *Fundamental Research*.

5. Kafidulina NN. Digitalization as a trend: Growth points for Russian education. Interactive Education.
6. Reddy, J. M., & Sujit, K. S. (2004). Higher education: The role of private universities in India. The IUP Journal of Public Finance, 2(4), 70-77.
7. Sawhney, S., Gupta, A., & Kumar, K. (2019). A simplified strategic management model for higher education institutions in India. International Journal of Higher Education and Sustainability, 2(3), 238-264.
8. Steiner-Khamsi, G., & Stolpe, I. (2006). Educational import: Local encounters with global forces in Mongolia. Springer.
9. Caldwell, B.G. toward a New View of Education for the Public Good. Staring the Strategic Conversation.(1998).
10. Cog burn, D.L. Globalization knowledge, Education and Teaching in the Information Age.(2000).
11. Ducker. Post Capitalist Society. New York: McMillan.(1993). "Introduction: Global and Local Dimensions of Reforms in Teacher Education, Teaching and Teacher Education". Editorial".(1999), 15, 133-141.
12. suryadatta.org/blog/effects-of-globalization-on-indian-education
13. Chinnammai, S. (2005), "Effects of Globalization on Education and Culture", ICDE International Conference, Retrieved March 29, 2015.
14. Draft Report of Working Group on Higher Education for the XI Plan, Planning Commission, Government of India (2007).
15. Frand, J. L. (2000), "The Information Age Mindset: Changes in Students and Implications for Higher Education", Retrieved February 25, 2015.
16. Gupta, S., Ritu S., Tismi, V., (2013), 'Impact of Globalization on higher education', from www.scribd.com(Online).

Bengal Patachitra Have Global Potential on 21st Century Digital Era: Where Traditional Art is a Way of Life and Make Changes Out of It?

Arunava Rakshit*

EVOLUTION

Patachitra of Bengal represents an essential trend of oral traditions, through changing times it has been changes in its way. This vital transformation helped to further the transmission process similarly towards from last quarter of the 19th century. But now these days Patua practices in a new dimension which they concur.

STAGES OF PATACHITRA

Preparation of Canvas

As the base material they use paper easily available in the market. Especially, fullscape or chart paper are used. The method to make the base strong and long lasting is not known. At the beginning of making *pat*, about 8 feet – 1feet part of the same is covered with plastic, which is easily available. It is done primary to protect the rest of the paper from water. Two handles on two sides are made with bamboo strips, help the artists to wind up the *patachitra*. It also becomes easier for the artists to unfold the *pat* with the two handles.

Preparation of Colour

They use colour from naturally available material, mostly they collect colour pigment nearby trees, leaves, ashes and sandstone. After mixing the pigment

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they use conventional neem adhesive. They know the usage of adhesive made of wood-apple, but the artists refrain from using it as because of fungi infected in rainy season.

Sources of Natural Colours used in Patachitra:

Colour Chart

Colour	Sources
Red	New leaves of the teak tree, Betel Leaf, Annatto fruit, Catechu.
Blue	Blue Pea flower.
Green	Runner beans, Leaves of Ivy gourd.
Brown	Matured teak leaves.
Black	Soot.
White	Kusum Mati (also known as saffron soil), Lime stone.

Sources of Natural Colours used in Santhal Patachitra:

COLOUR CHART

Colour	Sources
Gerua (Indian Red)	Geru Pathar (local name).
Yellow (Probably Yellow Ochre)	Holud Pathar.
White	Khorimati.
Black	Bhushokali
Orange	Kamala Pathar
Green	Simpata
Purple	Pui metuli
Pink	Boter Kuri
Red	Phanimanashar phol
Blue	Dela nil
Yellow	Palash Flower

List of well-known patuas (folk painter) in Bengal:

District	Area	Artist name
Birbhum	Sathpolsha Itagoriya Kushumjatra Purandarpur	Barun Patua Arun Patua Kalam Patua Jamir Bedia Laltu Chitrakar
Bankura	Noyadihi Raghurajpur Bishnupur	Muchiram Chitrakar Alok Chitrakar Ramprashad Chitrakar Sadhon Chitrakar Sneholota Chitrakar

Purulia	Turka Kashipur Kenda	Gobordhon Chitrakar Sitakonkho Chitrakar Anondo Chitrakar Angod Chitrakar
Murshidabad	Ayash Jhilli Dakhinkhondo Kantur	Rabi Patua Birinch Patua Pravat Patua Shriraj Patua
Medinipur (East + West)	Naya Binpur Thekuachalk Habibpur	Dukhushyam Chitrakar Rani Chitrakar Swarna Chitrakar Bahadur Chitrakar Shyamsundar Chitrakar Robban Chitrakar

Pata Songs and Patachitra Performance

Over the centuries, the artistic narrative remained unchanged. Traditionally, chanting and painting are two joint elements. The chanting or 'pater gaan' is the central element of the Patachitra, and the painting is realised only after the composition of the melody for the purpose of explaining the song visually and entertaining the spectators. The songs are divided into three phases: first is the story ('kahini'), then the moment of glory ('mahatmya'), and finally the introduction of the artist ('bhanita') in which, where he resides and his name and the village he comes from. The Chitrakars' repertoire consists of both traditional songs handed down by them ancestors and new compositions that enrich the personal collection of each artist. Subject matter is divided into three parts: traditional, social, and contemporary or global. Here; some of pat songs collected from patuas has a global narrative in their traditional art form.

IMPACT OF GLOBAL NARRATIVE ON BENGAL PATCHITRA:

'French Revolution'- patachitra



Patachitra and Pata Song: - Yakub Chitrakar, East Mednipur.

The King of France, Louis the 14th
Was punished for torturing his subjects.
The queen was very self-indulgent

How the King acted upon her wishes, listen to that story.
 The king says, "I don't want the responsibility of the kingdom
 Whoever is able can manage this difficult task".
 He calls the bourgeois, brokers and asks them,
 "Do you want to collect taxes and become rich?"
 The bourgeois brokers go and demand taxes from the poor.
 So brutal are they that the poor run off from the country.
 Then whoever it may be, has to pay for the dog's treatment
 If the King's dog bites any of the King's subjects.
 Then whoever it may be, has to pay for the dog's treatment
 If the King's dog bites any of the King's subjects.
 If anyone dares to act against the King
 They are arrested and executed at the guillotine.
 Some subjects raised a rebellion against the King.
 They were arrested and executed at the guillotine.
 The subjects who didn't obey the King's demands
 Were all arrested and kept in prison
 All the King's subjects cry and ask
 "Why are we being punished without any trial?"
 The King and Queen eat good food and sleep peacefully
 While their subjects are crying from hunger and starvation.
 The Queen asks, "What is that noise I can hear?"
 The King says, "This is the cries of hungry people."
 One day the people of the country becomes very angry
 And surround the palace all together
 In the darkness of the night, the King and Queen try to escape on a horse.
 But on the way, their subjects surround them.
 The King pleads the people and says,
 "Please do not punish me the way I have punished you."
 Some say, "Let's execute the Queen first at the guillotine."
 Some say, "Let's execute the King first at the guillotine."
 The King and Queen were executed at the guillotine.
 All the wronged subjects finally got justice.
 The King of France, Louis the 14th
 Was punished for torturing his subjects.
 Here I finish my story about France,
 I am Yakub Chitrakar, my home is Naya, Medinipur.





'Chandrayan' - Patachitra

Patachitra and pata Songs: - Bahadur Chitrakar, Naya, East Mednipur

ISRO scientists, we all bow down.
 O Chandra Yan is the name of India.
 ISRO scientists are also successful in the dark of the moon.
 Everyone in the world saw pictures of the moon.
 And ISRO scientists we all say that salutations.
 And Chandrayaan is the name of India.
 Moon mama is sleeping.
 Moon on the forehead of the moon
 Ticked.
 Chand mama gave the place to build a house.
 And ISRO scientists we all say that salutations.
 And Chandrayaan is the name of India.
 The nectar mill started, India moved on.
 We will build a golden India together.
 And ISRO scientists, we all bow down.
 O Chandra Jan succeeded in the name of India.
 Namaskar

'Covid-19' - Patachitra



Patachitra and Pata songs: - Swarna Chitrakar, Naya, East Medinipur.

Be aware of the virus and the people
Be aware of the virus
The virus spread from China's Huan city to the world
The virus spread from China's Huan city to the world
Coronavirus has become an epidemic
And people are aware of the virus
Be aware of the virus and the people
Be aware of the virus
Scientists say coronavirus is a deadly virus
Scientists say coronavirus is a deadly virus
The virus spreads from person to person
And people are aware of the virus
Be aware of the virus and the people
Be aware of the virus
Lockdown from the government breaks the chain of virus
Lockdown from the government breaks the chain of the virus
How many lives did the lockdown save
And people are aware of the virus
Be aware of the virus and the people
Be aware of the virus
If you have a cold, cough, fever, then visit the health center
If you have a cold, cough, fever, then visit the health center
Listen to the doctor, this is the appeal
And people are aware of the virus
Be aware of the virus and the people
Be aware of the virus
The virus will not go to the mouth after washing hands in soap
The virus will not go to the mouth after washing hands in soap
If you wear a mask on the face, do not spread it later
And people are aware of the virus
Be aware of the virus and the people
Be aware of the virus
Police, doctors, journalists, all of them
Police, doctors, journalists, all of them
They want to save people's lives
And people are aware of the virus
Be aware of the virus and the people
Be aware of the virus.

'Russia Ukraine War' - Patachitra



Patachitra and Pata Songs: - Sandhya Chitrakar, Naya, East Mednipur

Airstrikes in Ukraine Strange Events
 Airstrikes in Ukraine Strange Events
 Zelensky says Putin is your trick
 Airstrikes in Ukraine Strange Events
 Airstrikes in Ukraine Strange Events
 Don't tell me how to wipe away so much sorrow
 Airstrikes in Ukraine Strange Events
 There is no harm in comparing it
 Airstrikes in Ukraine Strange Events
 The rich and the poor are all leaving the country
 The rich and the poor are all leaving the country
 Airstrikes in Ukraine Strange Events
 A group of journalists picking up the report
 Again, the rescuers will go away and the force of the mind
 Airstrikes in Ukraine Strange Events
 The students of the school went to read everything
 They left their parents and went abroad
 Who rescued them, who rescued them?
 The airstrikes in Ukraine are strange.

Role of electronic/digital media:



Technological advancement make change in social behaviour. As times changed over the years- especially moulding mass media and communication to adapt to global technological transformations over the last hundred years, folk and traditional media got influenced as well. This was also reflected in India- especially over the last 15 years as the worldwide web explored a common platform for all forms and types of existing media and communication. The transformations within the intangible sector of folk and traditional media got reflected in various ways. Patachitra from Bengal got to be displayed within New Media- primarily through the personal websites of various folk artists and patua villages- a transformation evolved within the paradigms of local modes of entertainment- it found a voice within the global platform. With changing market demands and increasing reach through New Media-Patachitra traditions have also recreated artistic vision for the new generation of painters as they experience moulding their traditional profession to the demands of the modern consumerist global market. With several ethical issues questioning the survival, sustainability, and continuity of the folk tradition of Patachitra from Bengal and changing social roles, reflected in specific gender participations, this paper explores the various transformations which occurred within the representation of the old tradition in modern New Media and the issues involved therein.

With time, as the form has transformed and, in modern times, only survives to cater to the demands of the consumerist market- the paper proposes it is at times imperative to restrict the mention of the term. As the survival of the dying art of Patachitra faces a challenge like most other folk-art forms from around the globe, the intervention and inclusion of New Media is an aid in the process. However, the ground is created to expand the platform to include several urban traditions from around the world and reach beyond the mere limitations of Bengal. Thus, visual depictions, stories, and traditions expand to include a global consumerist demand. The essence has evolved into a new avatar: a new form, new format of storytelling, and new role-playing in modern society with changing socio-cultural and economic circumstances. Thus, Patachitra has gradually rediscovered its new voice to continue new formats of dialogue with society.

Patua sale their art work through digital market:



Image courtesy 'Banglanatokdotcom'.

Patachitra art market has also significantly changed since the last century. During the decades, several instances have changed the role of Patuas artists and the function of Patachitra singing paintings. External influences, such as the introduction of new types of entertainment, the arrival of tourism, and the logic of the western art market, introduced mechanisms unknown in the rural villages, influencing Patachitra's production in different ways.

Therefore, Patachitra's commercialisation mainly emerged with the decline of Patuas' demand to breathe new life into the tradition and provide the artists with an economic return. The new phase began in the 1970s with the demand of Calcutta's urban elite, who were uninterested in performances and willing to buy Patachitra and other artefacts just for collecting reasons as a demonstration of their social status. Soon after, with the growth of tourism due to the promotion activity of local NGOs, these selling dynamics started to increase, and the traditional practice was applied to new artefacts to satisfy the touristic demand. It is possible to say that Patachitra cultural heritage followed a two-fold direction: first with the diversification of artefacts and then with the mass sale of Patachitra. The diversification of Patachitra art onto new objects became functional to satisfy the tastes and needs of new potential buyers and to provide the Patuas with a more secure economic income. Begun as early as the 1990s, the production of new artefacts increased exponentially over the years.

The style, subjects, and decoration of Patachitra were applied to various commercial items, such as umbrellas, vases, lamps, t-shirts, bags, scarves, and other items. At the basis of this diversification were the needs of the buyers, for whom it is easier to carry something small rather than a long scroll. Moreover, these objects are preferred as they are part of everyday life and can be used for other purposes while at the same time being a tangible memory of the visit to the rural context. By now, almost all Patuas have dedicated themselves to these new productions. This phenomenon mainly regards the village of Naya and, to a lesser extent, also the village of Habichak in Medinipur. For Habichak, the creation of artefacts began more recently and only after workshops organised in collaboration with the Chitrakars of Naya. While in other villages further north, like in the Purulia district, no alternative products can be found because of the extreme poverty of the artists who do not receive any external support and therefore, can only afford to buy the sheets of paper. The new objects on which to paint were first introduced by the NGOs, while today, the purchase mainly depends on the economic availability of the individual Patua. Naya village, more involved in these activities, was able to enjoy the income from sales right from the start, which enabled the artists to buy back the items and diversify their production. Today, every artist at Naya offers a large number of objects decorated with this technique along with Patachitra scrolls.

Visual changes through medium:



Coaster with Patachitra motifs.



Decorated T-shirts.



Decorated tea pot and cup, Bowl, Handbag, Plate.

Image courtesy 'Banglanatokdotcom'.

Bengal Patua on International Sphere:



Urkult festival, Sweden, 2017.



Manimala Chitrakar performs with her Patachitra International festival Hungary, August 2019.



Swarna Chitrakar in a workshop at with kids Grinnell college, USA, 2017.



Patachitra exhibition, Noyon, France, July, 2017.

Image courtesy 'Banglanatokdotcom'.



Image courtesy 'Banglanatokdotcom'.

International visitors came into rural Bengal for Patachitra: Naya, East Mednipur. W.B.

Government and Non-Government Initiative

Government takes necessary steps to initiate their socio-economic upliftment, in 2018 govt have announced 'Silipi Vata' for folk artist which is 1000 rupees per month for every individual and established 'Silpa Kendra' in every district that they can store and sell their artwork. In spite of that govt holds Hastasilpa Mela in every year. In spite of govt initiative there are various NGOs needs steps for their economic stability. NGO like Bangla natok dot com considered as a pioneer organization, organizes workshop, seminar in those areas every year to create awareness. There are various NGOs' governmental agencies and bodies and individual blog posts mention or refer to the Patachitra traditions. With the click of a button as the world wide web opens a platform of interaction, traditional and folk media from Bengal seems close to the influence. As the webpage of like Daricha Foundation (<http://www.daricha.org/>), Bengalpatachitra.com are working in the realm of folk art- greets one with a colorful visual of a Patachitra- the introduction makes it lucid enough for a global audience to comprehend the meaning of local history and thereby- its significance in modern days.

non-government organization involved in Medinipur district (east west):

Index	2012-2013	2022-2023
NGOs Participation	1. Banglanatokdotcom.	1.Banglanatokdotcom. 2.Daricha Foundation. 3.Chitrataru.

ECONOMIC DEVELOPMENT OF PATUAS IN WEST BENGAL

Patua communities are characterised by lack of financial resources, land, assets, property and other resources. Due to lack of these resources, they experience problems in sustaining their livelihoods in an appropriate manner. The vast majority of the poverty-stricken individuals are employed in the agriculture sector, farming practices, and other activities, such as, animal husbandry, fisheries and so forth. Only Patuas of Medinipur district are in better condition rather than other districts of Bengal.

Economic growth of Patuas in Medinipur district (east west):

Index	2012-2013	2022-2023
Total no of Family	230	286
Average income per family	12,000 rupees.	40,000 rupees.
Average Art work per month	1-2 (depend on size and medium).	15-20 (depend on size and medium).
Annual Turnover (rupees)	01 crore	03 crores

CONCLUSION

In origin, Patachitra was not for sale, and Patuas reused them several times during their itinerant journeys. The scrolls were used to accompany the performance and usually we're not sold or left to the audience, as Patuas had to move from village to village. During the 20th century, Indian society underwent profound changes as a result of new social and cultural influences. In the thirty years between the period of independence from colonialism and the 1980s, the role of the Chitrakar started to decline as a consequence of the growing disinterest in rural entertainment. With the introduction of new forms of entertainment, such as radio, television, and cinema with Bollywood films, patrons and villagers began to show less and less interest in the Patuas' epic-religious performances. Many artists were forced to abandon their traditional occupation for more lucrative jobs: some migrated to the cities

for daily labour; others took up farming, trading, and rickshaw transport to survive and provide food for their families. Towards the end of the twentieth century, few Patuas still pursued their occupation, and the art of Patachitra appeared to be a tradition on the verge of disappearing. This art form would have risked extinction if it had not found a way to introduce a double evolution: the themes addressed and the role of the artists. It is also essential to add-as the medium gradually changed from a descriptive to a mere display art. According to locals 1000/1500 international visitors came Naya village every year to collect traditional art work. It has been started in last ten years and the number growing but rest of district are not connected with global audience. Naya became internationally acclaimed for traditional art practice by UNESCO. There are

five districts (Birbhum, Murshidabad, Purulia, Bankura, North 24 Pargona) in Bengal where Patua practice their art work but they remain unknown, now a day some NGOs like Daricha foundation, Banglanatokdotcom and some individuals organizes workshop and trained them to communicate with larger audience in a small scale. Hope soon all other organization may participate for their economic upliftment and they can perform in international sphere in recent years.

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References

1. Chandra Sharmila. *The Patuas of West Bengal and Odisha: An Evaluative Analysis*. Mumbai: Himalaya Publishing House, 2017.
2. Dutt Gurusaday. *Folk Arts and Crafts of Bengal*, University of Calcutta, 1939,
3. Chitrakar Anwar. Interview by Researcher at Naya Medinipur, 2020.
4. Chitrakar Bahadur. Do.
5. Chitrakar Baharjan. Do.
6. Chitrakar Dukhushyam. Do.
7. Chitrakar Manimala. Do.
8. Hauser Beatrix. "From Oral Tradition to "Folk Art": Revaluating Bengali Scroll Paintings." *Asian Folklore Studies*. 2002.
9. Milford Lutzker, Mary-Ann. "Intersections: Urban and Village Art in India." *Art Journal*- 58, 1999.
10. Brown Rebecca M. *Art for a Modern India, 1947-1980*. Durham: Duke University Press, 2009.
11. Bhowmick Atul Chandra. "Bengal Pats and Patuas: A Case Study." *Indian Anthropologist*. 1995.
12. Pal Pratapaditya. *Calcutta: Changing Visions, Lasting Images Through 300 Years*. New Delhi: Marg Foundation, 1990.
13. Parekh Bhikhu. "Defining India's Identity." *India International Centre Quarterly*-33. 2006.
14. Purohit Vinayak. *Arts of Transitional India Twentieth Century*. Columbia: South Asia Books, 1988.
15. Scrase Timothy J. "Precarious Production: Globalisation and Artisan Labour in the Third World." *Third World Quarterly*-24, 2003.
16. Sen Arup Kumar. "A Discourse on Nineteenth Century Bengal." *Economic and Political Weekly*-26, 1991.
17. Sinha Suhashini, and Professor C. Panda. *Kalighat Paintings*. Ahmedabad, Mapin Publishing, 2011.
18. Subramanyan K.G. "The Craft Movement in Santiniketan." *Calcutta: Crafts Council of West Bengal*, 1986.
19. Winchester Simon. *Simon Winchester's Calcutta. Footscray: Lonely Planet Publications*, 2004.
20. Yengkhom Sumanti. "Harmony in Color." *The Times of India*, July 12, 2010.

From Chalkboards to Cyber-boards: Digital Globalization in Indian Education System

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INTRODUCTION

The globalization of education through digital technologies has ushered in a transformative era for the Indian education system, transitioning from traditional chalkboards to interactive cyberboards. This paradigm shift reshapes how knowledge is imparted and acquired, offering unprecedented opportunities and posing unique challenges. India's education system has deep historical roots, with traditional methods centered around face-to-face instruction, handwritten notes, and reliance on physical textbooks. The advent of chalkboards revolutionized teaching by enabling educators to visually present information to students. This method persisted for decades, symbolizing the conventional approach to education. Over the past two decades, India has witnessed a rapid digital revolution that has permeated every aspect of society, including education. The proliferation of smartphones, widespread internet connectivity, and the government's Digital India initiative have catalyzed the integration of digital technologies into classrooms. This evolution has led to the emergence of "smart classrooms" equipped with digital projectors, interactive whiteboards, and online learning platforms. Despite the promising potential of digital globalization in education, several challenges hinder its widespread adoption. Infrastructure gaps, particularly in rural areas, pose barriers to equitable access to digital resources. Additionally, the digital divide based on socioeconomic disparities highlights the need for inclusive policies and interventions. However, digital globalization also presents unparalleled opportunities to enhance

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learning outcomes, foster innovation in teaching methodologies, and broaden educational access beyond geographical boundaries.

OBJECTIVE OF RESEARCH

This research paper aims to analyze the impact of digital globalization on the Indian education system. By examining case studies, government policies, and socioeconomic implications, the study seeks to:

- Understand the extent of digital integration in Indian classrooms.
- Evaluate the effectiveness of digital technologies in improving educational outcomes.
- Identify challenges and opportunities associated with digital globalization.

DIGITAL REVOLUTION IN INDIAN EDUCATION

The digital revolution in Indian education represents a transformative shift propelled by advancements in technology, connectivity, and innovative pedagogical approaches. Over the past few decades, India has witnessed a rapid integration of digital technologies into its education system, impacting various aspects of teaching, learning, and administration. Here's an exploration of the digital revolution in Indian education:

Emergence of Digital Technologies

The proliferation of digital technologies, including computers, the internet, smartphones, and multimedia devices, has revolutionized educational practices in India. Access to affordable smartphones and internet connectivity has enabled students and educators across the country to leverage digital resources for learning.

Adoption of Smart Classrooms

Traditional classrooms are being transformed into "smart classrooms" equipped with interactive whiteboards, projectors, audio-visual aids, and educational software. Smart classrooms enhance engagement and interactivity, allowing educators to deliver content in innovative ways and cater to diverse learning styles.

Rise of Online Learning Platforms

The advent of online learning platforms such as BYJU'S, Khan Academy, and Coursera has democratized access to quality educational content. These platforms offer a wide range of courses, tutorials, and assessments, enabling self-paced learning and personalized education experiences.

Blended Learning Models

Blended learning, combining traditional classroom instruction with online components, has gained popularity in Indian schools and universities. Blended learning optimizes student-teacher interactions, promotes independent learning, and fosters digital literacy among learners.

Digital Assessment and Feedback

Digital tools facilitate efficient assessment and feedback mechanisms, enabling educators to track student progress, analyze learning outcomes, and provide personalized interventions. Online assessment platforms streamline evaluation processes and reduce administrative burdens.

Open Educational Resources (OER)

Open Educational Resources (OER), including open textbooks, videos, and interactive simulations, have empowered educators to access and adapt educational materials freely. OER promotes collaboration, creativity, and resource-sharing among educators, contributing to the development of a vibrant educational ecosystem.

Government Initiatives and Policies

The Government of India has launched various initiatives to promote digitalization in education, such as Digital India, National Mission on Education through ICT (NMEICT), and SWAYAM (Study Webs of Active Learning for Young Aspiring Minds). Policies like the National Education Policy (NEP) 2020 emphasize the integration of technology in curriculum design, teacher training, and assessment practices.

Skill Development and Vocational Training

Digital technologies play a crucial role in enhancing skill development and vocational training programs, aligning education with industry requirements and fostering employability.

CHALLENGES AND OPPORTUNITIES

The digital revolution in Indian education presents a spectrum of challenges and opportunities that shape the landscape of learning and development. While digital technologies have the potential to revolutionize education, they also bring forth complex issues that need to be addressed effectively. Let's explore the challenges and opportunities associated with the digital transformation of education in India:

CHALLENGES

Digital Divide

Unequal access to digital infrastructure and internet connectivity across rural and urban areas creates a significant digital divide. Many students from economically disadvantaged backgrounds lack access to devices like smartphones or computers, hindering their ability to benefit from online education.

Quality of Online Content

Ensuring the quality and reliability of online educational content remains a challenge. The proliferation of digital platforms sometimes leads to information overload and makes it difficult for learners to discern credible sources from misinformation.

Digital Literacy Gaps

Limited digital literacy among students, teachers, and parents impedes the effective utilization of digital tools. Training and capacity-building initiatives are required to enhance digital literacy skills and promote responsible use of technology.

Teacher Training and Support

Many educators lack adequate training and support to integrate digital technologies into their teaching practices. Continuous professional development programs are essential to empower teachers with the necessary skills and confidence to leverage technology effectively.

Infrastructure Constraints

Insufficient digital infrastructure, including stable internet connectivity and power supply, poses challenges for the seamless implementation of digital learning solutions. Addressing infrastructure gaps is crucial to ensure equitable access to digital education resources.

Privacy and Security Concerns

Safeguarding student data and ensuring privacy in online learning environments are critical issues. Measures must be implemented to protect personal information and prevent unauthorized access to sensitive data.

OPPORTUNITIES

Enhanced Access and Inclusivity

Digital technologies facilitate access to quality education for learners in remote or underserved areas. Online learning platforms offer flexible, self-paced learning opportunities that cater to diverse educational needs and preferences.

Personalized Learning Experiences

Technology enables personalized and adaptive learning experiences tailored to individual student's strengths, weaknesses, and learning styles. Data analytics and artificial intelligence can be leveraged to track student progress and provide targeted interventions.

Collaborative Learning and Global Connectivity

Digital platforms facilitate collaborative learning, enabling students to connect with peers, educators, and experts from around the world. Virtual exchange programs and online forums promote cross-cultural understanding and global citizenship.

Innovative Pedagogical Approaches

Digital tools foster creativity and innovation in teaching methodologies, allowing educators to experiment with interactive and immersive learning experiences. Gamification, augmented reality (AR), and virtual reality (VR) can make learning engaging and meaningful for students.

Skill Development for the Future Workforce

Digital education equips students with 21st-century skills such as critical thinking, problem-solving, and digital literacy, preparing them for future careers in a technology-driven world. Vocational training programs leverage digital platforms to offer industry-relevant skills and bridge the gap between education and employment.

Policy Reforms and Strategic Investments

Government initiatives and policy reforms promote digitalization in education and encourage strategic investments in digital infrastructure and capacity-building. Public-private partnerships play a crucial role in driving innovation and scaling up digital education initiatives.

GOVERNMENT INITIATIVES AND POLICIES

The Indian government has implemented various initiatives and policies to promote digitalization and innovation in the education sector, aiming to enhance access, equity, and quality of education across the country. Here are key government initiatives and policies driving digital transformation in the Indian education system:

Digital India

Launched in 2015, the Digital India initiative aims to transform India into a digitally empowered society and knowledge economy. Under Digital India, the Ministry of Human Resource Development (now Ministry of Education) has focused on digitizing educational infrastructure and promoting e-learning solutions.

National Education Policy (NEP) 2020

The NEP 2020 emphasizes the integration of technology in education to enhance learning outcomes and promote flexibility and innovation. It advocates for the use of digital tools for personalized learning, teacher training, and assessment reforms.

SWAYAM (Study Webs of Active Learning for Young Aspiring Minds)

SWAYAM is an online platform offering free courses and resources for school and higher education. It provides Massive Open Online Courses (MOOCs) developed by faculty from premier institutions to enhance access to quality education for all.

DIKSHA (Digital Infrastructure for Knowledge Sharing)

DIKSHA is an integrated platform for school education, offering digital resources, teacher training modules, and e-books. It enables teachers to create, share, and use interactive content to enhance classroom instruction.

National Mission on Education through ICT (NMEICT)

NMEICT aims to leverage ICT (Information and Communication Technology) tools to improve the quality of teaching and learning in higher education. It includes initiatives like Virtual Labs, NPTEL (National Programme on

Technology Enhanced Learning), and e-content development.

Rashtriya Madhyamik Shiksha Abhiyan (RMSA)

RMSA focuses on improving secondary education and enhancing digital infrastructure in schools. It promotes ICT-enabled teaching and learning practices, including smart classrooms and digital content development.

ICT Initiatives in States and Union Territories

Many states and union territories have launched their own ICT initiatives to promote digital learning. For example, Karnataka's 'Unnati' program aims to provide digital content for school education, while Gujarat's 'e-Class' initiative focuses on digital classrooms.

Pradhan Mantri e-Vidya Program

Launched as part of the COVID-19 response, the Pradhan Mantri e-Vidya Program promotes online education and digital classrooms during times of disruption. It emphasizes the development of digital infrastructure and capacity-building for educators.

Skill India Mission

The Skill India Mission aims to empower youth with relevant skills for employment and entrepreneurship. It includes programs like PMKVY (Pradhan Mantri Kaushal Vikas Yojana) that leverage digital technologies for skill development and vocational training.

National Digital Library (NDL)

The NDL provides access to a vast repository of digital educational resources, including books, articles, videos, and audio materials. It promotes open access to knowledge and supports self-directed learning.

Government initiatives and policies play a crucial role in driving digital transformation and innovation in the Indian education system. Continuous investments in digital infrastructure, teacher training, and content development are essential to realize the full potential of digital education in India.

CASE STUDIES AND EXAMPLES

Case studies and examples provide valuable insights into how digital technologies have been implemented in the Indian education system, showcasing successful initiatives and their impact on teaching, learning, and educational outcomes. Here are some notable case studies and examples highlighting the transformative effects of digitalization in Indian education:

Telangana's Digital Classrooms

Telangana State Government has implemented a comprehensive program to establish digital classrooms in government schools. Smart classrooms equipped with interactive whiteboards, projectors, and multimedia content have transformed traditional teaching methods. This initiative has improved student engagement, enhanced learning outcomes, and promoted digital literacy among teachers and students.

Kerala's Hi-Tech School Project

Kerala's Hi-Tech School Project aims to integrate ICT tools into everyday classroom activities across all government schools in the state. The project provides laptops/tablets, multimedia projectors, and digital content to teachers and students, enabling interactive learning experiences. It has resulted in improved academic performance, increased attendance rates, and enhanced teacher-student interactions.

BYJU'S Learning App

BYJU'S, an Indian educational technology company, offers personalized learning experiences through its mobile app. The app provides engaging video lessons, interactive quizzes, and adaptive learning modules for students from kindergarten to competitive exam preparation. BYJU'S has revolutionized supplemental education in India, with millions of students benefiting from its innovative approach to digital learning.

NPTEL (National Programme on Technology Enhanced Learning)

NPTEL is an online platform offering free courses in engineering, sciences, and humanities developed by IITs (Indian Institutes of Technology) and IISc (Indian Institute of Science). NPTEL's MOOCs (Massive Open Online Courses) have democratized access to quality higher education, reaching learners across India and beyond. The platform has empowered self-directed learners, working professionals, and aspiring students to acquire knowledge and skills in diverse disciplines.

Digital Initiatives by Non-profit Organizations

Non-profit organizations like Pratham and Khan Academy India leverage digital technologies to deliver educational content and programs to underserved communities. These initiatives use mobile apps, interactive websites, and community-based interventions to promote literacy, numeracy, and lifelong learning.

Virtual Labs for Science Education

Virtual Labs developed under the NMEICT (National Mission on Education through ICT) provide online experiments and simulations for science education. Virtual Labs enable students to conduct virtual experiments and understand complex scientific concepts in a safe and interactive environment. This initiative supplements traditional laboratory training and enhances experiential learning in science education.

Digital Education Platforms in Tribal Areas

Several initiatives focus on improving educational access and outcomes in tribal regions through digital platforms. Projects like the Tribal Development Department's e-Kaksha program in Maharashtra leverage ICT tools to provide quality education in remote areas. These initiatives empower tribal communities with educational resources and opportunities for skill development.

In summary, these case studies and examples demonstrate the diverse applications of digital technologies in the Indian education sector, highlighting

innovative approaches to enhance educational access, quality, and relevance. By leveraging digital platforms effectively, India can address socio-economic disparities, promote lifelong learning, and prepare a skilled workforce for the future.

METHODOLOGY

A methodological approach complemented by document analysis and participatory research techniques enabled a comprehensive investigation into digital globalization in the Indian education system. This approach ensures robust data collection, nuanced analysis, and actionable recommendations to advance digital education initiatives and address challenges effectively. Additionally, document analysis of government reports, policy documents, and academic literature can inform the research by providing context, background information, and policy implications related to digital education initiatives in India.

CONCLUSION

The digital globalization of the Indian education system represents a transformative journey towards inclusive, innovative, and future-ready learning experiences. The integration of digital technologies has revolutionized teaching methodologies, expanded educational access, and empowered learners with 21st-century skills. However, as we look toward the future, several key considerations and actions are necessary to maximize the benefits of digitalization while addressing challenges effectively.

Firstly, it's essential to prioritize efforts to bridge the digital divide by ensuring equitable access to digital infrastructure, devices, and internet connectivity across all regions of India. This requires targeted investments in rural and underserved areas to promote digital inclusion and reduce disparities in educational opportunities.

Secondly, quality assurance mechanisms must be strengthened to uphold the credibility and reliability of online educational content and platforms. Establishing standards for digital education and continuous monitoring will enhance learning outcomes and build trust among learners, educators, and parents.

Thirdly, investment in teacher training and capacity-building is critical to empower educators with the digital literacy and pedagogical skills needed to leverage technology effectively in teaching and learning processes.

Furthermore, data privacy and security must be prioritized to protect student information and ensure confidentiality in online learning environments. Robust policies and regulations are needed to safeguard data and maintain privacy standards in digital education platforms.

Lastly, collaboration and stakeholder engagement are essential for fostering innovation, sharing best practices, and driving systemic change in the Indian education ecosystem. Public-private partnerships, community involvement, and multi-sectoral collaborations will be instrumental in shaping the future of digital education in India. Embracing digital globalization strategically and inclusively will contribute to shaping a brighter future for education in India and driving socio-economic development across the nation.

References

1. Government of India. (2020). National Education Policy 2020. Ministry of Education, Government of India.
2. International Journal of Information and Communication Technology Education, featuring articles on digital literacy, online learning, and educational technology.
3. Journal of Educational Technology and Pedagogy, particularly issues focusing on digital education and technology integration in India.
4. Kumar, V., & Kumar, P. (2020). Impact of Digitalization on Education Sector in India: A Review. *International Journal of Scientific Research and Management*, 8(3), 114-121.
5. Koul, S., & Gill, A. (2021). Digital Education in India: A Review. *International Journal of Research and Analytical Reviews*, 8(1), 415-420.
6. Ministry of Electronics & Information Technology, Government of India. (2015). Digital India Blueprint. Retrieved from: <https://www.digitalindia.gov.in/content/blueprint>
7. Ministry of Human Resource Development, Government of India. (2016). Report of the Committee on Digital Learning. Retrieved from: <http://mhrd.gov.in/digital-initiatives>
8. Ministry of Education, Government of India. (<https://www.education.gov.in/>)
9. Mishra, S., & Singh, A. (Eds.). (2018). *Digital Transformation of Education: Learning, Teaching, and Schooling in the New Digital Landscape*. Springer.
10. Mohanty, B. B., & Chandra, D. S. (Eds.). (2020). *Digital India and Education: Challenges and Opportunities*. IGI Global.
11. National Institute of Educational Planning and Administration (NIEPA), India. (<https://www.niepa.ac.in/>)
12. National Council of Educational Research and Training (NCERT), India. (<https://ncert.nic.in/>)
13. Sharma, R., & Kumar, A. (2019). Digitalization of Education in India: Challenges and Opportunities. *International Journal of Current Microbiology and Applied Sciences*, 8(10), 2225-2233.

Impact of Digital Globalization on Indian Society (Tribal Women Empowerment of South Gujarat Region)

Ms. Deval K. Engineer* & Dr. Madhubhai N. Gayakwad**

INTRODUCTION

The concept of 'Digital India' is a new concept to the Nation. Digital India is the beginning of digital revolution. Digital globalization take nation forward digitally and economically. Technology has significant impact on our daily lives. Before Covid-19 we were not adequately aware of the use of technology and especially digital globalization. After the pandemic, we have been forced to depend on technology for everything and then after we come across the digital globalization. Impact of digital globalization affects different groups of women in different places in different ways. The tribal women in India are deprived of their social, economic and political rights. Digital globalization have a major impact on current and future economy and social life. One can find it and identified a series that allow us to consider that global digitalization can become the determining factor in many ways with direct implication in Indian society. Digital globalization has connected millions of Indians to the internet. It has also empowered individuals and enabling access to communication, services and information like never before. Due to social media platforms have facilitated the exchange of ideas, cultural expression and activism in Indian society. It's a good impact of digital globalization that we have new forms of social movements, amplifying voices and fostering greater social awareness. Digital tools have empowered tribal women too in India, particularly in rural

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areas, through initiatives like digital literacy programs, e-governance services too. Indian society has experienced profound transformations across various aspects and sectors. The paper investigates for tribal women the opportunities and challenge presented by digital globalization in many aspects like economy, culture education and social dynamics.

WOMEN EMPOWERMENT

Digital globalization has empowered Indian women by providing access to information, education and economic opportunities. Women can now access online educational resources, participate in remote work or freelancing. And leverage digital platforms for entrepreneurship, thereby gaining financial independence and autonomy. Women Empowerment plays a crucial role in the overall development of any society besides positively impacting the daily lives of women. Empowerment is a process that helps women gain control of their lives, raising awareness and taking action for developing their self confidence in their own capacities. Digitalization is the primary focus of digital literacy, is the most essential skill required for the empowerment of women. The development of mobile technology has brought the world to one's fingertips and allowed women to update themselves about everyday national and global news. It would be advantageous for rural women to learn to use the internet via smartphones, carry out financial transactions online and become aware of global trends. The changes in the field of employment and information technology have brought with them a wide range of opportunities for women in India and across the globe.

TRIBAL WOMEN EMPOWERMENT OF SOUTH GUJARAT REGION:

Tribal women empowerment and digital globalization are two interconnected concepts that hold significant implication for the socio- economic development of tribal communities worldwide. Digitalization has opened up new avenues for income generation among tribal women in South Gujarat. Access to digital platforms such as online marketplaces, digital payment e-commerce websites has enabled them to engage in various income generating activities. Tribal women artisans can now sell their handicrafts, foodstuffs and traditional products online, reaching a wider customer base beyond their immediate geographic location. It has significantly enhanced the access of tribal women to market, both domestic and international. Through online platforms, tribal women can market their products to a global audience without the need for physical presence or intermediaries. This has not only increased their earning potential but also reduce their dependence on middlemen and exploitative practices. The tribal craftsmen and women, forest producers, small farmers have been brought to the mainstream digital business by introducing them to the online marketplace. Moreover, digital platforms enable tribal women to access market information, trends and consumer preferences, empowering them to make informed decisions about product development and market strategies. Digital India offers a lot of hope for future and it will open new avenues for tribal businesses of the country. Moreover, digitalization has facilitated of emergence of economy opportunities for educated tribal women, allowing them to undertake freelance work such as content writing, graphic design and data entry too from the comfort of their homes. This flexibilities in employment options has empowered tribal women

to supplement their household income while balancing familial responsibilities. Tribal women in south Gujarat use social media as a tool for advocacy on issues affecting their communities. As well, social media platforms such as Facebook, Instagram, Twitter and You Tube serve as powerful tools for tribal women to share their cultural heritage, foodstuff, traditions and daily life experiences with a global audience. Through social media platform, tribal women can connect with members of their community dispersed across different geographical locations. In conclusion, social media plays a significant role in the lives of tribal women in south Gujarat serving as a tool for culture preservation, community building, economic empowerment, and skill development.

However there are some challenges are there for south Gujarat tribal women to connect with main steam. Limited internet connectivity in rural areas is the biggest issue. Many tribal areas in South Gujarat lack reliable internet connectivity, hindering access to online education and telemedicine services.

The impact of digital globalization on south Gujarat tribal women has been multifaceted, bringing both opportunities and challenges. On the one hand, increase access of digital technologies has provided these women economic empowerment, avenues for education and communication. They have been able to access information, learning new skills and connect with the main stream and markets. Digital platforms have enabled them to sell their handicrafts and agricultural products online and increase their incomes. Additionally, online education and training programs have offered them opportunities for personal and professional development. Digital globalization and technologies hold great potential for improving access to education, health care and many more services for tribal women. In south Gujarat. However addressing challenges related to internet connectivity, digital literacy and cultural relevance is essential to ensure the equitable distribution of digital benefits and empower tribal women to lead healthier and more fulfilling lives. While digital globalization offers opportunities for connectivity, access to information and economic empowerment, it also challenges and risks for tribal women in south Gujarat. Despite its benefits, digital globalization also presents challenges and risks for tribal women of south Gujarat. These include online harassment, cyberbullying, privacy concerns and digital divide issues. Women may face gender-based discrimination or harassment in online spaces, highlighting the need for measures to ensure their safety and security online. Cultural barriers and gender norms may also hinder their participation in digital sphere, restricting their ability to fully benefit from the opportunities it offers. Concern about online safety and privacy may deter some women from fully engaging with digital platforms.

However digital globalization has also presented challenges for south Gujarat tribal women. Digital literacy is very common and main issue. Low levels of digital literacy among tribal women pose a barrier to effectively utilizing digital education and healthcare resources. Language and cultural barriers still the problem. Educational and many more content may not available in local languages or culturally sensitive, limiting its relevance and effectiveness for tribal women. The digital divide characterized by uneven access of technology and digital literacy has marginalized some women particularly in remote areas with limited connectivity and resources.

SUGGESTIONS FOR IMPROVEMENT

Empowering tribal women of south Gujarat through digital globalization can be transformative. Here are some suggestions for improvement.

- Access of Technology should be there. Ensure that tribal women have access to digital devices like smartphones and computers, as well reliable internet connectivity. Good internet facilities should be provided to rural women for the development of technological knowledge.
- Government can take the initiative to provide the basic knowledge about computer for tribal women because it is of utmost importance for availing the employment opportunities. Implement comprehensive digital literacy programs tailored to the specific needs and challenges of tribal communities. These programs should cover basic digital skills such as using computers, navigating the internet and understanding online safety and privacy.
- Develop digital content, including educational materials, vocational training resources and health related information in local language tailored to the cultural context of tribal communities. This ensure that the content must be relevant to tribal women.
- Entrepreneurship and economic opportunities is one of the good thing to attract tribal women towards technology. Provide training and support for tribal women to leverage digital platforms for start-ups, entrepreneurship and accessing markets. This could include skills, development in areas such e-commerce, digital marketing and financial literacy.
- Use digital tools to improve access to healthcare services for tribal women, including telemedicine consultations, health awareness campaigns and online resources for maternal and child health.

CONCLUSION

In conclusion, women have faced a variety of challenges like social pressure, discrimination, limited access to productive resources, poverty, limited opportunities for advancement, helplessness and exclusion and so on. On the other hand, digital globalization has resulted in the emergence of wide range of new circumstances for women, which have an impact of virtually every facet of their life. While digital globalization has brought about significant changes in the lives of south Gujarat tribal women, its full potential has yet to be realized. Women can empower fully from the opportunities presented by the digital age. By addressing all challenges, digital globalization can become a powerful tool for empowering South Gujarat tribal women and promoting their socio-economic development. Impacts of digital globalization on women's lives in terms of media role, education, cultural aspects, politics & the role of women, participation of women in society and other positive & negative aspects of digital globalization is truly important subject of research.

References

1. Raj, K., and Aithal. P.S. (2018). Digitization of India-impact on the BOP sector. International Journal of Management, Technology and Social Sciences (IJMTS).
2. Singh, Vikram. (2010). Information and Communication Technology for Women Empowerment, Proceedings of National Seminar on Role of Women in Information Technology: Today and Tomorrow.
3. Davidson, C. N. and Goldberg, D. T. (2012) Our Digital age: Implications for learning and its institution. E-learning and Digital Media.
4. Aggarwal, K., Malik, S., Mishra, D. K., and Paul, D. (2021). Moving from cash to cashless economy: Toward digital India. The journal of Asian Finance, Economics and Business.
5. Gupta, A., and Ladiwal, O. (2021) Digital Education in India: Future Perspective and Challenges.
6. Gupta, Anmol Raj and Zafar, Shahila. (2003). Rural India, The Next Frontier for Social Media Networks, International Journal of Engineering Research and Technology.
7. <https://defindia.org/bringing-tribal-communities-into-mainstream/>
8. Sharma, J. (2016). Digital India and its Impact on the Society. International Journal of Research in Humanities & Soc. Sciences.
9. Kumar, H., Poonia, S., and Iliyas, M. (2017). A step towards empowerment and Digital inclusion of rural public in India.
10. Nagamani, T., Satya, Veni G. and Krishna. (2016). ICTs for the Empowerment of rural women: A review.
11. Mahapatro, (2019). Gender and Tribal development: Exploring the lived experience of Adivasi women.

Impact of Digital Globalization on Indian Society

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INTRODUCTION

¹In recent decades, the world has witnessed a rapid surge in digital globalization, characterized by the pervasive adoption of digital technologies and the seamless integration of economies and cultures across borders. India, with its burgeoning population and dynamic economy, stands as a testament to the transformative power of digital globalization. The impact of this phenomenon on Indian society is profound and far-reaching, touching upon various aspects of daily life, from communication and commerce to culture and social dynamics.

This introduction aims to explore the intricate interplay between digital globalization and Indian society, shedding light on both the opportunities and challenges that arise in this increasingly interconnected world. As India emerges as a key player in the global digital landscape, understanding the implications of digital globalization is essential for policymakers, businesses, and individuals alike.

Digital globalization has ushered in an era of unprecedented connectivity, breaking down traditional barriers and fostering a sense of interconnectedness among individuals and communities across India. The widespread availability of the internet, coupled with the proliferation of mobile devices, has democratized access to information, enabling people from diverse backgrounds to engage with a wealth of knowledge and resources like never before. This newfound access to information has not only expanded educational opportunities but

1 <https://chat.openai.com/c/a0656ade-f038-46a5-aeed-f1fa3e91eed7>

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has also empowered citizens to participate more actively in civic life, driving social change and advocacy efforts on issues ranging from governance to environmental sustainability.

Moreover, digital globalization has revolutionized communication in Indian society, with social media platforms, messaging apps, and online forums becoming integral parts of daily life for millions of people. These digital tools have not only facilitated easier and more efficient communication but have also served as catalysts for the formation of virtual communities and networks, transcending geographical boundaries and fostering connections based on shared interests and ideologies.

In the realm of commerce, digital globalization has unleashed a wave of innovation and entrepreneurship, propelling India's economy into the digital age. E-commerce platforms, digital payment systems, and online marketplaces have transformed the way business is conducted, enabling small and medium enterprises to reach global markets and empowering consumers with greater choice and convenience.

However, amidst the promises of digital globalization, challenges loom large on the horizon. Issues such as the digital divide, cybersecurity threats, privacy concerns, and the proliferation of misinformation and fake news pose significant obstacles to realizing the full potential of digital globalization in India. Moreover, the rapid pace of technological advancement raises questions about its impact on employment, workforce dynamics, and societal well-being, underscoring the need for thoughtful and inclusive approaches to digital transformation.

In light of these opportunities and challenges, it is imperative for Indian society to navigate the complexities of digital globalization with foresight and resilience. By leveraging the transformative power of digital technologies while addressing the accompanying risks and disparities, India can harness the full potential of digital globalization to foster inclusive growth, empower its citizens, and build a more prosperous and equitable future for all.

INDIAN SOCIETY:

Indian society refers to the complex network of social relationships, cultural norms, traditions, and institutions that exist within the geographical boundaries of India. It encompasses the diverse population of the country, which consists of people from various ethnicities, religions, languages, and socioeconomic backgrounds.

Key features of Indian society include:

1. **Diversity:** India is known for its incredible diversity, manifested in its languages, religions, cultures, and traditions. This diversity is reflected in various aspects of Indian society, including food, clothing, festivals, rituals, and social practices.
2. **Social Structure:** Indian society has a hierarchical social structure that is influenced by factors such as caste, class, and gender. Historically, the caste system has played a significant role in organizing social relations, although its influence has diminished over time.

3. **Family and Community:** Family and community are central to Indian society. Traditional Indian families are often extended, comprising multiple generations living together under one roof. Strong social bonds exist within communities, with individuals often relying on their families and social networks for support.
4. **Religion and Spirituality:** Religion holds great significance in Indian society, with Hinduism, Islam, Christianity, Sikhism, Buddhism, and Jainism being the major religions practiced in the country. Spirituality permeates various aspects of Indian life, influencing rituals, festivals, and cultural practices.
5. **Education and Employment:** Indian society places a high value on education as a means of social mobility and advancement. However, disparities in access to quality education exist across different regions and socioeconomic groups. Employment opportunities vary widely across urban and rural areas, as well as different sectors of the economy.
6. **Gender Dynamics:** Gender roles and relations in Indian society are complex and evolving. While traditional gender norms may still persist in certain contexts, there have been significant strides towards gender equality in recent decades, particularly in areas such as education and workforce participation.
7. **Globalization and Modernization:** Indian society has been influenced by globalization and modernization, leading to changes in lifestyles, attitudes, and cultural practices. Urbanization, technological advancements, and exposure to global media have contributed to the transformation of Indian society in various ways.

DIGITAL GLOBALIZATION

Global digitalization refers to the widespread adoption and integration of digital technologies across the world, transforming various aspects of society, economy, and culture. Here are some key aspects of global digitalization:

1. **Connectivity:** The proliferation of the internet and mobile technology has connected people across the globe like never before. This connectivity has facilitated communication, collaboration, and the exchange of information on a global scale.
2. **Economic Impact:** Digitalization has had a profound impact on the global economy. It has enabled the rise of digital commerce, e-commerce platforms, and online marketplaces, transforming how goods and services are bought and sold. Digital technologies have also fueled innovation, entrepreneurship, and new business models, contributing to economic growth and productivity.
3. **Social Transformation:** Digitalization has reshaped social interactions and relationships. Social media platforms, messaging apps, and online communities have become integral parts of daily life for billions of people worldwide, facilitating communication, networking, and the sharing of ideas and experiences.
4. **Education and Learning:** Digitalization has revolutionized education and learning by making educational resources more accessible and interactive. Online learning platforms, e-books, educational apps, and digital classrooms

have expanded access to education, enabling lifelong learning and skill development opportunities.

5. **Healthcare:** Digitalization has transformed the healthcare sector, leading to the development of telemedicine, digital health records, wearable health devices, and health monitoring apps. These technologies have improved access to healthcare services, enhanced patient care, and empowered individuals to take control of their health.
6. **Cultural Exchange:** Digitalization has facilitated greater cultural exchange and globalization. Through the internet and digital media, people can access and share cultural content, music, movies, literature, and art from around the world, fostering cross-cultural understanding and appreciation.
7. **Challenges:** Despite its many benefits, global digitalization also presents challenges. These include issues such as digital divide (disparities in access to technology and digital skills), cybersecurity threats, privacy concerns, misinformation and fake news, digital addiction, and the impact of automation on jobs and employment.

IMPACT OF DIGITAL GLOBALIZATION ON INDIAN SOCIETY:

²The impact of digital globalization on Indian society has been profound and multifaceted. Here are some key aspects:

1. **Access to Information:** Digital globalization has significantly increased access to information for people across India. With the widespread availability of the internet and mobile devices, individuals can now easily access knowledge on a wide range of topics, including education, health, and current affairs.
2. **Communication:** Platforms like social media, messaging apps, and email have revolutionized communication in India. People can now easily connect with others both within the country and internationally, facilitating social interactions, business collaborations, and knowledge sharing.
3. **Economic Opportunities:** Digital globalization has created numerous economic opportunities in India, particularly in the tech sector. The rise of e-commerce, online marketplaces, and digital services has enabled Indian businesses to reach global markets and has empowered entrepreneurs to start new ventures with lower barriers to entry.
4. **Cultural Exchange:** The internet has facilitated greater cultural exchange between India and the rest of the world. Indian music, movies, literature, and traditions are now accessible to a global audience, while Indian youth are exposed to diverse cultures and ideas from around the world.
5. **Education and Skill Development:** Online education platforms and e-learning resources have expanded access to education and skill development opportunities for people across India, particularly in rural and remote areas where traditional educational infrastructure may be lacking.
6. **Social Change:** Digital platforms have played a significant role in driving social change in India. They have provided a space for marginalized voices to be heard, facilitated social movements and activism, and raised awareness

about important social issues such as gender equality, LGBTQ+ rights, and environmental conservation.

7. **Challenges:** However, digital globalization has also brought about challenges for Indian society. These include issues such as digital divide (disparities in access to technology and digital literacy), privacy concerns, cybersecurity threats, misinformation and fake news, and the negative impact of excessive screen time on mental health.

CONCLUSION

Overall, Indian society is characterized by its diversity, complexity, and rich cultural heritage. It continues to evolve in response to internal and external forces, shaping the lives of its diverse population in myriad ways.

Overall, global digitalization has brought about significant changes to societies worldwide, reshaping how people live, work, communicate, and interact with each other. As digital technologies continue to evolve, it is essential for policymakers, businesses, and civil society to address the challenges and ensure that the benefits of digitalization are accessible to all segments of the global population.

However, digital globalization has also brought challenges such as the digital divide, privacy concerns, cybersecurity threats, misinformation, and the negative impact of excessive screen time on mental health. Despite these challenges, the overall impact of digital globalization on Indian society has been largely positive, contributing to economic growth, social development, and cultural exchange. This paper concludes by emphasizing the importance of addressing the challenges and ensuring that the benefits of digital globalization are accessible to all segments of the Indian population.

Overall, while digital globalization has brought both opportunities and challenges for Indian society, its net impact has been largely positive, contributing to economic growth, social development, and cultural exchange. However, it is essential for policymakers, businesses, and civil society to address the challenges and ensure that the benefits of digital globalization are accessible to all segments of the Indian population.

References

1. <https://chat.openai.com/c/a0656ade-f038-46a5-aeed-f1fa3e91eed7>
2. <https://journals.sagepub.com/doi/full/10.1177/1745499919829214>

Impact of Digital Globalization on Indian Education System

Khan Heena Kausar Siraj*

INTRODUCTION

¹Over thousands of years, globalization has contributed to the progress of the world through travel, trade, migration, spread of cultural influences, and dissemination of knowledge and understanding. These global interrelations have often been very productive in the advancement of different countries. Globalization is viewed by somebody as westernization. But it is not so. The decimal system emerged and became well developed in India between the second and sixth centuries; it was used by Arab mathematicians soon thereafter. These mathematical innovations reached Europe mainly in the last quarter of the tenth century and began having an impact in the early years of the last millennium, playing an important part in the scientific revolution that helped to transform Europe. The agents of globalization are neither European nor exclusively Western, nor are they necessarily linked to Western dominance. Indeed, Europe would have been a lot poorer economically, culturally, and scientifically- had it resisted the globalization of mathematics, science, and technology at that time.

And today, the same principle applies, though in the opposite direction (from West to East). And Now, Initial enthusiasm for globalization as a beneficial set of processes has yielded to an understanding that the phenomenon is largely associated with increasing social inequality within and between countries as well as instability and conflict. So, at this stage, it is necessary to find the impact of globalization on Indian Economy. Education is important not only for the

1 <https://www.ijert.org/research/impact-of-globalization-on-indian-education-system-IJERTV2IS120367.pdf>

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full development of one's personality, but also for the sustained growth of the nation. Education is an important investment in building human capital that is a driver for technological innovation and economic growth. It is only through improving the educational status of a society that the multifaceted development of its people can be ensured. Basically Indian Education system is composed of three components and they are Primary education, Secondary education and Higher education.

INDIAN EDUCATION SYSTEM

Indian education has its own history of development. In the earlier times, Gurukuls dominated the society, which emphasized the traditional and cultural education, which had its own restriction. But Indian education system got an impetus after the invasion of the British. Western education exerted its influence on the Indian education system, under the British rule. Scientific and technological education gained more importance than traditional and cultural education in this era. But in the post-independence period, our constitution made the education a fundamental right and enacted a law for compulsory education up to 14 years.

Today, in the age of privatization, globalization and liberalization, India is exposed to the world in all spheres. In the present competitive world, expansion, excellence and inclusion are the three challenges of Indian education system. The age-old system of education has to be reformed. Practical knowledge should be given more priority than theoretical knowledge.

DIGITAL GLOBALIZATION:

²Digital globalization refers to the process by which digital technologies and the internet connect people, cultures, economies, and information across the globe. It encompasses the rapid spread and integration of digital technologies such as the internet, mobile devices, social media, and cloud computing into various aspects of society, including communication, commerce, education, and governance.

In the context of education, digital globalization has revolutionized traditional teaching and learning methods by providing access to vast amounts of information, resources, and educational opportunities online. It has facilitated the exchange of knowledge and ideas across geographical boundaries, enabling collaboration among students, educators, and institutions worldwide.

Digital globalization has also transformed the way education is delivered, with the emergence of online learning platforms, virtual classrooms, and digital educational resources. These innovations have expanded access to education, personalized learning experiences, and enhanced collaboration among learners and educators irrespective of their location.

Furthermore, digital globalization has spurred the development of new skills and competencies required for success in the digital age, such as digital literacy, critical thinking, and problem-solving. It has opened up avenues for lifelong learning and professional development through online courses, certifications, and virtual mentorship programs.

IMPACT OF DIGITAL GLOBALIZATION ON INDIAN EDUCATION SYSTEM

The impact of digital globalization on the Indian education system has been profound, revolutionizing various aspects of teaching and learning. Here are some key points:

1. **Access to Education:** Digital globalization has significantly enhanced access to education in India. With the proliferation of internet connectivity and mobile devices, students from remote areas can now access quality educational resources online. This has helped bridge the gap between urban and rural education. Digital globalization has led to greater access to educational resources and opportunities for students across India, including those in remote areas. Online platforms offer a wide range of courses and materials, enabling learners to access quality education irrespective of geographical constraints.
2. **Online Learning Platforms:** The rise of online learning platforms has democratized education by offering courses from reputed institutions and experts worldwide. Platforms like Coursera, Khan Academy, and Udemy provide Indian students with opportunities to learn new skills and subjects beyond the traditional curriculum.
3. **Blended Learning Models:** Digital tools have facilitated the adoption of blended learning models in Indian schools and universities. Integrating online resources with traditional classroom teaching enhances engagement, flexibility, and personalized learning experiences for students.
4. **Global Collaboration and Networking:** Digital platforms have enabled Indian students and educators to collaborate with their counterparts globally. They can participate in online forums, joint research projects, and international conferences, facilitating knowledge exchange and cross-cultural learning experiences. Digital globalization has facilitated global collaboration and knowledge exchange in the education sector. Indian students and educators can participate in international conferences, research collaborations, and online forums, enriching their learning and teaching experiences.
5. **Skill Development:** The digital economy demands new skills and competencies. Digital globalization has spurred the adoption of skill-based education in India, with a focus on areas like coding, data science, and digital marketing. Online courses and resources play a crucial role in upskilling and reskilling the Indian workforce. Digital globalization has emphasized the importance of acquiring digital literacy and 21st-century skills. Indian students now have access to courses and training programs focused on coding, digital marketing, data analytics, and other in-demand skills, preparing them for the demands of the digital economy.
6. **Challenges of Inequality:** Despite the positive impacts, digital globalization exacerbates existing inequalities in access to education. The digital divide between urban and rural areas, along with disparities in internet connectivity and device availability, remains a significant challenge. Ensuring equitable access to digital education is essential for inclusive growth. Despite the benefits, digital globalization has also highlighted disparities in access

to technology and internet connectivity across different regions and socioeconomic groups in India. The digital divide poses challenges in ensuring equitable access to educational opportunities for all students.

7. **Quality Assurance and Accreditation:** Digital globalization presents challenges related to the quality assurance of online education. With the proliferation of online courses and content, ensuring standards of education and accreditation becomes crucial. Regulatory frameworks need to evolve to maintain quality while promoting innovation in digital education. The proliferation of online courses and educational content raises questions about quality assurance and accreditation standards. Ensuring the credibility and reliability of online education providers is essential to maintain the integrity of the Indian education system.
8. **Teacher Training, Support and Professional Development:** Effective integration of digital technologies into education requires adequate training and support for teachers. Investing in teacher professional development programs focused on digital literacy, instructional design, and technology integration is essential to maximize the benefits of digital globalization in Indian classrooms. Digital globalization necessitates continuous training and professional development for teachers to effectively integrate technology into their teaching practices. Investment in teacher training programs focused on digital pedagogy and instructional design is crucial to maximize the benefits of digitalization in education.
9. **Diversification of Learning Resources:** The availability of digital resources has diversified the learning experience in India. Students can access multimedia content, interactive simulations, and virtual laboratories, enhancing their understanding of complex concepts across various subjects.
10. **Shift in Learning Paradigms:** Digital globalization has facilitated a shift from traditional classroom-based learning to more flexible and personalized learning approaches. Blended learning models, which combine online and offline learning activities, are becoming increasingly popular in Indian educational institutions.
11. **Administrative Efficiency:** Digital technologies have streamlined administrative processes within educational institutions. Tasks such as student registration, fee payment, and academic record management can now be performed online, reducing paperwork and improving efficiency.

CONCLUSION

In summary, digital globalization has transformed the Indian education system by expanding access, diversifying learning resources, and promoting digital literacy and skill development. However, addressing challenges related to equity, quality assurance, and teacher training is essential to harness the full potential of digital technologies for enhancing learning outcomes and driving inclusive growth.

Digital globalization has transformed the Indian education system by expanding access, fostering innovation, and promoting collaboration. However, addressing challenges related to inequality, quality assurance, and teacher training is

essential to harness the full potential of digital technologies for inclusive and sustainable development.

Overall, digital globalization has profoundly impacted the Indian education system, influencing teaching methodologies, learning outcomes, and administrative processes. Understanding its implications is crucial for harnessing the potential of digital technologies to drive inclusive and sustainable development in education.

References

1. <https://www.ijert.org/research/impact-of-globalization-on-indian-education-system-IJERTV2IS120367.pdf>
2. <https://chat.openai.com/c/e3ea3b55-c564-40f8-abdd-ae37620eba21>

Globalization on English Language of Communication: An Impact

Vinod Kumar Mahawar*

INTRODUCTION

Language is often viewed as the set of codes utilized by a specific group for communication, while culture encompasses the customs, beliefs, and ideas of a society. These definitions highlight the interconnectedness of language and culture, likening them to two sides of the same coin. Culture is expressed through language, making it the essence of cultural identity. Together, language and culture serve as the foundation of social structures, fostering unity and a sense of belonging among individuals. Language acts as a unifying force within society, binding people together through shared heritage and ethnicity.

Globalization is a complex and controversial notion that has both positive and negative impacts on various aspects of human society. In his work, Giddens (1990) describes globalization as the intensification of global social connections, wherein events occurring in one place can shape local occurrences elsewhere. Similarly, Rothenberg (2003) defines globalization as the acceleration and deepening of interactions between individuals, companies, and governments across nations. This definition also acknowledges the effects of globalization on human well-being, the environment, culture (including language, religion, and political systems), and economic development. These definitions collectively emphasize the goal of globalization: to create a world without boundaries, where people can freely communicate, exchange cultural traditions, and foster political, social, and economic progress.

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The phenomenon of globalization owes its existence to the widespread use of the English language as a means of communication. While other languages have undoubtedly played a part, it is English that reigns supreme in this regard. The interconnectedness between English and globalization is a concept succinctly explored by Gray (2002).

EXPLAINS

The proliferation of multinational corporations is a significant factor in the global spread of the English language. These companies often have headquarters in key regions such as Europe, North America, or Japan, with decentralized production centers that are electronically interconnected.

This passage discusses the implications of producing business and legal documents in English, providing communication skills training in English for staff, potential benefits for the local hotel and tourist industries, and the increasing presence of English in local schools. Additionally, the rise of global organizations, many of which operate within global networks, highlights the continued demand for English worldwide. Furthermore, the dominance of English on the internet is a significant factor in its global prevalence. (Block and Comeron, 2002, p.153-154).

The proliferation of English speakers worldwide is on the rise, with various factors contributing to this phenomenon. According to Crystal (2003), the expansion of English usage can be traced back to British colonization in the seventeenth century and the industrial revolution of the eighteenth and nineteenth centuries. Additionally, America's economic and military dominance on the global stage has played a significant role in the widespread adoption of English. The forces of globalization have further propelled English to become the primary language of international communication.

Naturally, the demand for English Language Teaching is on the rise, as it is viewed as a service industry (Pennycook, 1994). As Pennycook also points out, English has become a global commodity that can be bought and sold on the international market (1994, p.158). Additionally, Phillipson (1992, p.48) notes that English Language has become a valuable asset worldwide. The process of globalization has created an opportunity to showcase different cultures and traditions from around the world through the medium of English. This has led to the emergence of new forms of English, such as English for specific purposes (ESP), which is used in fields like medicine, engineering, and computer science in countries like India.

The phenomenon of globalization has undoubtedly engendered a profound complexity within the realm of the English language, whereby individuals hailing from diverse cultural backgrounds amalgamate their native tongues with the linguistic fabric of English. Consequently, this amalgamation has engendered a paradigm shift in the manner in which English is employed and articulated, endowing it with a dualistic nature of both local and global significance. In the contemporary milieu, English has assumed an indispensable role as a vehicle for effective communication, facilitating comprehension and the resolution of shared quandaries and predicaments. Moreover, its indispensability permeates across all professional spheres, with prestigious educational institutions across the globe emphasizing the paramountcy of English language prowess.

It proves to be an insurmountable task, even for the most astute linguists, to provide an accurate assessment of the complete tally of global languages. It is estimated that there are approximately 7000 distinct languages utilized for communication. Amongst this vast linguistic diversity, English holds a unique position, transcending its role as a domestic tongue to become an international language or lingua franca. Unsurprisingly, the forces of globalization have exerted a greater influence on English compared to other languages. Presently, English assumes significance not merely within the realm of education, but also in fields such as technology, computing, medicine, entertainment, and diplomacy. In the digital age, English has become particularly prominent, adopting a novel style and globalized approach on the internet. The profound impact of globalization on language cannot be ignored. Language is a dynamic entity, constantly evolving in accordance with societal culture.

However, the advent of information technology has disrupted traditional conceptions of culture, as new understandings are seamlessly integrated. In this era of globalization, preserving the original norms and rules of language has become nearly impossible. Language serves as the vital conduit through which cross-cultural communication flourishes. When considering the English language in particular, it enables us to explore new vistas, think on a global scale, and foster universal understanding. These factors render English the very lifeblood of globalization, often referred to as Global English. This global variant of English is hailed as the key to unlocking the vast potential of production and productivity, while also facilitating the dissemination of cultural and traditional aspects worldwide. Indeed, the use of the English language has been dramatically transformed by the forces of globalization.

The impact of globalization on language is profound, as it has transformed language from a tool of oral and written communication to a means of fast communication through the internet and electronic media. In order to keep pace with the fast-moving world, language has undergone significant changes, which are now utilized by internet users for communication. The language of expression has gained economic value, with world-renowned companies using English as a medium to market their products in the era of globalization. The influence of globalization on language and culture can be observed in every aspect of life, as evidenced by the widespread and effective use of English on social media platforms worldwide. The language used on social media deviates from traditional linguistic norms, as it evolves to be user-friendly, time-saving, and space-efficient, catering to users of all levels.

The rise of emojis as a form of communication could be seen as a return to a more natural way of expressing ourselves, influenced by the globalization brought on by the internet. Visual and audio messaging on social media platforms is becoming increasingly popular, leading to a shift towards a more pictorial form of communication that emphasizes emotion. In the future, pictures and icons may take precedence over traditional words and letters, as the use of “text speak” and new words created by globalization can sometimes cause confusion among language users. In a recent survey of 2,000 individuals, it was revealed that a mere 10% were able to correctly identify the true definition of “bae” as a term of endearment, while a staggering 57% were unaware of the meaning of “flek” as a descriptor for looking stylish.

GLOBALIZATION AND COMMUNICATING GLOBALLY

In exploring the role of English in our increasingly interconnected world, it is essential to first delve into the concept of globalization and its relationship to language. As extensive research has indicated, the term “globalization” defies a singular definition, instead encompassing a multitude of interpretations across various fields such as cultural studies, economics, the environment, and politics. While some individuals perceive globalization as a social phenomenon that renders borders obsolete, others emphasize its capacity to unify and standardize our global society. This overarching concept, aptly named globalization due to its association with the term “globe,” encapsulates the 20th century’s pivotal idea – the process of international integration resulting from the exchange of worldwide perspectives, products, ideas, and cultural elements.

In the realm of contemporary discourse, there exists a school of thought that posits globalization as perilously teetering on the brink of banality, potentially having already succumbed to such a fate. This perspective contends that the notion of globalization is but a mirage, a mere illusion. Nevertheless, one cannot dismiss the undeniable presence of certain mechanisms currently disseminating information and knowledge on a global scale. Undoubtedly, this phenomenon is intrinsically intertwined with the advent of the information age and the rapid advancement of novel technologies.

According to Chen (2012), five important features of globalization can be traced:

- Globalization is an ever-evolving phenomenon, driven by the interplay of cultural identity and cultural diversity, or the tension between the local and the global.
- Globalization has become an omnipresent force that permeates all facets of human society, shaping the way individuals live, think, and act.
- Globalization is intricately interconnected, constructing a vast web in which every element is intertwined through a network.
- Globalization embodies a state of cultural hybridization, facilitating the rapid transmission of cultures through new media by breaking down human boundaries.
- The phenomenon of globalization in the modern media landscape empowers individuals and contributes to a more diverse and inclusive society by acknowledging the unique strengths and significance of each individual element.

In this modern era of globalization, we are presented with both exciting opportunities and potential risks. The ability to connect and share knowledge with individuals from all corners of the world opens up new possibilities for collaboration and exchange. However, in order to navigate this global landscape, individuals must adapt their communication skills to accommodate the diverse cultural perspectives and technological advancements that shape our interconnected world. As virtual communication becomes increasingly prevalent in the workplace, it is essential to recognize the nuances of cross-cultural interactions and the impact of technology on our ability to effectively communicate across borders. Understanding the complexities of communication styles and information needs in different cultural contexts is paramount in achieving successful global collaboration.

The essence of culture is shaped by language, which influences customs, communication, and identity. Words, greetings, and humor all play a vital role in defining a community's sense of belonging and cultural heritage.

The mastery of multiple languages serves as a vital conduit for cross-cultural engagement and personal growth. By expanding one's linguistic repertoire, individuals broaden their perspectives, embrace a global mindset, and enhance their self-awareness while fostering deeper connections within their community.

Languages are the fundamental essence of globalization, for without language as a vehicle of communication, the concept of globalization would have remained an unattainable feat. Concurrently, globalization imparts profound ramifications on language, encompassing both favorable and detrimental aspects, ultimately shaping the cultural fabric of languages in multifarious manners. While conferring the opportunity for certain languages and their corresponding cultures to proliferate and ascend to a global prominence, globalization has also been accused of precipitating the demise of other languages and cultures.

In exploring the effects of globalization on languages, the students highlight the impact on minority languages, the loss of uniformity among major languages, the disregard for linguistic diversity and richness, and the decline in foreign language learning among English speakers. In essence, globalization, while not a new phenomenon, has become an increasingly prevalent force in all aspects of life. One crucial aspect of globalization is international communication, which heavily relies on a commonly understood language serving as a medium across cultures. Language is fundamental to social interactions; both shaping and being shaped by them. Consequently, the significance of world languages in the context of globalization cannot be overstated. The following section of this paper examines how world languages respond to the challenges posed by globalization and explores the prerequisites for English to emerge as the dominant global communication language.

CONCLUSION

The advent of globalization has brought about significant changes in the English language, effectively transforming both human lifestyles and cultures as a whole. In this transformative process, English has breathed new life into modern society, serving as a defining characteristic of contemporary individuals. The symbiotic relationship between globalization and English is undeniable; without globalization, the development of English as a global language would not have been possible. With the rise of globalization, English has fostered a sense of awareness among individuals, emphasizing shared cultural similarities rather than differences. By serving as a common thread connecting people from all corners of the world, Global English has the potential to propel us towards a promising future.

Moreover, the association between English and globalization extends beyond linguistic implications, encompassing cultural, political, and economic aspects. Undoubtedly, the close tie between English and the processes of globalization has a profound impact on the use and influence of this dominant international language. In this scholarly discourse, the author delves into the multifaceted concept of globalization and its intricate connection to the English language as a means of communication. Inevitably, globalization serves as a catalyst

for the proliferation of English, heralding transformative shifts in our societal landscape.

The primary objective of this paper is to engage in an intellectual debate, seeking to substantiate the profound and enduring impact of globalization on the universal adoption of English for communicative purposes. Notwithstanding, it is crucial to acknowledge that this influence has, at times, ushered in unconventional linguistic customs that diverge from the confines of conventional linguistic norms.

The concept of globalization gained prominence merely a decade ago, initially rooted in the realm of commerce before rapidly permeating all aspects of human existence. This transformative force has united the world into a singular global village, with the English Language serving as a catalyst for its seamless and efficacious expansion.

References

1. Block, D and Comeron, D (eds.) (2002). *Globalization and Language Teaching*. New York: Routledge.
2. Crystal, D (2003) *English as a Global Language*.
3. Cambridge: Cambridge University Press Giddens, A (1990). *The Consequences of Modernity* Cambridge: Polity Press.
4. Gray, J (2002) *The Global Coursebook in English Language Teaching*. In D. block and D. Cameron (eds.) *Globalization and Language Teaching* (pp.151-167) New York: Routledge.
5. Pennycook, A (1994). *The cultural Politics of English as an International Language*. New York: Longman.
6. Pennycook, A (2001). *Critical Applied Linguistics: A Critical Introduction*. New Jersey: Lawrence Erlbaum Associates.
7. Phillipson, R. (1992), *Linguistic Imperialism*. Oxford: Oxford University Press.
8. Rothenberg, L. (2003). *The Three Tensions of Globalization*, The American forum for global Education, 1-4 New York: Occasional Papers.

Green Library Technology: Towards Sustainable Development

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1.1 INTRODUCTION

As green technology emerged in almost all aspects of building construction, it was obvious that libraries would also start thinking of constructing new green libraries or adopting greening aspects in renovating the old library buildings. There are plenty of advantages in adopting green library technologies. It was the first time in 2007 that libraries started taking part in green library initiatives. In adopting green library technology we try to support the concept of sustainability and environmentalism, which is the most needed to protect the global ecosystem. In this chapter we are going to discuss all the aspects of green library technology in detail.

1.2 WHAT IS GREEN LIBRARY ?

When librarians talk about green libraries they usually have in mind the green library buildings. The California Integrated Waste Management Board defines a green or sustainable building as “a structure that is designed, built, renovated, operated or reused in an ecological and resource effective manner.” Interest in green library was actually intensified sometime in December 2007, when Library Journal Design Institute hosted the seminar on “going green” in Chicago Illinois. In this seminar the architects, city planners and librarians came together and shared their ideas about the latest developments and solutions in adopting green library technology (Library Journal 2007), The LEED (Leadership in Energy and Environmental Design) brought the certification system to rate the green libraries, which was initiated by US Green Building Council. It has

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become the US national standard for commercial and institutional buildings as their performance standard.

Library becomes green when it tries to adopt the green technology, which is prominent in building construction now a days. These days most of the fields talk about green concept as we all have realised several threats to our environment or to the eco system of our planet earth.

The Oxford English Dictionary defines the word, 'Green' as, "pertaining to or to help the environmentalism". The environment always comes along with sustainability. The sustainability relates to our economic activities and culture which do not lead to environmental degradation anyway. These measures consider reducing footprints of carbon and also reducing generation of greenhouse gases causing holes in the ozone layer around the Earth. The library can also become green when it allows green design in its architecture plan. Adopting green concept could be in constructing new building or in renovating the old one. It further becomes significant part in its operation or reuse it in an ecological resource efficient manner.

1.3 LITERATURE REVIEW

For this study we have referred some literature related to Green library or Sustainable Library and Green Library Movements. There are very few numbers of Literature have been found and gone thought literature which was relevant. (Hauke and Werner, 2013) describe the detail about the Green Library Movement and early begin of the movement in 1990s. (Antonelli, 2008) explain about different web page and websites related to Green Library Building. (Vijayalakshmi, 2014.) On his article on "Greening the Library for sustainable development" gives information about the Green Library or Sustainable libraries initiative in India and rest of the world.

1.4 CHALLENGES BEFORE GREEN LIBRARY

It is found that green library design also has special challenges like in green building design. In green library the major challenges are posed by the needs of materials and the patrons. In spite of proliferation of Internet technology and availability of digital resources through the same, the printed books are still dominating their existence in the library collections. Since libraries still need to stock. a large number of books, which brings responsibility of processing, managing and preserving them. In addition the library need to bear the weight of book and bound volume collections.

If we try to accommodate weight factor in organising library collections then it brings limitations in adopting multi floor construction, which favors in green technology. Secondly, when we think of preserving book collection the main concern would be to protect them from direct sunlight or ultraviolet rays of sun and from the extreme temperatures. Where as green building recommends maximum use of natural day light. Like the library book collections same is the case of patrons as they also need to be protected from the extreme environmental conditions like temperatures and ultraviolet rays of sun. Now let us see how and why the libraries are becoming green in spite of above challenges.

1.5 BROAD OBJECTIVES BEHIND GREEN LIBRARY

Broadly the Green Library design works towards minimising impact on the natural environment and to maximise indoor environmental quality by selecting the site carefully, by using natural construction materials, by using degradable products/ furniture and furnishers, by giving priority to conservation of resources (energy, water and paper) and by adopting responsible waste disposable (recycling) techniques. Adopting green design in library is an integrated process of many broader issues such as:

1. Site Selection
2. Water Conservation
3. Energy Conservation
4. Building Materials/Green Furniture
5. Healthy Indoor Air Quality

Now let us elaborate them little.

1.5.1 Site Selection

The selection of the site for the building is the major concern in green library planning. When any new library goes into planning proper site selection, then it seeks some queries broadly on how library would be eco friendly. The LEED has provided many guidelines which provide many tips for library site selection. There are various question highlighted relating to the site selection, given in their specifications such as:

- What kind of impact it would have on the local environment?
- Will there will be erosion? Whether the site is already green?
- Whether the library would be located in the populated area and most of the service related buildings are easily approachable?
- If good public transport facility is available to the site and whether there is enough parking facility available for the people to park their energy efficient vehicles? Overall it should not add to the pollution.
- If library's hard surfaces are covered or shaded through heat island effect e.g. by adopting Green Roofing etc.

1.5.2 Water Conservation

There are many ways and means to conserve the water resource in the library. It can be achieved by adopting following measures:

- By installing water recycling and reusing plant
- By adopting rainwater harvesting system which could be used for toilets and irrigation.
- By installing device which extracts water from the atmosphere which could be used for drinking purpose (Nero project at IIT Madras)
- The wastage of water could be prevented by using low flux bathrooms fixtures and by installing waterless urinals.

1.5.3 Energy Conservation

Having the energy-efficient buildings is the most important factor in adopting

green library technology. LEED rating system has, therefore, given maximum significance to it. In energy consideration the importance is given on the following aspects:

1. How to reduce cost of heating and ventilation (air conditioning, cooling and heating).
2. How to reduce the cost of illumination of the library premises through artificial lighting.

As for as the cost of ventilation is concerned it can be achieved by adopting the following innovative technologies:

- Green roofing and
- Geothermal cooling and heating system.

Regarding illumination of library premises the following measures help in saving cost of electric energy consumption:

1. By fitting energy-saving fans and lights e.g. by adopting energy efficient lights (Led lights) and cost saving fans.
2. The efforts need to be taken to make use of natural sunlight to the maximum possible extent and to create good balance between natural and artificial lighting.
3. Using renewable energy sources like wind and solar power generation systems certainly help not only in reducing the power bill but it can also turn a power generating source.

1.5.4 Green Furniture

In progressing towards green library the major obstacle is about how to reduce the construction waste. Most of the present furniture and fixture items bound to end up in adding to the construction waste. The solution to this problem can be achieved by using furniture and fixture items, which are made out of reusable or recyclable materials. Biological degradable materials like wood, linoleum, bamboo and cork can also be used in making furniture and flooring. Using cork material for flooring can greatly prevent creation of the construction waste.

1.5.5 Healthy Indoor Quality

In maintaining indoor quality or atmosphere having the healthy and pleasant environment is also an important factor in marching towards green library. The efforts are always made to provide air conditioned air quality inside the library premises. However, due to faulty AC equipment it could lead in generation of toxins. Secondly, CO, exhaled by the people (worker and patrons) who spend their considerable time inside the library could also create threat in raising carbon level inside the library. In order to improve and maintain the good air quality the efforts are made by bringing in materials having low Volatile Organic Compounds (VOC), which generate ozone toxins and by installing CO, monitors to maintain safe CO, level. These materials not only help in maintaining the environment but it can also help in taking care of health of people present inside.

1.6 SPECIFIC FEATURES TOWARDS ACHIEVING GREEN LIBRARY

After discussing the broader issues concerned to the Green Library let us look at

some of the specific issues. As Brown says, "Green library plan considers need of a library as the sustainable design and real cost saving in energy consumption together." The overall objective of green building is to adopt sustainable energy efficient approach in its construction, maintenance and look at overall life of the structure. Brown has further identified the following green design features to be adopted in the green library building. The most of writers have also endorsed these elements in green library design as:

1. Using Daylight: Light shelves
2. Green material/ furniture
3. Green roofing
4. Raised floor system
5. Energy efficiency
6. Natural ventilation
7. Green power and renewable energy
8. Indoor environmental quality

1.6.1 Innovative Technologies for Green Library

While going through the special features of different well known green libraries the author found that there has been use of many innovative technologies in achieving green status of the libraries. The innovative technologies could be listed as:

- Light Shelves
- Green Materials
- Green Roofs
- Geothermal Heating and Cooling Systems
- Rainwater Harvesting
- Waterless urinals etc.

Now Let us discuss these technologies along with their technical backgrounds.

1.6.1.1 Light Shelves

Use of sun light inside the library and providing access to natural lighting for illuminating the library premises has a lot of significance in adopting green library concept. Getting direct sun light once upon a time was creating a serious problem as it was posing health hazards for the people present inside the library (workers and patrons) due to ultra violet rays and heating due to direct sunlight was also not conducive for preserving of the printed collections. However, with progress in glass technology now all those bad effects are filtered and clean day light could be easily made available, which neither allows ultraviolet rays nor raises the temperature inside the library building, which was causing the health hazards to the people present inside the library. Moreover, National Library of Singapore has developed new means to bring in as much as sunlight as possible, wherein light shelves are used with a technique to pair the daylight with artificial lighting leading to reduce the energy cost to a considerable extent.

The architect of the library Ken Yeang has designed an innovative way of bringing as much as possible sunlight through light shelves. A light shelf is a

horizontal surface that reflects daylight deep into the building. Light shelves are places above eye level and have high reflectance on upper surface, which reflects day light on to the ceiling which facilitates traveling sunlight deeper into the building premise. In this design the building has two blocks separated from each other by an atrium. The atrium is fully day lit and semi enclosed close to drive light into various parts of the building and also helping and facilitating ventilation. The bridges in the atrium acts like linkage between two blocks. The bigger block of the library accommodates the core library which is located over it with naturally ventilated civic plaza, which is open to the sky. The smaller curved part which houses all the noisy activities like exhibitions, auditorium and multimedia space, thus providing noiseless and quiet atmosphere both in the main library premises, at the same time it allows people to undertake creative activities simultaneously.

Another special feature of the building is that it is orientated from east-west axis to avoid exposure of the afternoon sun, whereas from south-west wall remains to stop sun rays to get into the building. Sun-films have been fitted all over the glass panels, which prevent heating and glare of sun rays. This allows only natural light to come in even to the deeper parts of the library and use of artificial lighting is minimised to a maximum extent, which has been proved to be the great energy saving measure.

1.6.1.2 Green Materials

The second important factor to reconsider in achieving Green Library is the use of green materials. Furniture and fixtures available in the library consist of computers and hardware materials, furniture and furnishers. Out of these computer hardware when becomes useless is termed as e-waste or electronic waste and it can be destroyed with a certain method. There is trend of using green material in constructing or manufacturing the furniture. As consumers these days tend to look for furniture which is made out of green materials, similarly librarians are also considering environmental factor while buying the furniture for the library. Green material or green furniture normally symbolised by a tree. The products that use materials from sustainable forests, which have low toxic material levels, which is also locally manufactured and durable enough to last a long time. Metals like steel and aluminum are also durable type of materials which can be recycled. Bamboo is a super sustainable material. Cork is also extremely versatile material which can be used into making flooring. Green furniture can also be made from recycled metal, reclaimed wood and other safe materials.

1.6.1.3 Green Roofs

Green roof is the roof of a building that is partially or completely covered with vegetation and a growing medium, planted on a waterproofing membrane: Green roof consist of different layers such as root barrier, drainage and irrigation systems. There are various advantages of having greenroof such as absorbing rainwater, providing insulation and creating a habitat for birds. It could also help in decreasing stress of people around the roof by providing a more aesthetically pleasing landscape, helping to lower a temperatures round the building and creating the heat island effect. The term green roof is also be used to indicate that made from green technology such as roofs with solar collectors or photovoltaic

panels, Green roofs are also referred to as eco-roofs, vegetated roofs or living roofs. Green roofs are preferred to maintain temperature inside the building cool and pleasant. Membrane roofing is another type of roofing system used to create watertight roofs to protect the interior of the building. Membrane roofs are made from synthetic rubber, thermoplastic or modified bitumen. Membrane roofing technology is mostly used to protect the building from water seepage, however it may not be on the lines the green roofs which are specifically used in green building.

1.6.1.4 Geothermal Heating and Cooling

Geothermal heating and cooling systems are now becoming popular because of their energy saving capability. It is a better alternative than to use direct electricity for heating and cooling which is more expensive. Geothermal heat pumps work exactly like normal heat pumps. In normal case when heating is needed thermal energy is transferred from outside to inside building where as in case of geothermal heating and cooling system geothermal heat moves from the ground or earth in the building. The mechanism here is like this that if we dig about 3 meters below the surface we can gain stable temperature of 10°C therefore, one can make use of this stable level of temperature for maintaining a desired temperature in the building situated above. When heating is needed then required heat energy is drawn from the Earth through heat pumps and when cooling is required excess heat is transferred to earth. In both cases the earth's sync is used. Geothermal heating and cooling system can handle multiple loads for the community. Geothermal HVAC (Heating, ventilating and airconditioning) can bring the building in harmony with the earth by taking advantage of subterranean temperature to provide heating in winter and cooling in summer.

1.6.1.5 Rain Water Harvesting

If we try to store the rain water in reservoir when it is actually raining and use it suitably when needed, it becomes the rainwater harvesting system. Such water can be used for car washing, gardening or for toilets. In Rajasthan people try to store the rain water in a clean manner so that such water storage can be used even for normal drinking. In multi storage library we need water for different purposes from drinking and for toilets. As this system is most recommended to achieve water conservation then we essentially need to have the rain water harvesting system, if we want to create the green library.

1.6.1.6 Waterless Urinals

Waterless urinals do not require water for flushing, which can be installed at homes, institutions or even in libraries. Waterless urinals not only saves water energy but it also tries to harvest urine as a resource. Waterless urinals work like a conventional urinal in design. However, they do not require water for flushing and this results in saving water in a large quantity per urinal per year. In waterless urinals urine flows down the bowl, urine then passes through a sealant liquid, usually a specially made oil base or even an ordinary vegetable oil. The urine being denser than the oil it sinks through the liquid at the bottom leaving oil always on top which prevents bad smell. IIT Delhi has undertaken a research project on this innovative systems

1.7 GREEN LIBRARY MOVEMENTS, RATIONAL, SPECIFICATIONS AND STANDARD

These days there is growing concern of the sustainability of libraries in general. In a very complex situation and in adverse environment the librarians continue to carry out thankless job of preserving print as well as digital collections. They try to adjust themselves with the changing information technology and networking infrastructure. They always try to provide free service to the reader; they try to meet the growing cost of maintenance of building. However, doing all these essential functions and duties it was all leading in lowering the ecological foot prints. The challenge before the libraries is therefore, issues of sustainability of libraries and to identify the ways on how to opt for sustainability strategies in their functioning and making them eco-friendly. Naturally the popular rational in this direction is how to go for greening the libraries. The paper by Maria Anna Jankowska and James W. Marcum on sustainability challenges for academic libraries: Planning for future has taken a detailed view on Green Libraries. Now good amount of literature is available on, Green Library, which says that people are now concentrating on greening of libraries. The greening of libraries is not only process but it is a state of mind asking for action reciprocating as we take care of environment it takes care of us. American Library Association (ALA) has taken a pioneering steps in that direction and has established a Task Force On the Environment (TFOE), Which has helped in initiating the green concept in librarianship. With these initiatives it has now become possible to:

- Make libraries and public aware of diverse environmental information sources
- One window solutions to green concerned and practices in library
- Organising ALA greening conference
- Educating librarians and public by organising special programs to focus on environment
- Provide open access platform for scholarly environmental communication with publishing electronic green journal.
- ACRL organised 14th ACRL conference at Seattle to consider Green as a major theme.

Past 1990s topics on green has been popular in terms of terminologies like Green Academic Sectors; Greening College; Green Librarian; Green Librarianship and Green Blogs and Go Green. The literature and the topics are also addressing issues like recycling, noise, paper, environmental user education and environment literacy. There is website on Green Libraries www.greenlibraries.org which works as a directory.

Now green library building theme discusses architectural design, which considers sustainability solutions in building new libraries and in renovating old ones. So far it has been the fact that the traditional libraries use significant quantity of electricity, water, energy as well as threes for paper. These libraries also have been seen producing significant amount of solid waste (Now e-waste). In Green Library concept all these actions work against the environment and therefore there is great need to relook towards them with green point of view. US Green Building Council formed LEED which disseminates code and standard for green certification to be awarded for new as well as renovated

green libraries. In 1990 many public libraries in the US and Europe adopted green concept in their buildings contradicting to their traditional library's bad environmental impact. The green buildings are always energy efficient; they use non toxic recycled content materials and furniture; they make optimum use of day light; they make use of low flow toilets or use waterless urinals and try to reduce the maintenance cost as much as possible. The green design project initiated by LIBRIS provides a detailed design, planning and documentation on green building. It has considered the aspects from acoustics of libraries through interior finishing, library technology to infrastructure design. The Green Library concept is now trying to emphasis designing library premises to facilitate new role of the library as a research and learning center rather than, its traditional role, as the preservation and depository. With giving importance to green building efforts are made towards making libraries more sustainable with building interior and exterior which could promote sustainable use of renewable and non renewable resources to create healthy and pleasant conditions not only for library users but also for the collections and services. There may not be specific standards only for the green library buildings.

1.7.1 Specifications and Standards for Green Libraries

Green building is purely a civil engineering concept. Green Technology in construction has become popular in the last two decades. Many specification and standards have been emerged and used as the guidelines by the professionals. The standards therefore only for green library may not be there so it would be mix of general and specific standards for green libraries.

Before we actually discuss standards for green libraries let us take a note of the pioneering work done by some organisations as follows:

1.7.1.1 Specification

1. **USGBC-U.S.Green Building Council:** It is co founded by Mike Italiano, David Gottfried and Rick Fedrizzi in 1993. It is a private non-profit organisation which promotes sustainability in building design, construction and operation. USGBC was well known for its forming a green building certification rating system known as Leadership in Energy and Environmental Design (LEED). The certification is available for variety of levels pertaining to green building status. USGBC also holds international conference and expo dedicated to green building. US GBC has also its role in founding World Green Building Council.
2. **Leadership in Energy and Environmental Design (LEED):** US GBC initiated formation of LEED. it is a program which provides third-party verification of green buildings. The LEED rating system considers variety of buildings such as commercial building, homes, healthcare, schools and libraries as well as considers every phase of building lifestyle including design, construction, operation and maintenance. Any project depending on its achieving the certain level of green building specification can earn rating certification such as certified, silver, gold or platinum depending on number of points or credits earned within the specification. LEED has also established its hubs in different countries, which provides ratings certifications locally.

In collaboration with USGBC IGBC (Indian Green Building Council) carries out the activities in India. Similarly LEED's local hub in India is known as LEED-

India, Which issues certifications for green buildings in India.

In addition to LEED- in India there is another green building rating system known as Green Rating for Integrated Habitat Assessment (GRAHA) initiated by TERI (Tata Energy and Research Institute), New Delhi, which carries-out further the green building movement in India.

1.7.1.2 *Standards for green building*

The following Green building standards are in use:

- (a) Chicago Illinois Standards
- (b) Brown Green Standards
- (c) IGBC Indian Green Building Council
- (a) **Chicago Illinois Standard:** Chicago is the first city to apply environmental practices in construction of public buildings which finally succeeded in bringing out Chicago Illinois green building standard. This standard is on the lines of LEED's green building rating system. The green building and sustainable building concepts both refer to have minimum impact on environment in design and construction. The green building comprises all phases of construction like design, material selection and construction including life-cycle analysis and energy efficiency.
- (b) **Brown Green Standard:** Governor of California Jerry Brown has emphasised the emerging trend of green libraries and predicted that many libraries were on the verge of adopting Green design. So the new or renovated state buildings having area of over 10000 sq.ft. have to the level of US Green Building Council's LEED silver certification and would have to accept clean energy generation methods.
- (c) **IGBC Indian Green Building Council:** Since 2001 IGBC the counter part of USGBC in India started functioning with the support of Confederation of Indian Industries and as result IGBC has got authority to award LEED's Green Building rating certifications.

1.8 **ROLE OF LIBRARIANS IN AGREEING LIBRARIES**

Librarians play very significant role in greening the libraries. Moreover, in planning, designing, constructing and operating green libraries, participation of librarians has to be there. Although the green building is purely a civil engineering concept librarian may not take part as an expert but since librarian and all library staff need to be associated in operating the green building once the building construction is completed and handed over to the library management. It is always good if librarian is actively engaged in each and every aspect of green building as he along with his staff is fully aware of the purpose and objective of green library so that they can share the same with other library professionals. It is like librarian's participation in the process of library computerisation.

1.9 **CONCLUSION**

The library always facing problems like space and budget in the same way the books has been facing problems from dust, moisture, fungus and it needs special care. The green library or sustainable is a modern library where minimize electricity consumption and maximum use of renewable sources like

air, sunlight, woods. Now days it is much more needed for a library to greening the library environment. The librarians should take some decisions to make green library. And also take part in green library movement. Many national and international bodies are helping to make green library. Government should encourage the green library and guide to the all the libraries for making green libraries. Some of the Indian libraries have been trying to make a successful green and Librarians should take initiatives and participate in green library movement.

References

1. Anindya Bhattacharya: Green library and its utilities in modern day library service: A study. International Journal of Next Generation Library and Technologies (IGNGLT), August 2017 Vol. 3, Issue 3, pp 1-11
2. Brown, Bill: The new green Standards, Library Journal, 128,61-64, 2003, In-AnindyaBhattacharya op.cit
3. Choudhury, S. (2015). Green library: scope and implications at the national and international level. Retrieved from <http://www.slideshare.net/ksatpathy/wnl-165-green-libraries-by-sonali-choudhury>
4. Hauke, P., Grunwald, M., & Wilde, A. (2014). Green Libraries Coming Up ! National and international initiatives fostering environmental sustainable libraries and library services. In BOBCATSSS 2014 (pp. 1-7). Retrieved from <https://proceedings.bobcatss2014.hb.se/article/view/316/414>
5. Light shelves design in Natural Library of Singapore : <http://www.archute.com/national-library-in-singapore> by-ken-yeang In-Architecture/Library/public Facilities/sustainability - by lanMutuli
6. Maria Anna Jankowska and James W. Marcum: Sustainability Challenges for Academic Libraries: Planning for the future. College and Research Libraries, vol. 71, No.2(2010), PP 160-170
7. Monika Antonella: The green Library Movement: An overview and beyond. Electronic Green Journal 1 (27),2008
8. S P, R., & M, Em. K. (2013). Energy Efficiency in Green Buildings – Indian Concept. International Journal of Emerging Technology and Advanced Engineering, 3(3), 329-336.

Impact on Indian Literature During the Global Digitalization Era

Dr. Namrata Jain*

INTRODUCTION

The Vedic Text has learned to people how to live balanced life. The Vedas and Upanishad are written in Sanskrit Language which is an ancient and classical language of India. It is the bedrock of Indian philosophical thought. They include a spectrum of topics, metaphysics, to cosmology, ethics, grand epics Ramayana and Mahabharata teaches moral and provide entertainment, ritualistic practices. Ancient Indian Literature has blending mythology and history to provide profound insight into human nature and society.

we are witnessing today had already been expressed in holy books of Hinduism like The Ramayana, The Mahabharata, The Bhagavad-Gita, The Vedas & Upanishads which were believed to be written 5000 to 8000 years ago (3000 BC — 6000 BC). Those are proof of the holy epics of Hindu Civilization in India. Elements of modern science present in the Upanishads and Advaita, Siddhanta and the nature of maya resembles modern scientific awareness.

The digitization of the whole holy books and manuscript work is necessary towards the save of the Indian History because of too many holy books and manuscripts are damaged. The Artificial Intelligence hidden in the ancient books of India and the qualitative method focusing the secondary database which include Ancient texts, such as Vedas, Ramayana, Mahabharata, Shrimad Bhagwat Geeta, Puranas, literatures, scriptures and notes. This digitalization creates a new horizon has been attempted to pave in regards of origin of the concept of Artificial Intelligence and its existence and used in ancient Indian

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civilization and for development of science.

The advent of the digital age has transformed the way Indian literature. We have to efforts online literary forums and e-books to audio books and digital libraries, Indian literature is being disseminated and consumed in new, innovative ways for secure Indian ethics, values, culture through the holy books and manuscripts. It is the accessible by the all part of the world and they influence and adopt Indian culture. The digital revolution has also enabled budding writers to self-publish, further democratizing the literary space.

Modern Indian literature, mark by the colonial period, independence, and post-independence eras. This is replete with narratives that explore the socio-political reality of that time. This period saw a resurgence of writing in English, alongside literature in various regional languages, each providing distinct voices and perspectives to the shared Indian experience. It was helpful to Integrate all India for the independence struggle.

Indian literature has influenced global literature in significant ways. The philosophy expressed in the ancient texts has had a profound impact on the world, influencing writers, thinkers, and philosophers alike. The storytelling tradition of the epics, the moral and ethical dilemmas they present, has found resonance in global literature. The unique narrative structures employed by Indian authors and their rich character development, sociopolitical themes has addressed have all contributed to the broader literary discourse. Indian authors have also won too many international accolades, including the Nobel Prize and the Man Booker Prize, further cementing India's place on the global literary stage.

Due to the Digitalization all part of India familiar with the culture of the other state and impact on their literary work. This linguistic diversity enriches Indian literature, providing a vibrant spectrum of voices and their appeal and depth. Literature translate from Sanskrit to Tamil, Bengali to Gujarati, Hindi to Malayalam, Sanskrit to Hindi and many other sets of languages. Each language brings its unique stylistic elements and cultural nuances to the literary canvas, and each dialect contributes to the grand symphony of narratives, creating a mosaic of stories that cater to an array of literary tastes and preferences.

In the global literary scenario, Indian literature stands as a dynamic and compelling facet and. Indian literature has become more reachable to the global reader, facilitating cross-cultural dialogue and understanding. In addition, the role of Indian diasporas writers in bringing the nuances of Indian culture and experience to the global audience cannot be understated. Over the years, Indian literature has produced a galaxy of distinguished authors whose works have gained international acclamation. Rabindranath Tagore, the first non-European Nobel laureate, enchanted the world with his thoughtful and emotional and touching poetry and prose. R.K. Narayan, has set in the fictional town of Malgudi, offered amusing snapshots of everyday life in India.

Contemporary authors like Arundhati Roy, Salman Rushdie, and Jhumpa Lahiri have made important contributions to English literature with their suggestive storytelling and thought-provoking themes. Their works explore the intricacies of identity, diaspora, post colonialism, and the human condition, of the world literature. Poetry, with its rhythmic expressions and philosophical imagery, has been a strong medium of expression, from the Vedic hymns to contemporary

verses. Novels and short stories present a gamut of experiences, mirroring the complexities of Indian people and the human psychology.

Many Indian novels and stories have been adapted into successful films, both in India and abroad. These adaptations not only amplify the reach of these narratives but also underscore the universal appeal of Indian storytelling. The genre of drama has mirror the changing socio-cultural landscape. Non-fiction, comprising essays, memoirs, biographies, and travelogues, provides insightful commentary on various aspects of Indian life and thoughts.

In the global perspective, the future of Indian literature looks hopeful. As more Indian authors gain recognition on international platforms and further works obtain translated into various languages, Indian literature's global footprint is set to promote. Indian literature presents a panorama of narratives that are as diverse as they are unified. In the era of globalization, as cultures converge and dialogues ensue, Indian literature stands as a proof to India's enduring narrative tradition and its ability to vibrate with readers around the globe. Its tales of the past and the present, of joy and depression, of the ordinary and the extraordinary, gesture the global reader, contribution a literary journey like no other. Through its stories, one can glimpse the multifaceted reality of India, their dreams, and their struggles. The wealth of Indian literature is a gift to world literature, a treasure box filled with timeless tales waiting to be discovered, appreciated, and cherished.

Digital technologies and new media have brought about major changes in the production, distribution, and reception of literature. The internet, e-books, social media, and digital publishing platforms have transformed the many ways literature is created, shared, and consumed. The 21st century has had significant impacts on within the India and world literature in several ways. One of the most notable impacts is the amplified globalization of literature, with authors from diverse cultures and backgrounds gaining more appreciation and reaching wider audiences. This has lead to a greater diversity of voices and perspectives in literature, enriching the global literary landscape.

Additionally, advancements in technology have changed the way literature is consumed and distributed. E-books, audio-books, and online publishing platforms have transformed the reading experience and provided new opportunities for writers to share their work. Social and political issues of the 21st century have also influenced and inclined literature, with many authors addressing topics such as immigration, climate change, and social justice in their works. This has lead to a greater emphasis on socially relevant and thought-provoking literature. Overall, the 21st century has brought about a more inter-connected and diverse literary world, with new opportunities for writers and a greater prominence on addressing contemporary issues in literature. Indian authors are struggle with the impact of technology on society and individual lives. They explore themes such as social media, surveillance, virtual relationships, artificial intelligence, and the implications of a digital age on personal associations and their privacy.

Indian literature has certainly responded to the challenges and complexities of a quickly changing society, including globalization, urbanization, and the impact of technology. The digital age has provided a platform for writers to explore and reflect upon these transformations, offering insights into the sprouting

social, cultural, and psychological dimensions of contemporary India. Here are some ways in which Indian literature has engaged with these issues and the emerging trends observed in contemporary literary works like globalization and cultural interactions, environmental concerns, experimental narrative and forms, examining gender issue and feminist discourses, Regional and dialect writing, Diaspora and Transnational Identities.

It's important that these trends are not exhaustive across different regions and languages within India. Indian literature continues to evolve, responding to the dynamic changes and complexities of the society, offering a rich wall-hanging of narratives that reflect the contemporary Indian experience.

References

1. Kulsari, S.P., "Artificial Intelligence & Ancient Indian Texts and Vedas -An Analysis", Sept 10, 2022
2. Tomer Ajay, "Today's era is the revolutionary age of the Indian writing industry", Born to Write April 20, 2023.
3. Mallareddy, Dr Kotthireddy, "Challenges in Exploring Digital Humanities in Indian Literature and Culture", Conference: Challenges in Exploring Digital Humanities in Indian Literature and Culture At: S.R.R. Government Arts and Science College (Autonomous) Karimnagar, elangana, 505001, Feb.2023.
4. Staby Sub editor, "Indian Literature: An Unexplored Trove for Global Readers", June 17, 2023.
5. <https://spiritindia.com/indian-literature-an-unexplored-trove-for-global-readers/>
6. <https://timesofindia.indiatimes.com/readersblog/borntowrite/todays-era-is-the-revolutionary-age-of-the-indian-writing-industry-52807>

Impact of Digital Globalisation on Cultural Identity and Social Strata of India

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OBJECTIVES OF THIS RESEARCH PAPER

- *To look at how globalisation has brought about substantial changes in some of the Cultural as well as social structure of India.
- *This research tries to peep into the minds of different people and tries to analyse what impression of the globalisation process has been imprinted on their mindset.
- *This Research paper is peculiar in the sense that it provided the glimpses of thoughts and behavioural patterns of Indian youth.
- *To study the positive and negative impacts of globalisation affecting our Society.

INTRODUCTION

India is a vast country, having variety of geographical features and climatic conditions. Cultural heritage of India is poised for a rapid all-round growth with Globalization in the fields of economy, society and technology. In the present scenario, People around the globe are more connected to each other than ever in the past history of mankind. Information and technology flow more quickly than ever. International communication now has a wide range. Today We face a world of almost infinite promise which is also a world of terminal danger. This quick phenomenon has been titled 'Globalisation' that describes the process of interaction and integration among people, companies and governments worldwide.

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GLOBALISATION AND CULTURAL DIVERSITY OF INDI

In the context of India, there is amazing cultural diversity throughout the country. From the South to North and East to West, every State has their own distinct culture. India is home to some of the most ancient civilizations, including four major religions of the world i.e. Hinduism, Buddhism, Jainism and Sikhism. "Unity in diversity" -these are not just words, but something that are highly applicable to a country like India that is incredibly rich in its cultural heritage and rich knowledge. In India the socio-cultural changes under the modern West's impact have significantly started since the last phase of 19th century and this have been the most important aspect of the country's socio-cultural dynamics. Since the last quarter of the 20th century, India has also witnessed the powerful forces of current globalisation related to science technology and market economy which have made a massive change in its socio-cultural milieu. From the very beginning of the present era, the Shakas, the Khushans, the Huns, the Arabs, the Central Asians, the Portuguese, the Dutch, the French, and other external groups had close contacts with India as regards trade, commerce and other relations. But it was the British and later the Euro-American influence that has made a profound impact on Indian society. An Unbelievable expansion of western culture has continued at a faster rate along with the denigration and decline of Hindu culture, civilization, religion, art, literature and customs. Besides putting on a new mask of Globalization, Colonialism has taken on several new faces and cleverly masquerades itself through labels and slogans like democracy, tourism, gender equality, free trade internationalism and humanitarianism. As a result a global culture is emerging. We were totally unaware of the negative impacts of globalisation which has swept everyone off their feet, our country being no exception to this. Globalisation has impacted Indian society in different fields in many ways.

IMPACTS OF GLOBALISATION

Globalisation has both positive as well as negative impacts. This globalisation not only pulls upwards but also downwards creating new pressures for local autonomy.

#GLOBALISATION, LOCAL CULTURE AND PLURALISM

Globalisation refers to the process of integrating cultures, economies, and societies on a global scale. It has a remarkable impact on local cultures. The impact of globalisation on Indian culture needs to be examined by observing the social as well as cultural patterns and their local, National and International manifestation in India. One of the most obvious effects of globalisation on local cultures is the spread of different aspects of state wise culture. With the introduction of global mass media and the facilities of the internet, cultural products such as Art, music, films and television shows are now easily accessible in even the most remote corners of the world. Through the online platform, Traditional art forms like classical dance, music and indigenous crafts are finding new audiences. Artists from remote villages can showcase their talents on a global stage through digital marketing and virtual performances. This not only preserves art forms but also provides economic opportunities for artists. The influx of foreign goods and services has created an environment

where Indians are exposed to a much wider range of products and services than ever before. This has led to the homogenization of cultural tastes and the erosion of traditional cultural practices. Through these ways, people can access information from all over the world and become exposed to different cultures. This can lead to the adoption of certain aspects of a culture, such as language, fashion or music, by people from all over the world. But this step are side effects too. This process is transforming cultural identities worldwide as traditional ways of life, beliefs, and values confront the dominant Western Culture.

#Globalisation and Changing Trends in Indian Culture

In this Sanrio of globalisation, Unprecedented interaction and mobility have dented local cultures. There was a time when Indians used to greet each other with “Pranaam”, “Namaste” or something similar in regional dialects. But now that gesture of greeting is replaced with “Hi” and “Hello” among a large section of the population. Most people now like an independent life, a by-product of globalisation.

#Globalisation On Values and Traditions

Between technology and tradition, there is always a hard competition in any community. Technology has constrained the world into a global village by globalisation. Survival of today's life without electricity, transportation, communication, etc. takes us back in time. The advancement in the field of medical science, engineering, economy, etc. is as a result of technology. Industrialization, Urbanization, Modernization, Development of the means of transport and communication is all possible due to the positive impact of technology. It also helps in networking of the culture, tradition, and coherence of the society. The 21st century has been so much forward due to the progress of technology. Connecting electronically can also lead to isolation which is because of constant sensory stimulus of texts, tweets, Facebook, emails and more rather than thinking and listening to each other. Tradition style thrives if they have their recognized value. Technology helps to modify methods of production or industrialization rather than killing the tradition. Thus, technology allows preservation of tradition if the beneficiary part is considered. That will make the true sense of the right direction of technical advancement under Globalisation. But on the other hand, globalisation has resulted in the emergence of individualistic societies. Through globalisation, the promotion of liberal values has led to a decline in traditional values such as collectivism. Consequently, societies have become more individualistic because values such as consumerism take centre stage. Thus, globalisation affects how people perceive themselves, leading to the emergence of new forms of identity. The negative impacts of globalisation on cultural identity include the loss of cultural heritage and traditional values.

#Globalisation and the Erosion of Family Structure

Over the last few years, there have been tremendous changes in the values and lifestyle among the youth. The measure of success has been equated with the five C's which stand for cash, credit card, car, condominium and career and not so much on the quality of life and relationships. In pursuing this dream of five C's, youth is motivated to learn and upgrade their knowledge and skills so as to be more marketable. This can be at the expense of time with their families

and some companies are shortening the number of working days or allowing employees to work from home. Globalisation has not only brought about economic growth but also consumerism and young people has become the target of most commercial advertisements. This can lead to social and cultural tensions as people struggle to reconcile their traditional beliefs with the new global norms.

#Globalisation and Adultery

From the later Vedic age, in our society, both sexes were kept apart and there were a great deal of rules, regulations, and confinements placed on how things might be done. Because of the rise of western culture and globalisation, today's younger generations are interacting more successfully with one another. The Warped mentality, which is again a product of ideals that are very much foreign to our mother culture, is also to blame for the rise in the number of reported occurrences of rape and sexual abuse which nowadays causes mental harassment too.

#Globalisation and Festivals in Indian Culture

There has not been much of a shift in the way Indian holidays are celebrated, which is a blessing, but there have been some influences. The Indian Diaspora celebrates several holidays, including Navratri, Dussehra, Diwali, and Ganesh Chaturthi, outside of India. This has contributed to the globalisation of many festivals. As a result of the participation of so many residents at these celebrations, one might gain insight into traditional Indian rituals. However, there has been a shift inside the country that comes as quite a shock. Friendship Day, Valentine's Day, Christmas, Father's Day and Mother's Day are just a few of the numerous international holidays that are now being observed by people all around the world. Even just a couple of decades ago, the impact that these events had on Indian society were negligible at best. India is evolving and becoming more connected to the rest of the globe. Many Indian customs, celebrations, performing arts, and ways of life date back hundreds of years.

#Globalisation and India's Linguistics Diversity

The local and regional cultures are also manifested through linguistic diversity of India. Immediately after the independence, Languages have been an important issue in defining the territorial boundaries of the Indian states. In India, a state reorganisation commission was set up with the objective of suggesting new boundaries of the state, based on the principle of linguistic cultural affinity. Although each state has its own regional language. For example Kannada is the first language in Karnataka, and Malayalam in Kerala, but Because of the world wide status, English is already the primary language in India because though these are neighbouring states, a person from Kerala would still not understand Kannada. Hindi and English are thus commonly used by almost everybody. English is slowly taking over because of the effects of globalisation. This is due to the increased interaction with the Western world and the increased number of international students in India. So, it means, the local languages are dying out? Hardly! No, it is not like that. Globalisation has formed a common thread of communication as in most of the working sectors, English is the global language of communication. Despite linguistic diversity and traditional linkages, the

nation is now connected through internet. Social media, a common airline language on one language platform. The effects of globalisation on language in India have also had a positive impact on regional languages. Under the influence of English, regional language speakers have been able to adopt and use new words in their native language. This has enabled them to be able to communicate better with each other and has also allowed the younger generation to learn their native language more easily. Overall, the effects of globalisation on language in India have been both positive and negative. On one hand, it has enabled people to communicate more effectively and access foreign markets. On the other hand, it has caused the decline of native languages and has caused some people to forget their native language. This can lead to a loss of linguistic diversity and a sense of disconnection from one's own heritage.

#Globalisation on Communication and Education

The most revolutionary aspect of a Cultural, social and economic globalisation is reflected in the advances in technology of communication so its need to be taken up as an essential element. In the modern scenario, due to the advancement in technology, the world is both getting larger and smaller. Today we can communicate with people across the globe at the touch of a single button. The electronic media of communication such as mobile, LEDs, radio ,computer network via satellite paging services, electronic mail and internet web etc are modes of communication which have revolutionised the banking, trade and management practices, uses of culture and leisure and most other modes of inter cultural and inter group communicative actions. While globalisation or communication between nations beyond their borders is a traditional concept, with the onset of new technology, globalisation is impacting the ways we communicate and learn in fascinating ways. Because of the latest technologies of the internet, we have the opportunity to view diverse perspectives previously which were outreach of our scope . With the sound connectivity of interest, now We can fully connect with someone who is thousands of miles away in real time and the effects are profound. Another wonderful benefit of globalisation is that the world becomes more accessible, more inreach and equitable in general. Search engines, E-books, online courses and other virtual education give more students the ability to learn about subjects that used to require a certain level of income or social positioning. Restrictions on any information are the end point and it allows us the opportunity not only to receive information but to enter into academic spaces and contribute too for the enrichment of society. Globalisation create a space for ideas to transcend borders and social strata. When we combine the access to new perspectives with access to previously highly safeguarded materials, what we get is the opportunity to create brand new worlds. When we can see the world through new eyes, we have the opportunity to innovate new things and really develop new educational opportunities. This is now possible to have communication between individuals as well as groups or communities globally.

CONCLUSION

Globalisation has brought a tremendous impact upon human civilization. The strategies to cope with the globalisation are not sufficient to revolutionise the anti-globalisation approach. Is globalisation a boon or curse to our culture?

That is really a question of thought for all of us. The approach should always be constructive so that we get maximum benefit from globalisation, without exploiting our own cultural diversity and historic existence. We must enlighten our mind with famous quotes of visionary Swami Vivekananda, who foresaw the hazards of globalisation and impact of MNC culture in India as early as in 1893 when he spoke at the Parliament of World Religions in Chicago. To quote his soul-stirring words: "Shall India die? Then, from the world all spirituality will be extinct, all sweet-souled sympathy for religion will be extinct, all ideality will be extinct and, in its place, will reign the duality of lust and luxury as the male and female deities, with money as its priest, fraud, force, and competition its ceremonies, and human soul its sacrifice. Such a thing can never be." Still the horrible and terrible effects are taking place on our culture today on account of the relentless and unchallengeable process of Globalization". The issue before us now is to figure out the possibility of a right and just course of action in times that pose a tremendous challenge to our role both as Indians and as citizens of this beautiful earth.

References

1. Buggi C, Reddy S and Gowda G, Impact of Globalization on Agrarian class structure. Its implications of Indian villages. Third Concept, January 2001, P 17-19
2. Basam A.L, A Cultural History of India, Clarendon Press, Oxford, 1975.
3. Basham A.L., Studies in Indian History and Culture, Sombodhi Publication Pvt. Ltd., Calcutta, 1964, pp. 58-59.
4. Chawla Harsha , "Indian Culture and Globalization", Journal At: Kopargaon Volume: 4, 2017
5. Dharendra Singh "Globalization and PostModernism, Global Spirituality, op. cit., pp. 224-227. Vide also-Engineer, A. A. Globalisation and Emerging Challenges to Islam in Asia. Islam and Modern Age, 2005.
6. Ghosh, B., Popular Culture. Adhering to the Dictates of Market Globalism. The Statesman (India), June, 2006, pp. 19-20.
7. Giddens, A., The Consequences of Modernity, 1990, Cambridge: Polity. Runaway World. New York: Routledge, 2000.
8. Kumar, C. Raj, Legal Education, Globalization, and Institutional Excellence: Challenges for the Rule of Law and Access to Justice in India, Indiana Journal of Global Legal Studies, 2013.
9. Madhok, Bindu, and Selva J. Raj, "Globalisation, Higher Education, and Women in Urban India: A Development Ethics Approach, Journal of Third World Studies, 2011
10. Singh B.P., India's Culture- The State, the Art and Beyond, Oxford University Press, Delhi, 1998, p.37.
11. Sahoo, Sarbeswar, "Globalization and Politics of the Poor in India." Journal of Asian & African Studies, Sage Publications, Ltd., 2014.
12. Y. Gurappa Naidu, "Globalisation And Its Impact On Indian Society", The Indian Journal of Political Science Vol. 67, No. 1 (Jan- March, 2006), pp. 65-76.

Impact of Digital Globalization on Indian Education System

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INTRODUCTION

India is known for its rich population diversity in cultures. In India globalization impacts on the education system. Globalization has brought opportunities and many of challenges to the old education system. In this article I want to explore, how globalization has influenced the Indian education system.

Globalization in education refers to the exchange of ideas, knowledge and resources across the boundaries. It also includes integration of education system, collaboration, sharing of ideas of new resources etc.

REVIEW OF GLOBALIZATION ON INDIAN EDUCATION SYSTEM :

Globalization provides educational opportunity and also gives employment on large scale. Due to this many of the best students go abroad. In current Universities from the different countries want to join hands with Indian Universities and give India economic strength.

Large Industrial Organizations like Tata's Reliance or others take initiative to start new institutions throughout India with collaborations from collaborations like Harvard School of Business, MIT in USA & London, from which students will get international education easily.

Education has become an incredible and potential due to the globalization in the educational field. Universities from all over the world. Few Indian Universities are worldwide certified and acknowledged, with the exception of a limited

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number of top institutions, So that there is fierce rivalry for between a number of top schools.

While establishing a curriculum market demands should be considered.

While taking into account of globalization in education system we first know the meaning of globalization :

globalization refers to the increasing flow of knowledge, trade, values, finance across the boundaries.

Globalization is a process of integration of economic, political and cultural ideas.

Impact of globalization on educational system

- increased demand for education.
- increased quality of education.
- expansion of women's education.
- expansion of university education.
- development in private universities.
- decentralization of education.

Globalization has introduced several positive changes in the Indian education system like changes in curriculum, changes in methods of teaching as well as changes in test methods.

ROLE OF DIGITAL GLOBALIZATION IN INDIAN EDUCATIONAL SYSTEM

We see that globalization has encouraged collaboration between educational institutions in India and other countries. It means that the improvement of digital technologies of the internet has made information easily accessible to all students as well as educators.

Exchange in programs, student mobility is become easy. Due to this students and teachers can engage with diverse cultures, perspectives and focusing on global outlook.

Globalization made the students boarding the outlook of education on global aspects.

Students become able to face challenges in every aspect of education. The students are also able to balance between the traditions of their country and another country.

Globalization has prompted the Indian educational system to modernize its curriculum and teaching methods.

Digital learning tools, Google classroom, mind-map, See-saw, Edu clipper have a great impact on teaching - learning in India.

Digital education is a campaign launched the Government of India. It has a new approach and it ensures educational services to make available to students, electronically by improved online structures. Primary data is mainly collected by teachers and they give information to their students. Teacher make study about available digital resources and the need of students.

Teacher should act as guides for their students and direct them in their individual processes of development taking into consideration the challenges of

the globalization processes.

There is immense impact of digitalization on higher education. It empower educators and prepare students for the future.

In the 21st century, globalization has changed the teacher education and training. Teaching and learning with digitalization is the base of teacher training, which gives us new digitalized generation.

IMPACT OF GLOBALIZATION ON EDUCATION OF SYSTEM IN INDIA

Globalization means the increased access to television and other sources. In this modern age, we can see the improvement in students ability to acquire as well as utilization of knowledge.

Globalization encourages students to use various sources and get knowledge from our country as well as from another country. When the student give examination online, he uses symbols or give answers object types, which increases student's ability to think correctly and give proper answers immediately.

Education has an important role in shaping society and today there is a large effect of globalization on education and global activities.

RESULT OF GLOBALIZATION ON INDIAN EDUCATIONAL SYSTEM

There are many challenges posed by Globalization on educational system in India. In India, the Government regulates who you can teach, what you can teach them and what you can charge them. Universities are also regulated by legislations of the government.

But due to the globalization many private institutions are ready to invest in education and want to start online courses or digitalized education to students. These institutions also want to send students abroad and take education fully techno savy.

This improvement can give students an opportunity of taking education which they want.

There are many barriers in the globalization and new education system in India. Although this, we can see development in the technical side of education and after some years, all rural students can get education at higher and technical level.

CONCLUSION

Now a days lots of positive changes are happening in the education system of India.

There is a definite need of great charges in the Indian education system. Now a days India is utilizing vast human resources and the dream of youngsters are coming true.

We can also take into account another benefits of globalizations. We can see improvement of awareness of other cultures, reduced racism, spread of technology and increasing living standard.

While taking into account there are some demerits of globalization as unequal access to education and also the inequality in income distribution. Uneducated and unskilled areas of education face increasingly problems.

But there is another very good side of globalization, digital technologies, the internet has made information easily accessible to students and educators. Online resources, and learning platforms make easier the students new era of education.

References and Online Links

1. <https://edicationforallindia.com>
2. <https://ijcrf.org>papers>.
3. <https://motionpoint.com>
4. <https://pwwonlyias.com>pyq>
5. <https://www.jetir.org>
6. <https://www.researchgate.net>
7. <https://www.slideshare.net>

A Study of Digital Library Initiatives in India: An Overview

Rakhi*

INTRODUCTION

Knowledge and information were preserved in print medium following the development of printing technology, but they can now be saved electronically. The idea behind a library is to collect, store, and make information or knowledge available to researchers and readers in both print and digital formats, such as books, magazines, and other materials. Libraries and information hubs in the modern era are always facing new problems. However, they also have certain opportunities concurrently. Library science has seen significant transformation in the Information Technology era. With the development of high-speed networks and processing/storage devices, technology has brought about revolutionary changes in the electronic world.

With the arrival of the twenty-first century, a growing number of individuals will generate, organise, store, retrieve, and distribute information in digital form, making the digital medium their channel of choice. New ideas such as knowledge management and digital libraries have emerged as a result of the Internet's expansion, adding a new dimension to information technology. By embracing the newest information and communication technologies, digital libraries have assumed a pivotal role in the global IT infrastructure, fostering an organisational framework that facilitates resource sharing and communication among national and international scholars.

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CONCEPT OF DIGITAL LIBRARY

Since there are many things on the internet that people are calling “digital libraries,” which are not, in the opinion of librarians, what causes confusion is that the library community has used a variety of terms over the years to refer to this concept: electronic library, virtual library, library without walls. For example-

- Collections of software or computer algorithms are digital libraries to computer scientists and software engineers.
- For commercial document providers or database vendors, their digital libraries, electronic document delivery services, and databases.
- Document management systems that oversee major organisations’ electronic business document collection function as a digital library.
- A digital library is the collection of everything that a publisher may purchase the rights to and then charge users for accessing; for at least one very major software firm, it’s an online equivalent of a catalogue.

WHAT IS DIGITAL LIBRARY

A digital library is one that is computer-accessible and has collections kept in electronic media formats.

Computer networks can be used to access the electronically stored material remotely or locally. An information retrieval system’s reflection can be found in an electronic library.

DIGITAL LIBRARY INITIATIVES IN INDIA

Though they didn’t start until the mid-1990s, digital libraries were popular in industrialised nations during the 1970s. Initiatives to establish digital libraries were sparked by internet use. There have been significant efforts made to build digital libraries by the Indian government at the federal level as well as by state governments.

DIGITAL LIBRARY OF BOOKS

On September 8, 2003, Dr. A.P. J. Abdul Kalam inaugurated the Digital Library of India (<http://www.dli.ernet.in/>) with the goal of conserving knowledge and cultural heritage. The driving reasons behind this project are the US-NSF Universal Digital Library Project and the Million Books initiative, which is supported by Carnegie Mellon University in the USA. The initiative is being coordinated by the Indian government’s Ministry of Communications and Information Technology and IISc in Bangalore. Its 21 scanning centres, including three regional mega scanning centres, preserve and digitise significant library, scientific, and creative works, making them publicly accessible for research and education.

VIGYANPRASAR DIGITAL LIBRARY

An independent agency under the Department of Science and Technology, Government of India, is VigyanPrasar (<http://www.vigyanprasar.gov.in/digilib/>). It was established in 1989 to facilitate the transmission of science and technology. VigyanPrasar disseminates scientific knowledge through an open

access digital library that includes full-text digital copies of all notable scientific publications that VigyanPrasar publishes. Volume I, Issue 1 of the open access periodical DREAM 2047 and a popular science magazine are both archived on the VigyanPrasar Science Portal.

NCERT Online Text Books

The GoI established the National Council of Educational Research and Training (NCERT) in 1961 as an independent organisation (<http://www.ncert.nic.in/textbooks/testing/Index.html>). School textbooks are freely available online for everyone thanks to a nationwide portal that the NCERT launched based on the nationwide Curriculum Framework 2005.

Digital Library of Manuscripts

Kalasampada: (<http://www.ignca.nic.in/dlrich.html>)

The Ministry of Communication and Information Technology and the Indira Gandhi National Centre for the Arts (IGNCA) partnered to launch Kalasampada, a digital library on indigenous cultural heritage (DL-RICH, or Digital Library: Resources of Indian Cultural Heritage), with the goal of developing cultural heritage resources. DL-RICH offers digital access to a wide range of textual, graphical, audio-visual, and multimedia resources as well as rare paintings, manuscripts, rare books, rare pictures, sculptures, handicrafts, monuments, artefacts, and festivals. The Sanskrit text collection “GaudiyaGranthaMandira,” which contains more than 400 chapters from various oriental literature, is likewise organised by it.

NATIONAL MISSION FOR MANUSCRIPTS

National Manuscripts Mission (<http://www.namami.org/index.html>): With the establishment of the National Mission for Manuscripts in February 2003 by the Department of Culture and the Ministry of Tourism and Culture, Government of India, a vast collection of manuscripts in various forms, including textures, themes, and scripts, calligraphies, aesthetics, languages, illuminations, and illustrations, were to be located, documented, preserved, and made available.

Muktabodha

With the intention of conserving scriptural texts related to the Tantric and Agamic traditions, as well as India’s oral tradition of Vedic chanting and the ritualistic knowledge and philosophical insights that accompany it, the Muktabodha Indological Research Institute launched The Muktabodha Digital Library and Archiving Project (http://www.muktabodhalib.org/digital_library.html) in July 2003. The main goal of the digital library is to preserve rare Sanskrit texts and manuscripts in a variety of electronic formats and make them available to people through websites.

National Digital Library of Electronic Thesis & Dissertation

Shodh Ganga

Shodhganga (<http://shodhganga.inflibnet.ac.in/>) is a national repository of electronic theses and dissertations. Its goal is to enable free access to Indian

theses and dissertations for academicians worldwide. It was initiated on May 20, 2010, by INFLIBNET, with backing from UGC. Beginning on June 1, 2009, university researchers are required by UGC to submit their theses and dissertations in electronic format. The term “Shodhganga” refers to the storehouse of Indian intellectual output that the INFLIBNET Centre hosts and maintains. The Best ICT-Enabled Higher Education Institute for the Year 2011 eINDIA JURY CHOICE Award went to Shodhganga.

ShodhGangotri

Researchers who submit approved synopses to institutions in order to register for Ph.D. programmes can find them in the repository maintained by ShodhGangotri (<http://shodhganga.inflibnet.ac.in>). In an effort to prevent research duplication, it tracks the patterns and paths taken by Indian universities’ research efforts.

Vidyanidhi Digital Library

The Department of Library Science at the University of Mysore has launched Vidyanidhi (<http://www.vidyanidhi.org.in/>), an online platform for doctorate research in India, with funding from NISSAT, DSIR, the Indian government, Microsoft India, and the Ford Foundation. It started off as a pilot initiative in 2000 with funding from the Ford Foundation, the government, Microsoft India’s dissertation repository, and a number of resources for PhD research in India. Vidyanidhi enjoys the University Grants Commission’s (UGC) strategic assistance. The entire text of theses and a metadata database make up the two layers of the Vidyanidhi Digital Library. Vidyanidhi has held over 50,000 bibliographic records and 5,000 full text theses that were submitted to Indian universities.

Digital Library of Online Courseware

Seven IITs and IISc oversee the NPTEL (National Programme on Technology Enhanced Learning), or (www.nptel.iitm.ac.in), an open courseware initiative financed by the MHRD. Raising the bar for engineering education in India is the main objective of this initiative, which aims to create more than 200 curriculum-based online and video courses.

e-Gyankosh

IGNOU is an open university that provides billions of students globally with distance and open learning opportunities. eGyankosh (www.egyankosh.ac.in) is a National Digital Repository of learning resources, launched by IGNOU. This repository aims to house, catalogue, maintain, disseminate, and exchange the nation’s open and remote learning institutions’ digital learning resources: A range of learning resources, including audio-visual programming, archives of live interactive radio and television broadcasts, and self-instructional study materials, can be seamlessly combined and integrated into the repository.

e-PGPathshala

(<http://epgp.inflibnet.ac.in/about.php>)

Under NME-ICT, the MHRD has given the UGC funding to generate PG-level e-content in 77 academic areas. In accordance with the directives of the Standing Committee, e-PG Pathshala, the INFLIBNET centre is in charge of the technical

and administrative coordination of programmes. Under the programme called e-PG Pathshala, top-notch curriculum-based interactive content in various social science, arts, fine arts & humanities, scientific & mathematical sciences, linguistics, and language disciplines is being developed.

OTHER INITIATIVES

Traditional Knowledge Digital Library

The Department of AYUSH, NISCAIR, CSIR, the Ministry of Health and Family Welfare, and the Department of Science and Technology are collaborating on TKDL (www.tkdl.res.in). Five languages—English, German, French, Japanese, and Spanish—are used in the effort to document traditional information about Ayurveda, Unani, and Siddha that is in the public domain. The Indian government, through TKDL, is attempting to protect its traditional medicine from potential copyright threats from Western pharmaceutical companies. In addition to providing intellectual property protection, it will allow researchers to examine and record the scientific foundations of the drugs and treatments in the collection.

C-DAC Projects (http://cdac.in/index.aspx?id=mc_hc_digi_lib)

C-DAC (Centre for Development of Advanced Computing) is the premier research and development organisation for IT, electronics, and allied subjects within the Ministry of Communications & Information Technology's Department of Electronics and Information Technology.

It conducts:

- Digitization of Libraries
- Digital Library at Gujrat Vidyapeeth, Ahmedabad
- GyanNidhi: Multilingual Parallel Corpus in Indian Languages
- Digital libraries at Uttaranchal
- Digital Library at President's House
- Mobile Digital Library: Dware Dware Gyan Sampada
- Digital Library at Nagari Pracharini Sabha Varanasi;
- Mega Centre for Digital Library;

Problems and Challenges

Acute shortage of qualified staff to take up the task of digitising local content and evolving digital information repositories is one of the challenges facing India's digitization initiatives. Other challenges include copyright, implementation of access rights, content selection and security, efficient internet bandwidth, financial support, proper documentation, lack of ability, lack of incentives, lack of role model initiatives, and lack of incentive programmes.

Bhattacharya (2004) lists the following problems that Indian libraries face: intellectual property rights; inadequate funding and infrastructure; technological advancement; inexperience; lack of experience; appropriateness; proliferation of information on the internet; high maintenance costs; bandwidth issues; preservation of existing infrastructure; a lack of training and political and social restrictions

According to Dr. Gurram Sujatha, three aspects need to be considered in order to ensure the success of planned programmes for digital resource development and digital libraries across the nation: the digital divide, sustainability difficulties, and the national strategy for digitization.

CONCLUSION

India has taken the lead in the digital library movement by digitising and making traditional knowledge, rare documents, century-old publications, theses, dissertations, and journals available in Indian libraries freely accessible. This is made possible by the country's access to advanced ICTs and information infrastructure. In an effort to establish a really digital library, one such project is the Digital Library of India. Indian doctoral theses can be easily accessed and archived online thanks to centrally controlled digital repositories called ShodhGanga. This also helps to improve the calibre and standard of the study. Various organisations, including the apex higher education agencies, are also developing crossarchive search services and open courseware. In emerging nations, India has led the way in the digital library movement.

References

1. Bhattacharya, P. (2004). Advances in digital library initiatives: a developing country perspective. *The International Information & Library Review*, 36 (3):165–175.
2. Ghosh, Maitrayee (2009). E-theses and Indian academia: A case study of nine ETD digital libraries and formulation of policies for a national service. *The International Information & Library Review*, 41: 21-33.
3. Gurram S. Digital library initiatives in India: a proposal for open distance learning; 2021. Available from: <https://docs.lib.purdue.edu/iatul/2008/papers/25>.
4. Jeevan, V.K.J. (2004). Digital library development: identifying sources of content for developing countries with special reference to India. *The International Information & Library Review*, 36: 185–197.
5. Kittur G, Biradar K. Digital Library Initiatives: A Boon for Preservation of Information Resources in India. *Int J Sci Res* . 2017;6(1):2133–6
6. Sujatha, Gurram (2008). Digital library initiatives in India: a proposal for open distance learning. Proceedings of the IATUL Conferences. Availalbe at: <http://docs.lib.purdue.edu/iatul/2008/papers/25>

The Impact of Internet Addiction on Emotional Regulation and Communication Skills: A Review

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INTRODUCTION

Internet addiction, characterized by excessive and compulsive internet use, has garnered significant attention in recent years due to its adverse effects on various aspects of individuals' lives. Internet addiction is defined as individuals' inability to control their internet use, which leads to feelings of distress and functional impairment of daily activities such as work, academic, interpersonal relationships, and recreational pursuits (Davis, 2001)

Internet addiction, also known as problematic internet use or compulsive internet use, refers to a behavioural disorder characterized by excessive and compulsive engagement with the internet, leading to negative consequences in various aspects of an individual's life. It involves an inability to control or limit internet usage despite awareness of its adverse effects on physical health, mental well-being, social relationships, work or academic performance, and other areas of functioning (Young, 1996).

Internet addiction encompasses a range of online activities, like :

Gaming Addiction: Excessive gaming, often in massively multiplayer online role-playing games (MMORPGs) or other immersive virtual environments, leading to neglect of real-life responsibilities and withdrawal symptoms when unable to play.

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Social Media Addiction: Compulsive use of social networking platforms (e.g., Facebook, Instagram, Twitter) adversely affect the social interactions, personal relationships, and self-esteem.

Online Shopping Addiction: Uncontrollable urge to shop online, resulting in financial problems, hoarding behavior, and feelings of guilt or remorse.

Cybersex Addiction: Compulsive engagement in online sexual activities, such as viewing pornography, participating in cybersex chat rooms, or seeking sexual encounters via dating apps, leading to disruptions in real-life relationships and sexual dysfunction.

Information Overload: Obsessive consumption of online information, news, or entertainment content, resulting in decreased productivity, attentional difficulties, and cognitive overload.

While not officially recognized as a distinct disorder in diagnostic manuals such as the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) or ICD-11 (International Classification of Diseases), internet addiction is increasingly recognized as a significant public health concern due to its prevalence and impact on individuals' lives..

While the detrimental consequences of internet addiction on mental health and social functioning are well-documented, its specific impact on emotional regulation and communication skills needs to be further investigated. This paper aims to study the impact of internet addiction on emotional regulation and communication skills. For this purpose, investigator reviewed and synthesized available related literature on this topic.

INTERNET ADDICTION AND EMOTIONAL REGULATION

Internet addiction due to its compulsive and excessive nature has been increasingly recognized as a significant challenge in today's society. Beyond its immediate consequences on productivity and social relationships, internet addiction can profoundly impact emotional regulation, influencing how individuals perceive, express, and manage their emotions. Emotion regulation refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions. (Gross, 1998).

Dysregulation of Emotional Responses: Internet addiction can disrupt the intricate balance of emotional responses, leading to dysregulation characterized by heightened reactivity, impulsivity, or emotional numbing. Excessive engagement with online activities, such as gaming, social media, or gambling, may evoke intense emotional states, including excitement, frustration, or anxiety, which individuals may struggle to regulate effectively. The instantaneous and unpredictable nature of online interactions can overwhelm individuals' capacity to modulate their emotional arousal, resulting in maladaptive coping strategies or avoidance behaviours.

Escapism and Emotional Avoidance: Internet addiction often serves as a form of escapism, allowing individuals to avoid or suppress unpleasant emotions by immersing themselves in online distractions. Rather than confronting underlying stressors or emotional challenges, individuals may resort to compulsive internet use as a means of temporary relief or distraction, perpetuating a cycle

of avoidance and emotional dependency. However, prolonged avoidance of emotional experiences can hinder adaptive coping skills and exacerbate emotional distress, contributing to the maintenance of addictive behaviours.

Impaired Emotional Awareness and Expression: Chronic internet use may attenuate individuals' awareness of their emotional states, leading to diminished sensitivity to internal cues and reduced capacity for emotional introspection. Online interactions, characterized by anonymity and detachment, may inhibit authentic emotional expression, fostering a superficial or idealized presentation of self that masks underlying emotional vulnerabilities. Individuals may struggle to articulate their emotions accurately or seek validation and support from online communities, reinforcing patterns of emotional suppression or externalized validation-seeking behaviours.

Interference with Social Bonds and Empathy: Internet addiction can erode the quality of real-life social relationships, limiting opportunities for genuine emotional connection, intimacy, and empathy. Excessive reliance on online interactions may diminish individuals' ability to recognize and respond to others' emotional cues, impairing empathy and perspective-taking skills essential for maintaining healthy relationships. The depersonalized nature of online communication platforms may foster disinhibition and desensitization to the emotions of others, contributing to interpersonal conflicts or social detachment.

In a Systematic Review by Smith & Johnson (2019) found a significant correlation between internet addiction and poor emotional regulation. Individuals with internet addiction tended to have difficulties in managing their emotions effectively. A study by Garcia & Rodriguez (2020) revealed that adolescents with internet addiction showed deficits in emotional regulation skills compared to their non-addicted peers. Poor emotional regulation was linked to excessive internet use. Chen & Wang (2018) study demonstrated that young adults with internet addiction exhibited impaired emotional regulation abilities, leading to heightened emotional distress and difficulties in managing negative emotions. A Longitudinal Study by Kim & Lee (2021) indicated that college students who developed internet addiction over time experienced declines in emotional regulation skills. Poor emotional regulation was both a predictor and consequence of internet addiction. A Cross-cultural analysis by Wu & Li (2017) revealed that regardless of cultural background, individuals with internet addiction exhibited deficits in emotional regulation. This suggests that emotional dysregulation is a universal factor in internet addiction. Zhang & Wang (2019) study proposed a moderated mediation model, indicating that the relationship between internet addiction and emotional regulation was mediated by impulsivity, with self-esteem as a moderator. Higher self-esteem buffered the negative impact of internet addiction on emotional regulation. Liu & Chen (2020) research findings suggested that adolescents with insecure parental attachment were more prone to developing internet addiction due to deficits in emotional regulation. Secure parental attachment served as a protective factor against internet addiction. A study by Yang & Park (2018) highlighted that internet addiction was associated with poor emotional regulation skills, leading to decreased psychological well-being. Interventions targeting emotional regulation were suggested to mitigate the negative effects of internet addiction. In a study, Wang & Zhang (2019)

found that female college students with internet addiction demonstrated greater difficulties in emotional regulation compared to their male counterparts. Gender differences in emotional regulation may contribute to variations in internet addiction prevalence. Li & Wu (2022) study identified emotion dysregulation as a mediator in the relationship between neuroticism and internet addiction. Individuals high in neuroticism were more likely to experience difficulties in regulating their emotions, predisposing them to internet addiction.

Addressing emotional regulation deficits is integral to the treatment of internet addiction, necessitating a multifaceted approach that combines cognitive-behavioural techniques, emotion-focused strategies, and mindfulness-based interventions. Internet addiction profoundly influences emotional regulation processes, contributing to dysregulation, avoidance, and interpersonal difficulties. By addressing underlying emotional vulnerabilities and enhancing adaptive coping strategies, individuals can cultivate greater emotional resilience and reduce reliance on maladaptive internet use as a coping mechanism. These studies collectively underscore the intricate relationship between internet addiction and emotional regulation, highlighting the importance of addressing emotional regulation skills in interventions targeting internet addiction.

INTERNET ADDICTION AND COMMUNICATION SKILLS

Communication skills refer to the ability to interact with others effectively, express oneself clearly, listen actively, and understand and interpret verbal and nonverbal cues in communication (DeVito, 2019). The advent of the internet has revolutionized how people communicate and interact. However, along with its many benefits, excessive internet usage has led to concerns about addiction and its impact on various aspects of life, including communication skills.

Impaired Face-to-Face Communication: Excessive internet use often leads to a decrease in face-to-face interactions, as individuals spend more time engaged in online activities rather than participating in real-life social interactions. This lack of interpersonal interaction can lead to difficulties in expressing emotions, maintaining eye contact, and interpreting nonverbal cues, all of which are essential components of effective communication.

Diminished Social Skills: Internet addiction has been associated with a decline in social skills, including the ability to initiate and maintain conversations, empathize with others, and resolve conflicts effectively. Excessive reliance on online communication platforms may hinder the development of essential social skills, as individuals may struggle to navigate real-life social interactions and understand social cues. Reduced opportunities for face-to-face communication and social engagement may contribute to feelings of social isolation, loneliness, and difficulty forming meaningful connections with others.

Impact on Verbal and Written Communication: Internet addiction can adversely affect both verbal and written communication skills. Individuals may experience difficulties articulating their thoughts coherently, maintaining a conversation flow, or conveying ideas effectively in spoken communication. In written communication, such as emails, text messages, or social media posts, internet addiction may lead to the use of abbreviated language, emojis, or slang, which can detract from clarity and professionalism. Excessive use of digital communication platforms may also contribute to a decrease in vocabulary,

spelling errors, and a reliance on autocorrect features, affecting the quality of written communication.

Challenges in Active Listening and Empathy: Internet addiction can impair active listening skills, as individuals may be easily distracted by notifications, multitasking, or the allure of online content during conversations. Reduced ability to engage in active listening may hinder empathy and understanding in interpersonal interactions, as individuals may fail to fully comprehend others' perspectives and emotions. Difficulty in empathizing with others' experiences and emotions can strain interpersonal relationships and lead to miscommunication or conflict.

A study by Lee & Kim (2019) revealed a negative association between internet addiction and communication skills among adolescents over time. Excessive internet use was linked to decreased face-to-face communication abilities and social interaction. A research by Chen & Wang (2018) indicated that individuals with internet addiction exhibited deficiencies in both verbal and nonverbal communication skills compared to non-addicted individuals. Internet addiction was associated with decreased expressive abilities and social cues recognition. Zhang & Liu (2020) study demonstrated that college students with internet addiction demonstrated lower levels of communication competence compared to their non-addicted peers. Poor communication skills were attributed to excessive reliance on online communication platforms. A Meta-analysis by Wang & Li (2017) revealed a consistent negative effect of internet addiction on interpersonal communication across various studies. Internet addiction was associated with decreased communication frequency, quality, and effectiveness. A study done by Park & Choi (2021) indicated that individuals with internet addiction tended to exhibit maladaptive communication patterns in romantic relationships, such as avoidance, conflict escalation, and reduced intimacy. Internet addiction negatively affected relationship satisfaction and quality. Liu & Wang (2019) study found that poor parent-child communication was associated with higher levels of internet addiction among adolescents, mediated by deficits in communication skills. Effective parent-child communication served as a protective factor against internet addiction. A study by Yang & Zhang (2018) indicated that young adults with internet addiction reported higher levels of communication anxiety compared to non-addicted individuals. Internet addiction was associated with fear of face-to-face communication and social interaction. Li & Wu (2020) study found a negative correlation between internet addiction and assertive communication skills among college students. Individuals with internet addiction tended to exhibit passive or aggressive communication styles, leading to interpersonal difficulties. A study by Wang & Zhang (2021) study revealed that internet addiction negatively impacted communication satisfaction in romantic relationships from both partners' perspectives. Excessive internet use disrupted meaningful communication and emotional connection. A study by Zhou & Li (2022) study revealed that deficits in communication skills mediated the relationship between internet addiction and loneliness. Poor communication skills exacerbated feelings of social isolation and loneliness among individuals with internet addiction.

These studies collectively emphasize the detrimental impact of internet addiction on various facets of communication skills, highlighting the need

for interventions aimed at improving offline communication abilities and fostering healthy interpersonal relationships. Certain psychological factors, such as social anxiety, depression, and low self-esteem, may contribute to both internet addiction and communication difficulties. Addressing these underlying issues through therapy or counselling interventions could potentially alleviate symptoms of internet addiction and improve communication skills. The impact of internet addiction on communication skills may vary across cultures and contexts. Cultural norms regarding communication styles and the perceived importance of online interactions may influence the severity and manifestation of internet addiction, as well as its effects on communication abilities. Age and developmental stage play significant roles in both internet usage patterns and communication skill development. Adolescents and young adults, in particular, may be more susceptible to internet addiction due to developmental changes and peer influences, highlighting the importance of early intervention and education on healthy internet use habit.

CONCLUSION

The impact of internet addiction on emotional regulation is a significant concern, as evidenced by numerous studies highlighting its detrimental effects on individuals' psychological well-being. Internet addiction profoundly disrupts emotional regulation processes, leading to a range of negative outcomes for individuals' mental health and interpersonal relationships. Research has consistently shown that excessive internet use is associated with heightened levels of stress, anxiety, depression, and loneliness (Caplan, 2007; Ko et al., 2012; Mei et al., 2016). Individuals often turn to the internet as a maladaptive coping mechanism to escape from or numb unpleasant emotions temporarily (Kuss & Griffiths, 2012). However, this reliance on online activities for emotional regulation can exacerbate emotional dysregulation in the long run (Kim et al., 2017). Furthermore, internet addiction can contribute to emotional numbing and desensitization, as individuals become increasingly immersed in online content that may desensitize them to real-life emotional cues (Bányai et al., 2017; Montag et al., 2015). This desensitization can impair individuals' ability to empathize with others and regulate their own emotions effectively in offline settings, leading to difficulties in interpersonal relationships (Whang et al., 2003). Moreover, the addictive nature of certain online activities, such as gaming or social media, can hijack the brain's reward system, reinforcing compulsive behavior and making it even more challenging for individuals to control their internet use (Brand et al., 2014; Weinstein et al., 2015). This cycle of addiction further exacerbates emotional dysregulation and impairs individuals' ability to cope with stressors in healthy ways (Kardefelt-Winther, 2017).

Internet addiction significantly impairs communication skills, leading to negative consequences in individuals' personal and professional lives. Research consistently demonstrates that excessive internet use, particularly in the form of social media, online gaming, and browsing, reduces opportunities for face-to-face communication (Kraut et al., 1998; Nie & Erbring, 2000). This decline in real-world interactions can diminish individuals' proficiency in non-verbal communication cues such as body language, facial expressions, and tone of voice,

hindering their ability to effectively communicate in offline social situations (Valkenburg & Peter, 2007). Moreover, internet addiction often contributes to the development of shallow or superficial relationships characterized by brief, transactional interactions rather than deep, meaningful connections (McKenna & Bargh, 2000; Orr et al., 2009). Individuals may prioritize online interactions over face-to-face communication, leading to difficulties in initiating conversations, maintaining eye contact, and interpreting social cues in real-life settings (Kraut et al., 1998; Valkenburg & Peter, 2007). Furthermore, excessive internet use can foster a reliance on digital communication tools, such as texting and messaging apps, to fulfil social needs, thereby reducing individuals' ability to engage in spontaneous, unscripted conversations (Valkenburg & Peter, 2007; Kraut et al., 1998). This dependency on digital communication platforms may limit individuals' adaptability to various communication contexts and hinder their effectiveness in navigating complex social dynamics (Valkenburg & Peter, 2007).

Internet addiction disrupts emotional regulation processes, leading to heightened levels of stress, anxiety, depression, and loneliness, as well as difficulties in interpersonal relationships. Addressing internet addiction requires comprehensive interventions aimed at promoting healthier coping mechanisms, enhancing emotional regulation skills, and fostering balanced internet usage. Research findings also indicate that internet addiction detrimentally affects communication skills by diminishing face-to-face interactions, promoting shallow relationships, and fostering dependency on digital communication tools. Addressing internet addiction requires interventions aimed at promoting balanced internet usage, fostering healthy social connections, and cultivating effective communication strategies both online and offline.

References

1. Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M. D., & Demetrovics, Z. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PloS one*, 12(1), e0169839.
2. Brand, M., Young, K. S., Laier, C., Wölfling, K., & Potenza, M. N. (2014). Integrating psychological and neurobiological considerations regarding the development and maintenance of specific Internet-use disorders: An Interaction of Person-Affect-Cognition-Execution (I-PACE) model. *Neuroscience & Biobehavioral Reviews*, 71, 252–266.
3. Caplan, S. E. (2007). Relations among loneliness, social anxiety, and problematic Internet use. *CyberPsychology & Behavior*, 10(2), 234–242.
4. Chen, Y., & Wang, H. (2018). Effects of Internet Addiction on Verbal and Nonverbal Communication Skills. *Computers in Human Behavior*, 80, 276–283.
5. Chen, L., & Wang, Q. (2018). Effects of Internet Addiction on Emotional Regulation in Young Adults. *Computers in Human Behavior*, 89, 207–214.
6. Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, 17(2), 187–195.
7. DeVito, J. A. (2019). *The Interpersonal Communication Book* (15). Pearson.
8. Garcia, M., & Rodriguez, S. (2020). Internet Addiction and Emotional Regulation in Adolescents. *Journal of Adolescent Health*, 67(2), 245–251.

9. Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271-299.
10. Kardefelt-Winther, D. (2017). Conceptualizing Internet use disorders: Addiction or coping process? *Psychiatry and Clinical Neurosciences*, 71(7), 459-466.
11. Kim, H., & Lee, S. (2021). Internet Addiction and Emotional Regulation Among College Students: A Longitudinal Study. *Journal of Youth and Adolescence*, 50(4), 789-801.
12. Kim, K., Ryu, E., Chon, M. Y., Yeun, E. J., Choi, S. Y., Seo, J. S., & Nam, B. W. (2017). Internet addiction in Korean adolescents and its relation to depression and suicidal ideation: A questionnaire survey. *International Journal of Nursing Studies*, 47(7), 884-891.
13. Ko, C. H., Yen, J. Y., Chen, C. S., Yeh, Y. C., & Yen, C. F. (2012). Predictive values of psychiatric symptoms for internet addiction in adolescents: A 2-year prospective study. *Archives of Pediatrics & Adolescent Medicine*, 166(10), 901-906.
14. Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.
15. Kuss, D. J., & Griffiths, M. D. (2012). Internet gaming addiction: A systematic review of empirical research. *International Journal of Mental Health and Addiction*, 10(2), 278-296.
16. Lee, J., & Kim, S. (2019). Internet Addiction and Communication Skills Among Adolescents: A Longitudinal Study. *Journal of Adolescent Health*, 65(3), 393-399.
17. Li, J., & Wu, Q. (2022). Emotion Dysregulation Mediates the Relationship Between Neuroticism and Internet Addiction. *Personality and Individual Differences*, 189.
18. Li, S., & Wu, J. (2020). The Relationship Between Internet Addiction and Assertive Communication Skills in College Students. *Journal of College Student Psychotherapy*, 34(2), 112-126.
19. Liu, X., & Chen, Y. (2020). Parental Attachment, Emotional Regulation, and Internet Addiction Among Adolescents. *Journal of Child and Family Studies*, 29(8), 2123-2132.
20. Liu, X., & Wang, Y. (2019). Parent-Child Communication and Internet Addiction Among Adolescents: The Mediating Role of Communication Skills. *Journal of Family Issues*, 40(7), 945-963.
21. McKenna, K. Y., & Bargh, J. A. (2000). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Review*, 4(1), 57-75.
22. Mei, S., Yau, Y. H., Chai, J., Guo, J., & Potenza, M. N. (2016). Problematic Internet use, well-being, self-esteem and self-control: Data from a high-school survey in China. *Addictive Behaviors*, 61, 74-79.
23. Montag, C., Kirsch, P., Sauer, C., Markett, S., & Reuter, M. (2015). The role of the CHRNA4 gene in Internet addiction: A case-control study. *Journal of Addiction Medicine*, 9(3), 191-195.
24. Nie, N. H., & Erbring, L. (2000). Internet and society: A preliminary report. *Stanford Institute for the Quantitative Study of Society*.
25. Orr, E. S., Sisic, M., Ross, C., Simmering, M. G., Arseneault, J. M., & Orr, R. R. (2009). The influence of shyness on the use of Facebook in an undergraduate sample. *CyberPsychology & Behavior*, 12(3), 337-340.
26. Park, Y., & Choi, E. (2021). Internet Addiction and Communication Patterns in Romantic Relationships. *Journal of Social and Personal Relationships*, 38(5), 1507-1522.
27. Smith, J., & Johnson, R. (2019). The Relationship Between Internet Addiction and Emotional Regulation: A Systematic Review. *Journal of Behavioral Addictions*, 8(3), 567-581.

28. Valkenburg, P. M., & Peter, J. (2007). Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis. *Journal of Computer-Mediated Communication*, 12(4), 1169–1182.
29. Wang, J., & Li, X. (2017). The Impact of Internet Addiction on Interpersonal Communication: A Meta-analysis. *Communication Research Reports*, 34(3), 197-205.
30. Wang, L., & Zhang, M. (2019). Gender Differences in Emotional Regulation and Internet Addiction Among College Students. *Current Psychology*, 38(6), 1507-1515.
31. Wang, L., & Zhang, M. (2021). Internet Addiction and Communication Satisfaction in Romantic Relationships: A Dyadic Perspective. *Journal of Couple & Relationship Therapy*, 20(3), 270-285.
32. Weinstein, A., Lejoyeux, M., & Brand, M. (2015). Internet addiction or excessive Internet use. *The American Journal of Drug and Alcohol Abuse*, 41(5), 499–506.
33. Whang, L. S., Lee, S., & Chang, G. (2003). Internet over-users' psychological profiles: A behavior sampling analysis on Internet addiction. *CyberPsychology & Behavior*, 6(2), 143–150.
34. Wu, Y., & Li, X. (2017). The Role of Emotional Regulation in Internet Addiction: A Cross-cultural Perspective. *Cyberpsychology, Behavior, and Social Networking*, 20(5), 295-301.
35. Yang, J., & Park, H. (2018). The Impact of Internet Addiction on Emotional Regulation and Psychological Well-being. *Computers in Human Behavior*, 78, 230-239.
36. Yang, M., & Zhang, H. (2018). Internet Addiction and Communication Anxiety Among Young Adults: A Cross-sectional Study. *Computers in Human Behavior*, 85, 120-127.
37. Young, K. S. (1996). Psychology of computer use: XL. Addictive use of the Internet: a case that breaks the stereotype. *Psychological Reports*, 79(3), 899-902.
38. Zhang, L., & Liu, Q. (2020). Internet Addiction and Communication Competence in College Students: A Cross-sectional Study. *Journal of College Student Development*, 61(4), 431-439.
39. Zhang, H., & Wang, Y. (2019). Internet Addiction and Emotional Regulation in Chinese Adolescents: A Moderated Mediation Model. *Computers in Human Behavior*, 99, 56-63.
40. Zhou, K., & Li, Y. (2022). The Role of Communication Skills in Mediating the Relationship Between Internet Addiction and Loneliness. *Journal of Community Psychology*, 50(1), 123-137.

College Library and Its Uses

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INTRODUCTION

Library is the collection of different kinds of books and sources of information made reachable to people for borrowing or orientation purpose. The collection of libraries can include books, magazines, newspapers, films, audios, DVDs, maps, manuscripts, e- books and various other formats. Library is prepared and maintained by individual, institution or public body. Public and institutional libraries provide their collection of resources and services to people who need material they cannot otherwise have access to. Those who require help for their research can seek the same from the librarian.

A personal library is the one owned by an individual with adequate means. Such libraries are created as per the knowledge and interest of person. Thus public library is open for all to cater to the interest and taste of all people and contains books on diverse subjects. An institutional library refers to a library that belongs to an institution such as school, college, university or a club, etc. Such library is open to the members of community and caters to their needs and interest.

USES OF LIBRARIES

- Libraries play a vital role in imparting knowledge. Libraries help in learning and expansion of knowledge. Therefore it develops the habit of reading and boosts the thirst for more and more knowledge. It adds to what an individual has already learnt and leads to his personal growth and development in life.

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- Libraries are especially essential for people who cannot afford costly books and resources for reading and acquiring information. They are the ones who truly understand the value and importance of library.
- Libraries do not only provide resources but also offer service by professional librarians who are experts at searching, organizing and interpreting information needs.

Libraries provide virtual space for individual and group studies. They also facilitate access to digital resources and internet

- Modern libraries are extending services by providing material accessible by digital media. Librarians provide assistance in navigating and also analysing large amount of information through digital resources.
- Library is the place with absolute silence where one can concentrate on reading. Even though it is open for all people the basic rule for all those who enter the library is to read peacefully and also the maintain silence.
- People who love reading create their own private libraries. Such ambiance at home has a positive impact on the members of the family. However it helps in developing reading habit in children and contributes to their growth and development. It broadens the outlook of the people.

USES OF COLLEGE LIBRARIES

- Education and libraries go hand in hand. Libraries create and provide flexible learning space and environment. School library is essential to support teaching and learning process.
- Facilitates the work of teachers by providing access to various curriculum resources and information. Therefore it equips students with skills vital to succeed in this competitive world. It encourages students to read quality fiction to develop the habit of reading for pleasure and enhances social, cultural, artistic and emotional growth.
- School libraries and the study programs incorporated by librarians, teachers and administrators cater to the educational growth and also development of the students.
- School libraries have a positive impact on the students' academic performance. The students with access to well supported libraries with professional services perform and score better regardless of their socio-economic status.

Libraries continue to play a significant role among college students, although the way they are utilized has evolved in recent years due to technological advancements and changes in learning practices. Here are some common uses of libraries among college students today:

1. Study spaces: Libraries provide quiet and conducive environments for studying and academic work. College students often utilize library spaces, including individual study carrels, group study rooms, and designated quiet areas, to focus on their coursework, research, and assignments.
2. Access to physical resources: While digital resources have become more prevalent, libraries still offer access to physical resources that students may need. These include printed books, reference materials, academic journals,

magazines, newspapers, and other physical media. Libraries also provide access to specialized collections and archives that may be relevant to students' research or academic interests.

3. Digital resources and databases: Libraries have adapted to the digital age by providing access to a wide range of online resources and databases. Students can access e-books, scholarly articles, research databases, audiovisual materials, and other digital content through library portals and subscriptions. Librarians often play a role in helping students navigate and utilize these resources effectively.
4. Research assistance and support: College libraries offer research assistance services to help students navigate the research process effectively. Librarians provide guidance on locating relevant resources, formulating research questions, and evaluating the credibility of sources. They may also assist with citation management, helping students properly cite their sources in academic papers.
5. Collaborative learning and group work: Many college libraries have spaces and resources designed to facilitate group work and collaborative learning. These may include group study rooms, multimedia rooms, interactive displays, and technology-equipped areas. Students can gather in the library to work on group projects, discuss coursework, or engage in collaborative learning activities.
6. Technology and equipment access: College libraries often provide access to technology and equipment that students may need for their academic work. This can include computers, printers, scanners, audiovisual equipment, and software applications. Some libraries also offer equipment loans, allowing students to borrow laptops, cameras, microphones, and other devices for a specified period.
7. Academic support services: Libraries may house additional academic support services within their premises. This can include writing centers, tutoring services, academic workshops, and information literacy programs. Students can seek assistance in these areas to improve their writing skills, receive subject-specific tutoring, or enhance their research and information literacy abilities.

It's important to note that the usage of libraries can vary depending on factors such as the institution's resources, student preferences, and technological advancements. Some students may rely more on digital resources and online libraries, while others may still value the physical spaces, collections, and services provided by traditional libraries.

Libraries were perceived to be sources of information. However, this has changed over the years with information being avoidable from anywhere and at any time. As a professional thesis writer, you are likely to struggle wondering whether libraries are still important or relevant for students.

Before dismissing these important structures, it is worth looking at the importance or value of a library to students.

ENCOURAGE CURIOSITY, PROBLEM SOLVING AND INNOVATION

Students are in school to learn about particular subjects. This is likely to leave them with a closed down mentality about education. The library claims to have books and materials on all subjects you can imagine in the world. When a student is looking for a solution, wants to develop something or is pinched by the bug of innovation, he or she will turn to the library. It, therefore, becomes the go-to place whenever you want to be innovative.

HIGH QUALITY REFERENCE MATERIALS

Libraries stock quality reference materials for academic purposes. There are numerous books, articles, journals, and magazines, among other publications in the world. Their quality cannot be ascertained. However, a library never stocks any material without vetting. This is a guarantee that you will get the best quality reference materials.

SUPPORTS READING AND LITERACY

The library supports reading and literacy among students and the community. The idea of a library signals nothing else but reading and pursuit of knowledge. It forms a habit and tradition of reading among students and members of the society.

Open spaces for reading are becoming increasingly difficult to find. This leaves students with only the library to run to. Further, the library gives you a feeling of formal learning. This perception is important if a student is to achieve academic goals and a community produce literate persons.

THE BEST PLACE TO STUDY

People can study anywhere, but there is no guarantee that they will comprehend the text. You can study in the house, under a tree, in the vehicle and so many other places. However, no place will defeat the suitability of a library when you need to study.

A library is a quiet place for a thesis writer to produce the best academic paper. This allows the reader to concentrate and therefore produce well thought out ideas. This boosts the quality of paper you get.

A library is also a comfortable place to read and write. The seats and tables are designed in a way that you can concentrate long hours and focus on academics. Other students are also within the premises. In case you need to consult, they will assist. Further, there are books of all kind in the library. You do not spend all day searching for them. With the assistance of experienced librarians, these books will be easy to find.

SAFE PLACE FOR THE QUIET STUDENTS

Students exist in different personalities and calibre. Some are loud and jumpy such that they spend their free time in the field. Provision is made for such personalities. However, there are quiet academic-focused students in every school. Their main activity is taking to books even though they may be allocated time to play. These students find a comfortable place to explore and execute their ideas.

Some of the students are sharp and working on dynamic projects beyond school work. There are others who need extra time to work on class projects and exercises. Other than work from the class where their concentration can easily be distracted, the library provides a solution.

DYNAMIC RESOURCES FOR STUDENTS TO TEST THEIR KNOWLEDGE

Students have their academic work to complete. However, they have other ideas and are curious about what is in the world around them. The library provides a safe place where they can test these ideas and knowledge.

The reference materials available are not restricted to a single subject. This gives an opportunity for students to explore more ideas using credible materials stocked in the library. It helps to boost their confidence and also enables them to be innovative in their learning process.

The library is not about to be replaced, not even by technology. Thesis rush provides high-quality academic materials that will make writing easy and fast. You will also get quality writing services on different topics to boost your academic performance.

CONCLUSION

Any kind of library is an asset to our community. However it is the leap in advancement of knowledge and well-being of a person. Reading is always the good habit. Visiting the library and reading can be the best way to spend leisure time and to learn something new.

Libraries play important role in progress and development of the society. Thus, library is a valuable resource for the society.

References

1. Abraham, L.T, (2008). Tackling Digital Divide in Kerala and the possible role of libraries, *Library Herald*, Vol.46-No-2, p.128.
2. Bansode, S. Y., & Patil, S. K. (2011). Bridging digital divide in India: Some initiatives. *Asia Pacific Journal of Library and Information Science*, 1(1).
3. Kharade, J. (University of M., & Sharma, G. (Sndt U. (2011). Bridging the digital divide in India: challenges and opportunities. 5th National Conference Indiacom, Computing for National Development, 1-5.
4. Mason, S. M., & Hacker, K. L. (2003). Applying Communication Theory To Digital Divide Research, 1(5), 40-55.
5. McDonald, J. D., & Levine-Clark, M. (Eds.). (2017). *Encyclopedia of library and information sciences*. CRC Press
6. Naidoo, S. and Raju, J. (2012). Impact of digital divide on information literacy training in a higher education context. *South Asian Journal of Library and Information Science*, 78(1), 34-44.
7. Panda, M. I., Chhatar, D. C., & Mharana, B. (2013). A Brief View to Digital Divide in Indian Scenario, 3(12), 1-7.
8. Serrano-Cinca, C., Muñoz-Soro, J. F., & Brusca, I. (2018). A multivariate study of internet use and the digital divide. *Social Science Quarterly*, 99(4), 1409-1425.
9. Singh, S. (2010). Digital divide in India: Measurement, determinants and policy for addressing the challenges in bridging the digital divide. *International Journal of Innovation in the Digital Economy (IJIDE)*, 1(2), 1-24.

10. Soomro, K. A., Kale, U., Curtis, R., Akcaoglu, M., & Bernstein, M. (2020). Digital divide among higher education faculty. *International Journal of Educational Technology in Higher Education*, 17(1), 1-16.
11. Tapashi, Dasgupta (2018). A study on aspects of India's digital divide. *Research Review International Journal of Multidisciplinary*, 3(11), 689-693.

Unveiling the Deficiencies of Language in Articulating Trauma: Unearthing the Uniqueness of Same-Gender Empathy in Understanding the Profound Trauma Experience in the novel *The Colour Purple* by Alice Walker

Charu*

INTRODUCTION

The Color Purple is a 1982 epistolary novel by American author Alice Walker that won the 1983 Pulitzer Prize for Fiction and the National Book Award for Fiction (“*The Color Purple*”). Alice Malsenior Tallulah-Kate Walker (born February 9, 1944)[2] is an American novelist, short story writer, poet, and social activist (“Alice Walker”). Walker, born in rural Georgia, overcame challenges such as childhood injury and segregation to become a valedictorian and eventually graduate from Sarah Lawrence College (“Alice Walker”). Walker the first African American woman to win a Pulitzer for fiction. A feminist work about an abused and uneducated African American woman’s struggle for empowerment, *The Color Purple* was praised for the depth of its female characters and for its eloquent use of Black English Vernacular (*The Color Purple* | Book, Novel, Summary, Characters, Alice Walker, & Facts | Britannica). Walker largely kept to herself as she continued to attend segregated schools, first East Putnam Consolidated and then Butler-Baker High School, from which she graduated in 1961 as valedictorian of her class. She then left home to attend Atlanta’s Spelman College, a college for black women, on a scholarship. While at Spelman, Walker became involved in the civil rights movement. In 1963, she was awarded another scholarship and transferred to Sarah Lawrence College in New York, where she was one of only a handful of African American students, most of whom were men. She became

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pregnant in 1964, which made her again despondent and suicidal. She threw herself into her writing and ultimately terminated the pregnancy. During this time of despair, Walker wrote her first published story, "To Hell with Dying" (1965), inspired by the death of Mr. Sweet, a guitar-playing family friend. She spent her junior year at Sarah Lawrence as an exchange student in Africa and graduated in 1965. After graduation, Walker worked for the Head Start program in Jackson, Mississippi, where she met and, in 1967, married civil rights attorney Melvyn Leventhal. In 1968, Walker became pregnant again, but lost the baby due to complications. The experience brought on another bout of depression and inspired her first collection of poetry, *Once* (1968). The marriage lasted until 1976 and produced a daughter, Rebecca, who was born shortly after Walker's first novel, *The Third Life of Grange Copeland* (1970), was published (*Alice Walker*).

PLOT

"The Color Purple" by Alice Walker is a powerful and emotionally charged novel that tells the story of Celie, a young African-American woman living in rural Georgia in the early 20th century. The novel is presented in an epistolary format, consisting of Celie's letters which provide an intimate and personal account of her life. Celie endures a life filled with abuse and hardship, starting with her childhood where she is repeatedly raped by her stepfather and eventually gives birth to two children whom he takes away from her. She is married off to a cruel and abusive man named Mr. __, who mistreats her both physically and emotionally. Throughout the novel, Celie finds solace in her relationship with her sister Nettie, who has escaped their oppressive environment and is living as a missionary in Africa. The siblings maintain a heartfelt correspondence, and Nettie shares stories of her experiences and her encounters with African culture. As the story progresses, Celie's life takes a transformative turn when she befriends a bold and independent woman named Shug Avery. Shug becomes Celie's confidante, lover, and source of strength, helping Celie to find her voice and assert her own identity. "The Color Purple" explores several themes, including the power of sisterhood, the resilience of the human spirit, the search for self-empowerment, and the overcoming of systemic oppression. Through Celie's journey, the novel portrays the triumph of love, friendship, and personal growth in the face of adversity.

The book received widespread acclaim for its unflinching portrayal of the experiences of African-American women in the early 20th century, addressing issues such as racism, sexism, domestic violence, and sexual identity. It won the Pulitzer Prize for Fiction in 1983 and was adapted into a critically acclaimed film directed by Steven Spielberg in 1985. Overall, "The Color Purple" is a profound and thought-provoking novel that explores the complexities of human relationships, the quest for self-discovery, and the indomitable spirit of women in the face of oppression.

TITLE

In *The Color Purple*, Alice Walker uses the title "The Colour Purple" to refer to the way that women in the novel are valued and recognized by society, as we see that throughout the novel women play a major role but are still the central concern are on the actions of the man. Similar was the society of that

time women were treated as secondary objects. Hence Walker wants to portray how a so-called marginalised gender's voice was oppressed and it was only the other character of the same gender and sex who made Celie rise and get to know more about herself.

According to Walker, women who are "titled" are those who have a recognized status or position within their community, such as being married or having children. They are seen as legitimate and worthy of respect because they fit into the societal norms and expectations of what a woman should be as in the novel we had Shug who had a passion for music which helped her to gain the status.

On the other hand, women who are "untitled" are those who do not fit into these norms and expectations. They may be unmarried, childless, or have unconventional lifestyles or beliefs. As a result, they are often marginalized and devalued by society and this type of character is Celie who's uneducated, treated as a object for males desire.

Through the characters of Celie and Shug, Walker explores the ways in which these societal expectations affect women's sense of self-worth and their ability to thrive. Celie, who is unmarried and has been abused for most of her life, initially feels unworthy and "untitled". However, through her relationship with Shug, she begins to question these societal norms and recognize her own value and worth as a person, regardless of her marital or maternal status.

Overall, the terms "titled" and "untitled" in *The Color Purple* reflect the societal pressures and expectations placed on women, and the importance of recognizing and valuing individuals for who they are, rather than conforming to narrow definitions of gender roles and identity. In Alice Walker's novel "The Color Purple," the historical significance of the color purple as associated with royalty is contrasted with the impoverished lives of the African American characters. While historically, purple was a symbol of respect and power, the characters in the novel, notably Celie, initially experience poverty and oppression. However, the color purple becomes a symbolic goal for them, representing freedom and power. At the beginning of the story, Celie is subjugated by Albert and his children, living a life of hardship. Her fondness for the color purple emerges when she imagines Shug wearing it – a symbol of beauty, royalty, elegance, and liberation. The unavailability of purple cloth emphasizes Celie's lack of liberation at this point. As the narrative progresses and Celie undergoes a transformation with Shug's support, she begins to find her own identity and independence. This is symbolized when she decorates her room with red and purple after owning a house. The choice of colors reflects Celie's newfound strength and autonomy. The color purple, once an unattainable symbol, becomes a representation of Celie's journey towards personal liberation and empowerment.

The title further elaborates how the colored people found their way through these tough times by looking towards religion which again was manipulated by the whites to gain complete control over the colored (Isha). The title of Alice Walker's novel, "The Color Purple," draws on the historical association of the color purple with royalty. Historically, purple was a challenging and expensive color to produce, symbolizing respect and power. In the novel, despite the characters being impoverished African Americans facing numerous challenges, the color purple becomes a symbolic goal, representing freedom and power.

Celie, the protagonist, initially experiences subjugation by Albert and his

children. The first mention of her fondness for the color purple occurs when Mister's sister, Kate, sympathizes with Celie's situation and urges him to buy her new clothes. Celie envisions Shug in purple, associating the color with beauty, royalty, elegance, and liberation. However, the unavailability of purple cloth underscores Celie's lack of liberation at this point in the narrative. As the story progresses with Shug's influence, Celie undergoes a transformation, finding her identity and independence. This is exemplified when she creates red and purple pants for Sophia. Celie, now a homeowner, decorates her room with red and purple, symbolizing her newfound strength and autonomy. "The Color Purple" delves into various modes of inequality, encompassed in a series of letters Celie writes to God and her sister Nettie. The novel spans around forty years, depicting Celie's evolution from a victim of patriarchy and racial oppression to a triumphant woman with grown-up children. Celie's initial staunch belief in the church undergoes a transformation as she reads Nettie's letters, challenging her perception of a white God and prophets. Shug's philosophy, emphasizing the appreciation of nature and life's beauty, inspires Celie. The title, "The Color Purple," is rooted in Shug's assertion that failing to notice the color purple in the field displeases God. Shug encourages Celie to enjoy all that God provides, reshaping Celie's understanding of God as a genderless, raceless entity—a source of wonder and marvels. The color purple becomes more than just a hue; it becomes a conduit for Celie's profound spiritual and personal growth.

THE COLOR PURPLE AS A EPISTOLARY NOVEL

The term "epistolary novel" refers to the works of fiction that are written in the form of letters or other documents. "Epistolary" is simply the adjectival form of the noun epistle, from the Latinized Greek for letter ("What Is an Epistolary Novel?").

Personal Connection and Authenticity: The epistolary form allows the characters to communicate directly with the reader. Celie's letters, addressed to God and later to her sister Nettie, create a sense of intimacy and authenticity. Readers gain direct access to Celie's thoughts, emotions, and experiences, fostering a personal connection. The novel includes moments of silence and unspoken pain that are as significant as the words themselves. Celie, in particular, experiences periods of silence and repression, highlighting the struggle to find words for her emotions. This silence underscores the limitations of language in conveying the entirety of her trauma. The moments of silence in the novel can be seen as symbolic of the gaps in language when it comes to expressing trauma. Celie's letters may convey some aspects of her experiences, but the gaps and omissions in her narrative also speak to the unspeakable nature of certain traumatic events which another female character can hear of same sex and can fill those gaps.

Tanritanir and Hasan (2011) emphasize the significance of epistolarity, specifically letterwriting, as a powerful literary form for women writers, especially in feminist works. The act of letter-writing allows women writers to critically examine modern society and envision a world that surpasses existing norms. Letters, as a form of expression, unveil the characters' thought processes and provide a means for them to articulate their own voices (Raj). Though the language provides the power of self-expression but still in first instance the letters were addressed to "god" who Celie herself doesn't know about there presence, gender and sex. As a result, initial letters to God, that explain in the shortest

possible ways the trials and tribulations Celie (and, later, Nettie) experience. Walker presents Celie's thoughts in the vernacular, with poor grammar and spelling. These emphasize the point that Celie is not an educated woman. Also the character too have inbuilt that her words and the gap between the words could only be understood by the other female only. Celie's letters also tend to touch upon topics briefly and sparsely rather than being developed and embellished in long paragraphs. After Nettie and Celie reconnect, Celie's letters get longer and more detailed. She is happier in her life, and tends to express joy by writing more.

Voice and Perspective: Through the letters, Walker provides a distinct voice for Celie. This choice is crucial for portraying Celie's journey from oppression to empowerment. The evolution of Celie's voice, language, and perspective is evident as the narrative progresses, offering readers a nuanced understanding of her character. Till half of the novel celie adreeses albert in her letters as mr. _ because she feels she doesn't have the authority to take his name.

Empathy and Understanding: By presenting the narrative through letters, Walker invites readers into the characters' inner worlds. This fosters empathy and understanding, as readers can directly witness the characters' struggles, joys, and transformations. The emotional impact is heightened as readers become privy to the characters' most personal thoughts. As Cellie express to Sophie that she was mistreated throughout the life and she failed to stand for her rights that's why she asked Harpo to beat her too.

Multiple Perspectives: The novel encompasses letters from various characters, offering multiple perspectives on the same events. This multi-dimensional narrative allows for a more comprehensive exploration of the themes of race, gender, and inequality. Nettie's letters, for instance, provide a different viewpoint and contribute to a fuller understanding of the story.

Symbolism and Liberation: Celie's act of writing letters becomes a symbolic tool for her liberation. In a society where her voice is suppressed, the act of writing becomes a form of resistance and empowerment. The letters represent Celie's journey towards self-expression and self-discovery.

Historical Context and Cultural Authenticity: The use of letters aligns with historical and cultural authenticity. In a time and community where formal education might have been limited for African American women, the act of writing letters reflects a mode of communication that would have been accessible and culturally relevant.

Reader Engagement: The epistolary form engages readers actively. They become not just observers but participants in the characters' lives. This engagement is particularly effective in conveying the emotional weight of the narrative and the societal issues explored in the novel.

TRAUMA THEORY AND ITS LANGUAGE FAILURE

The introduction to trauma theory traces its origins back to the 1870s with a focus on hysteria. Jean-Martin Charcot studied hysteria, emphasizing the physical and psychological symptoms associated with trauma, such as numbness, loss of senses, cramps, and forgetfulness. Sigmund Freud further developed this theory,

linking hysteria to psychological trauma and introducing the concept of "talk therapy" as a means to alleviate symptoms by expressing traumatic memories and intense emotions. The term "trauma" originally referred to physical harm but evolved to encompass both physical and mental damage in psychiatric understanding, especially in Freud's and Jung's psychoanalytic school (Freud, "Aetiology of Hysteria"). Freud introduced the concept of traumatic neurosis and explored the impact of traumatic experiences on patients, emphasizing the compulsion to repeat traumatic events beyond the pleasure principle. Trauma was viewed as inevitable, with potential origins in various life stages (Qing).

Carl Jung's discussion of trauma centered on emotional events and complexes that could disturb people's feelings, involving various origins like familial relationships, social dynamics, inferiority, and rights. The term "trauma theory" was coined by Cathy Caruth, who defined it as a sudden, disastrous, unavoidable experience, with delayed, uncontrollable reactions often manifested through hallucinations or intrusions. Caruth emphasized the psychological symptoms of trauma and argued that trauma is a process of revealing reality or truth through narration, highlighting the decoding of past traumatic experiences.

Celie, a black woman in "The Color Purple," experiences domestic violence, isolation, and gender-based trauma. Despite facing confusion, humiliation, and suffering, she bravely struggles and ultimately achieves self-salvation. Alice Walker, the author, dedicated her life to the cause of women's liberation and has personal experiences with trauma, adding valuable insights for readers interpreting the novel. Through Celie's story, Walker not only portrays the traumas contemporary women endure but also guides them toward understanding and overcoming their own traumas. Many women may not initially recognize the extent of their trauma, akin to Celie's acceptance of her circumstances. "The Color Purple" serves as a transformative and enlightening narrative that can help women recognize and address the trauma in their lives (Qing).

Inadequate Vocabulary: Words often fall short in capturing the depth and complexity of traumatic experiences. They can lack the power to convey the intensity of emotions felt by the character in "The Color Purple." In "The Color Purple," the inadequacy of vocabulary to express the depth of traumatic experiences is evident in Celie's letters. Celie faces profound emotional and physical abuse, yet she struggles to find the right words to articulate the intensity of her suffering. The limitations of language become apparent as she grapples with the traumatic events she endures.

For instance, Celie often resorts to simple and straightforward language when describing traumatic incidents, such as her letters to God where she reveals instances of abuse by her stepfather. The brevity and simplicity of her words fail to fully capture the emotional turmoil and the gravity of the violence she experiences. The following excerpt illustrates this inadequacy:

"You better not never tell nobody but God. It'd kill your mammy." (Ikram BNS)

This concise expression underscores the difficulty Celie faces in conveying the depth of her trauma. The inadequacy of vocabulary becomes a barrier to fully articulating the profound emotional impact of the traumatic events she endures throughout the novel.

Linguistic Limitations: Language is inherently limited when it comes to expressing traumatic events. The letter may fail to convey the full extent of the physical and psychological suffering endured by the character. The letters often use simple and direct language to describe the traumatic events, but they fall short of capturing the depth of Celie's pain and the complexity of her emotional experience. The following excerpt illustrates this linguistic limitation:

"He start to choke me, saying You better shut up and git used to it. But THE RESEARCHERdon't never git used to it."(Ikram BNS)

In this passage, Celie's words are straightforward, lacking the nuanced details that could convey the profound emotional and physical toll of the abuse. The linguistic constraints reflect the difficulty survivors of trauma face when trying to articulate the intricacies of their experiences.

The simplicity of language becomes a barrier to expressing the complexity and depth of Celie's suffering, highlighting the inherent limitations of words in capturing the full spectrum of trauma. Trauma often leaves individuals speechless, rendering them unable to articulate their deepest fears and anxieties. The letter may not capture the unspoken terror that the character experiences. Traumatic experiences can lead to emotional suppression as a coping mechanism. Words in the letter may not adequately convey the internal turmoil and repressed emotions experienced by the character.

The excerpt from "How Narration Produces Gender: Femininity as Affect and Effect in Alice Walker's *The Color Purple*" explores the emotional impact of narrative strategies, particularly in the context of femininity. It delves into the notion of having a "good cry" and how sentiments, often associated with femininity, are elicited through narrative techniques in Alice Walker's novel. *The Color Purple*, the author discusses the narrative form, which is epistolary in nature, and how it contributes to the emotional impact of the story. The shift from addressing letters to God to addressing letters to Nettie is highlighted, and the final letter's emotional intensity is explored. This emotional peak is attributed to the narrative technique of focalization through Celie's perspective, especially in an epistolary format

Silence and Isolation: Trauma can create a sense of isolation and disconnect from others. The letter might not effectively communicate the character's profound sense of solitude and the difficulty of connecting with others. An instance that highlights this theme is Celie's early letters to God, where she expresses her loneliness and the lack of emotional connection with those around her. For example:

"Nobody come to see me. My mammy, daddy, and Nettie all dead. My brothers dead too. They fight the white folks and die. Ever body THE RESEARCHERknow been dead. The only reason THE RESEARCHERfeel my heart beat is cause I'm a Gemini. Twins sometimes. THE RESEARCHERcan't see nobody wanting to marry me."(Ikram BNS)

This passage reflects Celie's isolation, having lost her family and feeling unloved. The letter becomes a poignant expression of her struggle to connect with others, emphasizing the emotional distance and the profound impact of trauma on her sense of belonging.

Non-Verbal Elements: Trauma is not solely communicated through words. The letter may overlook the significance of non-verbal cues, such as body language, facial expressions, and tone of voice, which can convey the depth of the character's suffering. **Sensory Details** Traumatic experiences often involve sensory elements that are challenging to articulate. The letter may fail to capture the sights, sounds, smells, tastes, and physical sensations that contribute to the character's trauma. **Fragmented Narratives,** trauma can disrupt one's ability to construct a coherent narrative. The letter may lack a cohesive structure, making it difficult to convey the character's experiences in a linear and comprehensive manner. **as a result** Celie wrote her experiences in the form of letters rather than a single plot. **Unresolved Trauma,** the letter might not effectively depict the long-lasting effects of trauma. It may fail to convey the character's ongoing struggles, such as flashbacks, nightmares, and triggers, which continue to haunt them beyond the immediate traumatic event.

Cultural and Societal Constraints: The letter may be limited by cultural and societal norms that discourage open discussions about trauma. These constraints can inhibit the character from fully expressing their experiences and the letter from accurately reflecting their trauma. **he novel is set in the early to mid-20th century South,** where deeply ingrained racial and gender norms restrict the freedom of expression, particularly for African American women.

Celie faces cultural and societal constraints that discourage open discussions about trauma, especially regarding the abuse she experiences. The prevailing norms of the time discourage women, especially black women, from openly challenging or discussing their suffering. Celie's letters are a private form of communication with God and later Nettie, reflecting the lack of a socially acceptable space for her to share her traumatic experiences openly. For example, Celie's early letters are marked by a sense of secrecy and shame, as she writes, "You better not never tell nobody but God. It'd kill your mammy." (Ikram BNS) This reveals the societal pressure and fear that silence imposes on her, hindering her ability to openly articulate her experiences. The constraints placed by cultural norms contribute to the suppression of trauma within Celie's letters.

Subjectivity of Experience: Trauma is deeply personal, and each individual's experience is unique. The letter may not capture the character's individual perspective, rendering it insufficient in conveying the intricacies of their trauma. Her individual perspective and emotional responses to trauma are nuanced and personal, highlighting the limitations of expressing such complex experiences through letters. For instance, when Celie writes about her abusive relationship with Mister, her letters convey a mix of resignation, fear, and survival instincts. However, the depth and complexity of her emotional journey may not be fully captured in the letters. The limitations of language become apparent in conveying the intricate web of emotions tied to her traumatic experiences.

In real life, the subjectivity of trauma is equally challenging to express through written communication. Each person's experience of trauma is unique, influenced by personal history, coping mechanisms, and individual resilience. Words may inadequately convey the profound emotional impact and the intricacies of navigating trauma on a personal level. The subjectivity of experience underscores the difficulty in capturing the full essence of trauma through letters,

both in fiction and real life. It emphasizes the need for more comprehensive and nuanced forms of expression to articulate the individual nuances of traumatic experiences.

Power Dynamics: Trauma often involves power imbalances, such as abuse or oppression. The letter may fail to convey the power dynamics at play and the impact they have on the character's trauma. Traumatic experiences can erode trust in others and oneself. The letter may not effectively communicate the character's struggle to trust and form meaningful connections, further limiting its ability to express their trauma. **Post-Traumatic Growth:** While trauma is deeply distressing, it can also lead to personal growth and resilience. The letter may not capture the character's transformation and the strength they develop in the face of adversity. In "The Color Purple," Shug Avery plays a significant role in helping Celie cope with her trauma and facilitating her post-traumatic growth. Shug, through her understanding and support, becomes a crucial figure in Celie's transformative journey.

When Shug arrives firstly, she disliked her because of her dark colour, she not only recognizes the depth of Celie's suffering but also encourages her to question and challenge the oppressive structures in her life. Shug's character provides an example of post-traumatic growth, as she has faced her own challenges and emerged stronger and more self-assured. This shows how a same genders and sex person could help to cope with all trauma's.

An instance of Shug aiding Celie's post-traumatic growth is their intimate relationship, which offers Celie a space for emotional expression and healing. Shug's nurturing and empowering presence allows Celie to explore her identity, desires, and emotions, fostering a sense of selfworth and resilience. Shug's understanding of Celie's trauma goes beyond words, reflecting a deeper connection that transcends the limitations of language. Nettie's experiences in Africa and Celie's evolution in her relationships contribute to their personal growth. The exchange of letters allows them to share these transformative moments, fostering mutual understanding of their individual journeys and the broader cultural contexts in which they find themselves.

Cultural Context: The cultural context within which the trauma occurs may influence how it is expressed. The letter may not fully convey the cultural nuances and implications of the character's trauma. Trauma often involves interactions with others. The letter may not effectively depict the impact of these interactions on the character's trauma, including the role of support or lack thereof.

Time and Memory: Traumatic events can distort one's perception of time and memory. The letter may struggle to accurately convey the character's fragmented recollections and the nonlinear nature of their trauma. Celie's letters often depict a fragmented and nonlinear experience of time. Traumatic events disrupt her sense of chronological order, and she frequently revisits past incidents, blending memories together. For instance, Celie's letters do not follow a linear timeline, and events from different periods are often intertwined, reflecting the disorienting effect of trauma. Nettie's letters, in contrast to Celie's, provide a more chronological account of events. Nettie's role in the novel serves not only as a source of support and understanding but also as a counterbalance to Celie's

fragmented temporal experience. Nettie's letters act as a chronological anchor, offering clarity and context to Celie's nonlinear narrative.

Secondary Trauma: The letter may not address the secondary trauma experienced by those who witness or hear about the character's suffering. This aspect adds another layer of complexity to the expression of trauma. Celie's initial letters to God primarily focus on her own traumatic experiences, such as the abuse she suffers at the hands of her stepfather and later her husband. While Celie provides a deeply personal account of her struggles, the letters may not fully capture the secondary trauma experienced by those who are indirectly affected by her suffering. As news of Celie's hardships spreads through the community, especially through the letters exchanged between various characters, there is a ripple effect of secondary trauma. The community members, including Shug Avery, Sofia, and others, are indirectly impacted by Celie's experiences. The limitations of language become apparent in conveying the depth of their emotional responses and the secondary trauma they undergo.

Cultural Stigma: Some cultures stigmatize discussions of trauma, leading individuals to suppress their experiences. The letter may not capture the character's internalized shame or the societal pressures that discourage speaking out. **Healing and Recovery:** The letter may not adequately express the character's journey towards healing and recovery. It may overlook the character's resilience, coping mechanisms, and efforts to reclaim their life after trauma. **Celie's Initial Letters:** In the beginning, Celie's letters serve as a therapeutic outlet for her. She writes to God as a way to cope with the abuse and trauma she experiences. However, her early letters primarily express despair, pain, and a sense of powerlessness. The language used is reflective of her suppressed voice and the emotional toll of her experiences. **Shug Avery's Influence:** Shug Avery becomes a transformative figure in Celie's life. Shug's arrival marks a turning point as she encourages Celie to explore her own desires, feelings, and sense of self-worth. Shug's influence becomes a crucial factor in Celie's healing process. The limitations of language are evident here as Celie's growth and the impact of Shug's mentorship may surpass what can be effectively conveyed through letters. As Celie begins to engage in sewing and later in designing pants, her artistic endeavors serve as a form of self-expression and a medium for healing. The letters may not fully capture the therapeutic nature of Celie's creative pursuits and the sense of empowerment she gains through them. Celie's bond with other women, particularly her sister Nettie and friends like Sofia and Shug, plays a crucial role in her healing. The communal support and sense of sisterhood contribute to her recovery. While the letters hint at these relationships, they may not delve deeply into the emotional nuances and the profound impact they have on Celie's well-being.

Celie's evolving understanding of her own sexuality and her romantic relationship with Shug are essential components of her healing journey. The letters may convey the progression of these relationships, but the depth of Celie's emotional and sexual awakening may not be fully captured through her written words. Towards the latter part of the novel, Celie undergoes a remarkable transformation. She becomes a more independent and empowered woman. The letters may not entirely encapsulate the magnitude of Celie's personal growth, her newfound strength, and her ability to stand up for herself.

CONCLUSION

The novel intricately explores the profound suffering endured by various Black women, subjecting them to enduring trauma from relentless violence. Expressing this trauma in words becomes a formidable challenge as the writer herself is confronted with the fear and brutality of the violence suffered. Victims often fear being further victimized or misunderstood if they vocalize their experiences, and the inadequacy of language adds another layer to this challenge, reflecting the inherent difficulty in fully articulating the depth of these emotional scars.

The novel delves into Celie's early experiences, witnessing the traumatic violence inflicted upon her mother. Although young, Celie grasps the pain her mother endures, and while she cannot alleviate the suffering, she refrains from exacerbating it. Celie's subsequent abuse, both physical and psychological, leaves lasting wounds, with the letters struggling to convey the magnitude of the separation from her children and the shared, yet unspoken, bond experienced by many women. Despite her victimization, Celie emerges as a resilient character. She extends support to Nettie, rescuing her from a similar fate and facilitating her escape. However, coping mechanisms vary, and Celie, influenced by her traumatic past, initially perpetuates harm onto others, such as with Shug and later Sofia. The novel unfolds a path to redemption as Celie confronts her wrongs, reveals the truth to Sofia, and seeks forgiveness, illustrating the intricate understanding that women can have for each other's experiences. The arrival of Shug is pivotal, revealing the complexities of acceptance. Shug initially recoils at Celie's dark skin but, upon learning her trauma, embraces and aids her in the healing process. Importantly, the novel's impact differs for female and male readers, with the first-person female narrative providing a unique lens through which female readers may more deeply connect with the realism of the characters' experiences. The novel thus becomes a profound exploration of trauma, resilience, and the intricate dynamics between women in the face of adversity.

Bibliography

1. "Alice Walker." Wikipedia, 15 Feb. 2024. *Wikipedia*, https://en.wikipedia.org/w/index.php?title=Alice_Walker&oldid=1207843492.
2. *Alice Walker: History, Themes & Analysis of Novels, Stories and Poems*. <https://www.gale.com/open-access/alice-walker>. Accessed 20 Feb. 2024.
3. Freud, "Aetiology of Hysteria." <https://courses.washington.edu/freudlit/Hysteria.Notes.html>. Accessed 18 Feb. 2024.
4. Ikram BNS. *The-Color-Purple-Alice-Walker*. *Internet Archive*, <http://archive.org/details/thecolor-purple-alice-walker>. Accessed 18 Feb. 2024.
5. Isha. "Alice Walker's 'The Color Purple': Significance of the Title 'The Color Purple.'" *Alice Walker's "The Color Purple"*, 28 Aug. 2014, <https://thecolorpurpleamlit.blogspot.com/2014/08/the-significance-of-title-color-purple.html>.
6. Qing, Zhao. "Interpretation of Celie's Trauma in *The Color Purple* from the Perspective of Trauma Theory." *International Journal of English Literature and Social Sciences*, vol. 5, no. 5, 2020, pp. 1566–72. DOI.org (Crossref), <https://doi.org/10.22161/ijels.55.34>.
7. Raj, David Arputha. *Language as a Symbol* In. 2014. "The Color Purple." *Wikipedia*, 9 Feb. 2024. *Wikipedia*, https://en.wikipedia.org/w/index.php?title=The_Color_Purple&oldid=1205214328.

8. *The Color Purple* | Book, Novel, Summary, Characters, Alice Walker, & Facts | Britannica. 24 Jan. 2024, <https://www.britannica.com/topic/The-Color-Purple>.
9. "What Is an Epistolary Novel? || Definition & Examples." *College of Liberal Arts*, 4 Oct. 2020, <https://liberalarts.oregonstate.edu/wlf/what-epistolary-novel>.

NEP, Indian Knowledge System and Digital Globalization

Irani Aruna Singh*

INTRODUCTION

A massive advancement and huge changes have been witnessed by the people in the 21st century around the world and the field of education is no exception. The waves of change have also touched our education policies and one such policy is National Education Policy 2020 which is the first education policy of the twenty first century.

The New Education Policy 2020 has a great vision as well as potential to overcome the limitations of old educational policies or other commissions. NEP 2020 was framed to modify or adopt the good parts of the present education system and to change the other remaining parts that serve a little purpose in the twenty first century.

The wave of change has also lead to the collaboration of old and new knowledge systems around the globe. Digital explosion has added new element to every aspect of various systems. It has bridged the gap between the old and the new, the traditional and the modern, the offline and the online by collaborating and making a blend or hybrid of them.

CONTENT

Post-independence, the main focus of government had always been on imparting quality education. The drafting of University Education Commission (1948-49) under the chairmanship of Dr. Radhakrishnan with the aim of improving university education made a huge impact on the roots of the new India. This commission made the youth of that time period capable enough to support

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themselves, their respective families and the nation itself. Regarding the digital tools, the Commission was of the view, - "The machine should be treated as a natural accessory to man's social development. It is the tool of the free individual, and not his master. It must not become the servant of powerful self-seeking individuals and groups. Under proper control and an equitable system of distribution, it can supply the basic needs of food, shelter and clothing to every individual and release him from the burden of life for his own proper function of relating himself to his source, to his fellowmen, and to the forces of his natural environment."

Over the years, university education made slow and steady improvement amongst those who were once debarred of educational opportunities but the school education still showed little improvement. Therefore, the Secondary Education Commission (1952-53) was established under the chairmanship Dr. A. Laxman Swami Mudaliar with the aim of improving secondary education. A student when completes his/her school education either pursues higher academic degree or pursues a vocation or he/she might join his/her family business or if in case he/she belongs to a financially sound family then he/she might think of starting a new business. For this purpose, the Secondary Education Commission (1952-53) included recommendations for providing children with good textbooks, effective curriculum, and vocational education along with provisions for internship in the industries to get more experience etc. It helped the students in pursuing their academic passions or dreams and also in earning their livelihoods. Digital tools also had an important role in this case. According to the Secondary Education Commission, "It is hardly necessary to emphasize the role that audio-visual aids, films and radio talks, can play in the liberalizing of the education of the school children. In some States they have been developed to such an extent that most of the schools are able to obtain from the Department of Public Instruction the audio-visual aids and films and to correlate them with the particular subjects that are being taught. The students thus get not merely theoretical instruction but through these aid a graphic presentation of the subject. We recommend that a central library of educational films should be available in each State and that films of great value be sent from the Central Government to the States periodically. We recommended also that educational films suited to Indian conditions should be taken and made available to schools."

While working for the secondary education, the higher officials thought of extending their efforts towards Universalization of Elementary Education (UEE) simultaneously. According to National Policy on Education (1968), "In the post-independence period, a major concern of the Government of India and of the States has been to give increasing attention to education as a factor vital to national progress and security." But the limited availability of modern tools in the education sector during the pre-independence era made it difficult for the government to bring revolution in this sector during initial years of post-independence era. Moreover, the tribal people could not get enough opportunities due to the extreme geographical conditions.

The availability of modern tools over many years leads to the advancement in the policies too and that reflects in the National Policy on Education (1986). By the year 1986, much digital and technological advancement resulted in the

transformations in the field of education. According to NPE 1986, “Curriculum-based school TV programmes for secondary school students are presently being telecast by 4 Doordarshan kendras. Educational Television (ETV programmes) of general enrichment for children in the age group 5-11 years are being telecast in the respective regional languages through satellite, six days a week, in the 6 INSAT States, and are being relayed by all transmitters in the 4 other Hindi-speaking States. A 1-hour general enrichment programme for University/ College students is also being telecast daily.”

Teaching-learning process involves effective teaching such that learning outcomes are achieved efficiently. In this rapid changing world, evolution of teaching-learning process is a necessity. With the digital globalization, there is a worldwide knowledge explosion and it is difficult to decide that what is to be taken and what is to be discarded. Cyber security and privacy policy alongwith ethical standards help in preventing plagiarism and leakage of any confidential data. When a person chooses to learn via an online or an offline platform then the biggest challenge one face is that of finding a reliable source of data. Digital tools like ChatGPT, Copilot etc. helps a lot when we need to update ourselves but one cannot solely depend on them for their work because a primary source of data is one of the most reliable sources of data. Moreover, ethics also prohibits anyone to use someone’s content without acknowledging them. But the government approved online sources are available to everyone and are reliable source of data also. Regarding this NEP 2020 also recommends key initiatives like:

1. **Online Teaching Platforms and Tools:** Existing e-learning platforms such as SWAYAM and DIKSHA will be extended to provide teachers with tools to monitor progress of students. According to NEP 2020, tools such as two-way video and two-way audio interface for holding online classes are a real necessity.
2. **Addressing Digital Divide:** As all digital devices are neither available not affordable to many common people, therefore, radio or television broadcasts really helps in reaching many students. These programmes must be made available 24x7 in many languages.
3. **Virtual Labs:** Existing e-learning platforms such as DIKSHA, SWAYAM and SWAYAMPRAKHA will create virtual labs so that students could get access to practical and hands-on experiment-based learning experiences.
4. **Online assessment and examination:** Some government bodies like NTA, PARAKH etc. are trying to form new ways of online assessment and online examination. Online examinations are now-a-days common but there are still many sectors where there is a need to adopt the online examination methods over paper-pen method.
5. **Blended Models of Learning:** Blended models of learning and hybrid mode of learning covers the needs of many stakeholders.

Every new educational policy or commission is framed to overcome the limitations of old educational policies or other commissions. NEP 2020 serves the same purpose.

Blend is not only evident in one field but in many. Interdisciplinary courses are also a blend of more than one discipline. For example: a blend of biology in a

technological field gives biotechnology; a blend of biology and physics gives biophysics, a blend of computers field and biology field gives us computational biology. Similar blend is evident in the traditional and modern knowledge systems. According to A.V. Balasubramanian, "In varied areas of traditional knowledge systems there are instances of healthy collaborations with modern knowledge. If we take the case of healthcare systems we see this occurring between Ayurveda, Yoga, Siddha and modern medicine and to a limited extent also with Homeopathy." Yoga School of Philosophy teaches eightfold path that involves yama, niyama, asana, pranayama, pratyahara, dharna, dhyana, smadhi for a better life. Similarly, modern fitness trainers and physiotherapist use similar methods to improve health. Now-a-days, a blend of the two is used depending on the need of the stakeholders.

'Yama' part of the 'Yoga philosophy' preaches us to speak the truth, not to steal, to practice non-violence etc. and similar teachings are taught by 'Buddhist philosophy'. Today, modern moral education comprises of the same teachings. It is a collaboration of teachings of different schools of philosophy. People directly or indirectly are aware about teachings of many schools of philosophy but they learnt that from different sources. Hence, they are oblivion of the fact that they have been following the teachings of ancient Indian schools of philosophy. 'Sankhyan school of philosophy', 'pratyahara' part of the 'Yoga school of philosophy' and 'Jain philosophy' stressed on the satvika diet for a better and healthy life. Today, there are many dieticians who are also laying stress on similar diets for better health. Hence, one can say that today's modern practices are a blend of ancient Indian schools of philosophy and ancient Indian knowledge systems.

CONCLUSION

Digital globalization has a huge impact on the field of education. Many programs like SWAYAM, DIKSHA, SWAYAMPRAKASH, etc. are examples of the digital advancements in the field of education. Moreover, NEP 2020 is slowly and steadily moving towards the attainment of its vision and mission. From administration level to grassroots level, every person is working towards the success of NEP 2020. As the policy has been made, therefore, administration's major function is to monitor and distribute the funds according to the data they receive but at the grassroots level, all the teachers and lecturers still has a long path to tread. The blend of various knowledge systems has resulted in a new collaborated knowledge system that caters to the needs of every aspect of a particular field.

References

1. Google.University Education Commission.
2. Google.Secondary Education Commission.
3. National Policy on Education (1968) <https://www.education.gov.in>
4. National Policy on Education (1986) <https://ncert.nic.in>
5. National Policy on Education (2020) <https://www.education.gov.in>
6. Balasubramanian, A.V.(2004).Traditional and modern sciences and technologies in
7. India: trading new paradigms for old.*Alexandria*.

Impact of the National Education Policy 2023 on Digitalization of Education: Opportunities, Challenges, and Future Directions

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INTRODUCTION

The New Education Policy 2024 extends compulsory schooling from 6-14 years to 3-18 years, including three years of pre-schooling for children aged 3-6 years. The curriculum will include 12 years of formal education and three years of Anganwadi/pre-school education. The 10+2 school curriculum framework will be replaced with a 5+3+3+4 curricular structure for ages 3-8, 8-11, 11-14, and 14-18 years, emphasizing Early Childhood Care and Education (ECCE). The policy also suggests using the mother tongue as the medium of instruction, adhering to the “three-language formula” and ensuring no language is imposed on anyone. Home language, mother tongue, local language, or regional language will be used until Grade 5, preferably until Grade 8 and beyond.

The New Education Policy (NEP 2020) aims to establish the Higher Education Commission of India (HECI) as a single body for all higher education in India, excluding medical and legal education. The policy will phase down college affiliation and provide colleges with graded autonomy in 15 years. The policy will blur the distinctions between arts, sciences, curricular and extra-curricular activities, and vocational and academic programs, allowing students to choose from various disciplines. The FYUP Programme returns and no more dropouts will be introduced, with undergraduate degrees lasting three or four years. The government will also create an Academic Bank of Credit to store academic credits earned at various HEIs digitally.

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NEP 2020 focuses on universal access to school education, including vocational education courses from pre-school to 12th standard. Foundational Literacy and Numeracy (FLN) will start from grade 3, and project-based learning in the school curriculum will aim for holistic development. The graduate enrollment ratio is expected to increase up to 50% by 2035, and the student dropout rate will reduce.

The government has already taken initiatives to bring online and distance education at par with regular courses, such as online courses, digital repositories, funding for improved student services and research, and credit-based recognition of MOOCs. The National Educational Technology Forum (NETF) will be established to promote technological innovation in education.

The policy also promotes internationalization of education by encouraging global collaborations with universities and research institutes. The collaboration between the Centre and State governments is expected to reach 6% of GDP in the education sector to improve educational infrastructure. The new education policy for 2023 places a strong emphasis on remote learning and online learning in an effort to lower obstacles and boost student enrolment in postsecondary education. As per NEP, the following significant activities are implemented for online education:

1. Pilot programmes for online learning
2. fortification of the digital infrastructure
3. Increase in internet resources and learning platforms
4. Included in the blended learning mode
5. Appropriate teacher training and rewards
6. Establishment of virtual labs and ongoing upgrades

NEP 2023: Opportunities

India's digitalization has advanced significantly thanks to programmes like Digital India and the expansion of the technology industry. Because of the country's changing demographics and expanding educational needs, digital education must be integrated. Digital solutions—interactive, dynamic learning environments—are taking the place of conventional approaches. The goals of education in the twenty-first century are in line with this change in pedagogy, which promotes self-directed learning skills and increases productivity, efficiency, and the development of critical thinking.

In order to digitalize education in schools, the Indian government is putting in place a number of initiatives, such as one laptop per child programmes, digital infrastructure, and artificial intelligence for machine learning. With their scalability, accessibility, and inclusion, Massive Open Online Courses (MOOCs) are becoming a symbol of democratisation and have the potential to completely transform the way that knowledge is distributed.

Digitalization is given strong priority in the National Education Policy of 2020 (NEP 2020), which acknowledges technology as a vital instrument for developing 21st-century capabilities. NEP 2020's digitalization, which is essential for all educational levels, is accelerated by flexibility and lifelong learning.

It is eventually transforming the educational journey within the formal system by becoming more and more integral to enrollment, curriculum design, pedagogy, and evaluation (Muralidharan et al., 2022). The policy suggests a number of crucial steps to fully utilise technology's potential for instruction.

In order to address concerns like student device (mobile) addiction and preferred e-content formats, it first recommends undertaking pilot studies to evaluate the advantages and difficulties of integrating online education.

With the intention of guarantee the durability and scalability of technology-based solutions, it also highlights the development of open and adaptable digital infrastructure. Thirdly, the strategy suggests improving already-existing e-learning systems such as DIKSHA and SWAYAM to give educators useful instruments for tracking students' progress. Additionally, it supports the creation of an online content library featuring user-rated educational games, simulations, and AR/VR resources.

The approach also uses mass media, such as radio and television, to broadcast instructional programmes in several languages, thereby addressing the issue of the digital divide. It places a strong emphasis on online content creation, learner-centric pedagogy training for teachers, and the value of in-person instruction in addition to digital learning. Establishing standards for digital and online teaching and learning is another need of the strategy, which aims to guarantee uniformity and quality in teaching across universities. The National Educational Alliance for Technology, which will function as an independent organisation, is also established by the policy. Its main goal is to act as a specialised platform for the efficient integration of technology throughout the previously specified educational sectors (Singh et al., 2022).

NEP 2023: Challenges

Although a few experts have examined its weaknesses, the NEP framework is expected to bring about a dramatic shift in India's higher education ecosystem. They are as follows:

- The policy calls for the establishment of a new university every week for the next fifteen years in order to double the gross enrolment ratio by 2035, which presents a significant implementation necessitates sufficient financing and resources.
- India requires a large pool of qualified educators who are conversant with the new pedagogical approach in order to properly implement the updated curriculum.
- Teachers typically share a disciplinary anchoring culture, so having highly skilled educators who specialise in one subject and lean towards other subjects as well.
- Owing to the vast number of students, NEPs many entry and exit possibilities may encounter difficulties in India. High yearly admissions to postsecondary education could result from it. Universities sometimes have a hard time projecting the number of students who will enrol and leave.

There are detrimental effects on mental health associated with the pervasive adoption of technology, especially in higher education institutions (HEIs). According to studies, there is a direct link between the use of technology and deteriorating mental health. College students use their phones for nine hours a day on average, which raises concerns about addiction. Frequent use of digital devices can exacerbate the symptoms of attention deficit disorder (ADHD), impair social and emotional intelligence, foster addictive behaviours, increase social isolation, and interfere with brain development and sleep cycles.

One of the most common indicators of the detrimental effects of digitalization on education is an increase in screen time. Teenagers who use screens for longer periods of time are more likely to have poor eating habits, engage in less physical exercise, and have trouble sleeping. All of these add up to growing worries about global health, which makes it necessary to incorporate preventive measures into college and school curricula in order to enhance students' general health and quality of life.

Students in higher education institutions are experiencing a serious crisis of nomophobia, or the fear and anxiety that comes with not having a smartphone or other mobile device. Cell phone addiction and nomophobia are being brought on by excessive use, and worries about missing connections, running out of battery life, and losing internet access are all contributing factors. In addition to worsening anxiety, tension, and depression, severe nomophobia is directly connected to lower academic attainment.

Students now feel overwhelmed by information as a result of the widespread use of cutting-edge educational tools, which increases anxiety and complicates the process of making educated judgements. Cyberbullying is a terrible problem that frequently results in victims experiencing internal turmoil, despair, feelings of inadequacy, insecurities, and self-harm.

Phubbing—disregarding or ignoring someone in a social situation when they are with others—has a detrimental effect on mental health, undermines important soft skills, and creates social isolation. The omnipresent usage of technology within the academic sphere has brought hurdles and challenges broadly concerning the mental health and overall welfare of higher education students.

FUTURISTIC DIRECTIONS

Psychological problems stemming from the overuse of digital platforms such as digression towards other unnecessary details, gadget addiction, insomnia, suicide attempts, depression, anxiety, gaming addiction, substance abuse, relationship problems, and conflict with parents due to ignorance are on the rise. Therefore, having counselors at school is now a necessity. Offering guidance and counseling services in schools makes it easy for students to access help in a safe and comfortable environment. Prioritizing the needs of students as human beings is crucial. Qualified counselors can help students understand their problems and help them reach rational conclusions. Inclusivity in classrooms should be considered, not just based on socio-economic backgrounds. Additional policy recommendations include hiring psychologists, accommodating queer people, educating teachers about students' health conditions, sensitizing teachers and students to survivors of abuse and trauma, and practicing consensual conversations.

CONCLUSION

Concerns about mental health are on the rise as a result of digital technology's growing impact on schooling. A mere 0.05% of India's healthcare budget is earmarked for mental health programmes, and the country lacks a sufficient infrastructure to support mental health. Both immediate action and a thorough resolution are needed for this issue. To address these difficulties, stakeholders, scholars, and legislators need to take coordinated action. This action should include encouraging responsible technology use, offering easily available mental health care and support, digital services, awareness campaigns, and joint efforts to de-stigmatize mental health complications.

The digital space presents a complex scenario with increasing challenges such as decreased attention spans, misinformation, and privacy issues. This presents a challenge for educators, policymakers, and society as a whole. Minority groups often face unique challenges, contributing to higher rates of mental health issues. However, policies often fail to recognize the increased vulnerability of these populations. It is crucial to implement practical strategies to ensure mental health support is accessible and equitable for all members of society, regardless of their background. The NEP 2020 acknowledges mental health concerns, but the evolving landscape of digital education necessitates a more holistic approach. Indian educational systems must prioritize mental health and overall development while keeping pace with technological advancements. This dedication and commitment can ensure a brighter future for students. The New Education Policy (NEP) aims to improve the mental health of students by involving schools at all levels, including state, district, sub-district, and block levels. School counseling will lead to a curriculum that promotes intellectual, personal, and psychological development. Parents and guardians should be cautious when listening to their children's problems, creating an atmosphere of understanding and openness.

Futuristic Directions

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References

1. Ahmad R. and Zadha N., (2013), Importance of Guidance and Counseling in Effective Teaching and Learning in School. *The Communications*, Vol.27. No (01), ISSN: 0975-6558 115.
2. Arthur N, and Russell-Mayhew, S. (2010), Preparing counsellors for inter professional collaboration through supervision and lateral mentoring. *Canadian Journal of Counselling and Psychotherapy/Revue canadienne de counseling et de psychothérapie* 2010, 44(3).
3. Gururaj G, Varghese M, Benegal V, Rao GN, Pathak K, Singh LK, et al. (2016), National mental health survey of India, 2015-16: Prevalence, patterns and outcomes. NIMHANS Publication., 90-121
4. Ministry of Education. (1986). National Policy on Education 1986. Retrieved September 12, 2023, from https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/npe.pdf 17. Ministry of Education (2020). National Education Policy 2020. Retrieved September 12, 2023, from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf 18.
5. Moitra, P., & Madan, J. (2022). Impact of screen time during COVID-19 on eating habits, physical activity, sleep, and depression symptoms: A cross-sectional study in Indian adolescents. *PLOS ONE*, 17(3), e0264951. <https://doi.org/10.1371/journal.pone.0264951>
6. Muralidharan, K., Shanmugan, K. S., & Klochkov, Y. (2022). The New Education Policy 2020, Digitalization and Quality of Life in India: Some reflections. *Education Sciences*, 12(2), 75. <https://doi.org/10.3390/educsci12020075>
7. Nikolaou, E. and Markogiannakis, G. (2017), The Role of Teacher in Primary School Students' Mental Health Promotion. *Global Journal of Human-Social Science: (A) Arts & Humanities - Psychology*. 17. pp.
8. Parakh, R. (2020), The New Education Policy's Emphasis On Mental Health Is Welcome, the author analyses the New Education Policy in light of its effort to lay greater emphasis on the mental health of students. <https://www.womensweb.in/2020/09/new-education-policy-mental-health>
9. Singh A., (2019), Mental Health in Academic Settings, *International Journal of Policy Sciences and Law* Volume 1, Issue 2, pp. 481-501
10. <https://www.learningroutes.in/blog/new-education-policy-2021-things-you-need-to-know>

Dealing with Missing Data and Uncertainty in the Context of Data Mining

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I. INTRODUCTION

Many real-world datasets have missing or incomplete data [24]. Since the accuracy of most machine learning algorithms for classification, regression, and clustering is affected by the completeness of datasets, processing and dealing with missing data is a significant step in the Knowledge Discovery and Data Mining (KDD) process. Some strategies have been devised to handle incomplete data as explained in [8, 14, 5]. In particular, for regression, where missing data has been more widely studied (e.g. [9]), multiple imputation has shown advantage over other methods [22, 23]. However, much work is still needed to solve this problem in the context of data mining tasks and multiple imputation in particular needs some research to show if it is equally applicable to data mining. Before we investigate multiple imputation and data mining, which is our long term aim, in this research we want to deliver a thorough understanding of how the different methods for handling missing data affect the accuracy of data mining algorithms when the uncertainty increases, i.e. the amount of missing data increases. We create an experimental environment using the university of California Irvine (UCI) Machine learning repository [13], by removing data from a number of UCI datasets completely at random (MCAR). We select increasing number of attributes at random to remove data from and we also increase the number of records at random from which we remove data in the attributes selected. Therefore, we produce a number

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of experimental datasets which contain increasing amounts of data MCAR. Researchers have used a number of different methods to treat missing data in the data preprocessing phase. In this paper, we study the performance of classification algorithms in the context of increasing missing data under different pre-processing scenarios. In particular, we investigate how increasing the amount of missing data affects the performance for complete case analysis, and single imputation for a number of classification algorithms. We also compare that to the performance of algorithms with an internal mechanisms to handle the missing data, such as C4.5, and Random Forest. The rest of this paper is organised as follows: Section 2 presents the problem of missing data and Section 3 presents the mechanisms used in Data Mining to address the problem. The methods used in our paper to set up our experimental environment are discussed in Section 4. Section 5 analyses the results. A discussion of the results is in Section 6. Finally, Section 7 presents our conclusions.

II. THE PROBLEM OF MISSING DATA

Little and Rubin [14] have defined missing data based on the mechanism that generates the missing values into three main categories as follows: Missing Completely at Random (MCAR), Missing at Random (MAR), and Missing not at Random (MNAR). Missing Completely at Random (MCAR) occurs when the probability of an instance missing for a particular variable is independent from any other variable and independent from the missing data so missing is not related to any factor known or unknown in the study. Missing at Random (MAR) occurs when the probability of an instance having a missing value for an attribute may depend on the known values but not on the value of the missing data itself. Missing not at Random (MNAR) occurs when the probability of the instance having a missing value depends on unobserved values. This is also termed a *nonignorable* process and is the most difficult scenario to deal with. In this paper we focus on generating missing data using the MCAR mechanism. Further work will investigate the other mechanisms.

Horton et al. [9] have further categorized the patterns of missing data into monotone and non-monotone. They state that the patterns are concerned with which values are missing, whereas, the mechanisms are concerned with why data is missing. We can state that we have monotone patterns of missing data if the same data points have missing values in one or more features. We focus in this study on non-monotone missing data.

III. DEALING WITH MISSING DATA

In practice, there are three popular approaches that are commonly used to deal with incomplete data:

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A. Complete Case Analysis

This approach is the default in many statistical packages but should be only used when missing is under MCAR [14]. All incomplete data points are simply omitted from the dataset and only the complete records are used for model building

[14]. The approach results in decreasing the size of data and the information available to the models and may also bias the results [20]. Tabachnick and Fidell [21] assumed that both the mechanisms and the patterns of missing values play a more significant role than the proportion of missing data when complete case analysis is used.

B. Imputation

Imputation means that missing values are replaced in some way prior to the analysis [14]. Mean or median imputation is commonly used with numerical instances and mode imputation with the nominal instances. Such simple imputation methods have been criticized widely [4, 18], because they do not reflect the uncertainty in the data and may introduce bias in the analysis. On the other hand, multiple imputation [17], a more sophisticated method, replaces missing values with a number of plausible values which reflect the uncertainty although the technique may have higher computational complexity. A method for combining the results of the analysis on multiple datasets is also required. For regression analysis, Rubin [17] defined some rules to estimate parameters from multiple imputation analysis. For application to data mining, good methods for pooling the analysis may be required.

C. Model Approach

A number of algorithms have been constructed to cope with missing data, that is, they can develop models in the presence of incomplete data. The internal mechanisms for dealing with missing data are discussed in the context of the algorithms used in this study.

D. Classification Algorithm and Missing Data

We focus on the following well known classification algorithms, some of which have been identified as top data mining algorithms [25]: Decision Trees (C4.5), Naïve Bayes (NB), Random Forest (RF) and Support Vector Machines (SVMs). Further, we will explain how different algorithms and their implementations in Weka, our platform of choice, can treat missing values at both the building and the application phase.

C4.5 is one of the most influential decision trees algorithm. The algorithm was modified by Quinlan [15, 16] to treat missing data using fractional method in which the proportion of missing values of an attribute are used to modify the Information gain and Split ratio of the attribute's Gain ratio. After making the decision for splitting on an attribute with the highest gain ratio, any instance with missing values of that attribute is split into several fractional instances which may travel down different branches of the tree. When classifying an instance with missing data, the instance is split into several fractional instances and the final classification decision is a combination of the fractional cases [6]. We use the Weka implementation, J48, which uses the fractional method [7].

Naïve Bayes algorithm is based on the Bayes theorem of probabilities using the simplification that the features are independent of one another. Naïve Bayes ignores features with missing values thus only the complete features are used

for classification [2, 11]. Therefore, it uses complete case analysis instead of handling missing data internally.

Random Forest is an ensemble algorithm which produces multiple decision trees and can be used for classification and regression. It is considered as a robust algorithm and produces high classification accuracies. This is because random forest splits training samples to a number of subsets then builds a tree for each subset, rather than building one tree [1] and combines their decision. Random Forest, uses the fractional method [1, 10] for missing data in a similar manner to C4.5. The implementation of the algorithm in Weka also uses the fractional method as in C4.5 algorithm.

SVMs are used for binary classification and can be extended to higher dimensional datasets using the Kernel function [19]. SVMs maximize the margin between the separating hyperplane and the classes. The decision function is determined by a subset of training samples which are the support vectors. We use a Weka implementation called SMO (Sequential Minimal Optimization), a modification of the algorithm that solves the problem of Quadratic Programming (QP) when training SVMs in higher dimensions without extra storage or optimization calculations. Although SVMs do not deal with missing values [12], the SMO implementation performs simple imputation by globally replacing the missing values with the mode if the attribute is nominal or with the mean if the attribute is continuous [7].

IV. METHODS

For our study, a collection of 17 benchmark datasets are collected from UCI machine learning repository [13]. The datasets have different sizes and feature types (numerical continuous, numerical integer, categorical and mixed) as shown in Table 1. None of the datasets have missing values in their original form so this enables us to study how missing data affects the accuracy and performance of classification algorithms.

Data values are then removed completely at random as follows to generate increasing amounts of missing data. First, 10% (then 20%, 50%) of the attributes are randomly selected then missing values are artificially generated by removing values randomly in 5%, 30% and 50% of the records, respectively. As a result, nine artificial datasets are produced for each of the original datasets with multiple levels of missing data. In total, we have 153 datasets. Table 2 summarises the experimental scenarios artificially created.

For testing the models, 10-fold cross-validation was used and performed 10 times. All results reported represent the average of the 10 experiments with 10-fold cross-validation.

Table I The Details of The Datasets Collected for The Experiments.

No.	Dataset	#Features	#Instances	#Classes	Feature Types
1	Post-Operative Patient	8	90	4	Integer, Categorical
2	Ecoli	8	336	8	Real
3	Tic-tac-toe	9	958	2	Categorical
4	Breast Tissue	10	106	6	Real

5	Statlog	20	1000	2	Integer, Categorical
6	Flags	30	194	8	Integer, Categorical
7	Breast Cancer Wisconsin	32	569	2	Real
8	Chess	36	3196	2	Categorical
9	Connectionist Bench	60	208	2	Real
10	Spect	69	287	2	Categorical
11	Hill Valley	101	606	2	Real
12	Urban Land Cover	148	168	9	Integer, Real
13	Epileptic Seizure Recognition	179	11500	5	Integer, Real
14	Semeion	256	1593	2	Integer
15	LSVT Voice Rehabilitation	309	126	2	Real
16	HAR Using Smartphones	561	10299	6	Real
17	Isolet	617	7797	26	Real

Table II Experimental Scenarios With Missing Data Artificially Created.

Scenario %Features %Missing

Scenario 1		5
Scenario 2	10	30
Scenario 3		50
Scenario 4		5
Scenario 5	20	30
Scenario 6		50
Scenario 7		5
Scenario 8	50	30
Scenario 9		50

In the complete case analysis, all the incomplete records are omitted. This often results in datasets that are too sparse to be used for classification. The datasets that are left with enough records for classification are considered feasible.

To test simple imputation, the numerical attributes are replaced with their mean and the categorical attributes with their mode. Then the produced datasets after imputation are used for classification model building.

We use the classifiers: J48, Naïve Bayes, RandomForest and SMO implemented in Weka with their default options for classifying the data. We use the classification accuracy as a metric for our experiments. To further compare performance of the classifiers, we compute the average of the percentage difference in accuracy between a classifier obtained with the original (complete) datasets and the

datasets with increasing missing data as follows:

$$\%Diff = (((Acc\ Scai - Acc\ Orgj) / Acc\ Orgj) * 100) \tag{1}$$

where Acc Scai represents the classifier accuracy for a specific scenario, in our experiment we have 9 scenarios, and Acc Orgj represents the classifier accuracy of the corresponding original dataset.

We perform two different statistical tests when evaluating the performance of classifiers over the datasets as follows:

- 1. When comparing differences in accuracy for each scenario we first use Wilcoxon Signed Rank test with a significance level at $\alpha = 0.05$.
- 2. We then compare multiple classifiers over multiple datasets using the method described by Demšar [3], including the Friedman test and the post hoc Nemenyi test which is presented as a Critical Difference diagram, with a significance level of $\alpha = 0.05$.

V. RESULTS

Fig. 1 shows the average accuracy of classifiers and standard deviation (as error bars) for each of the original complete datasets along with the baseline majority class model accuracy. Models perform better than the baseline in most of the datasets except Post-Operative Patient, Breast Tissue, Spect, and LSVT Voice Rehabilitation, where default accuracy is similar or slightly better than that obtained by the models. We use the Friedman test for statistical differences. The resulting p-value < 0.05, so we proceed with Nemenyi test. The Critical Difference diagram for the Nemenyi test is shown in Fig. 2. The Figure illustrates that SMO and RandomForest behave better than J48 and Naïve Bayes although there is no statistical differences within each group.

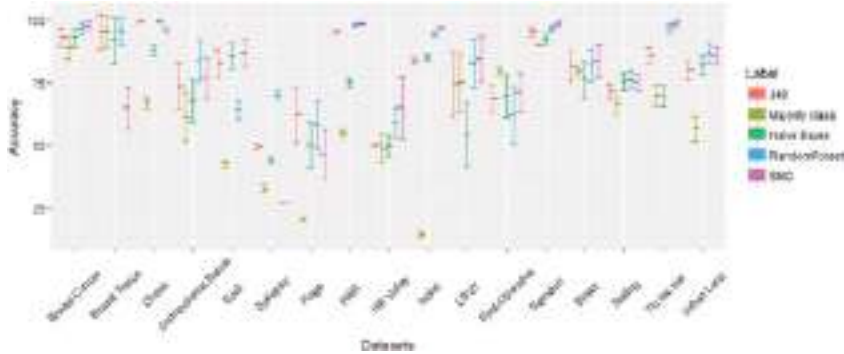


Fig. 1 The average accuracy of classifiers and standard deviation (as error bars) for each of the original (complete) datasets along with majority class.

A. Complete Case Analysis

The datasets that are not feasible for classification after removing missing records are marked with C whereas the feasible are marked with ✓ as shown in Table 3. Datasets are ordered by increasing number of attributes (dimensionality)

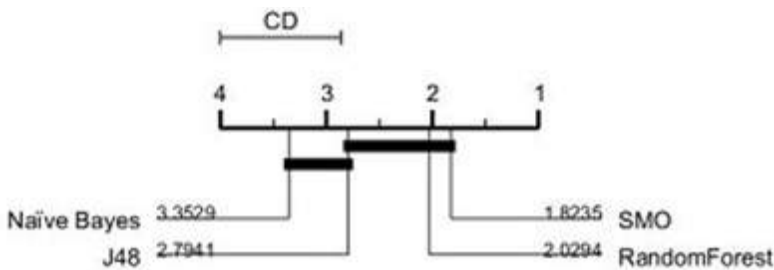


Fig. 2 Critical Difference diagram shows the statistical difference between the classifiers. The bold line connecting classifiers means that they are not statistically different.

and then number of records. Only two low dimensional datasets are feasible for classification in all scenarios: Ecoli and Tic-tac-toe. In contrast, datasets with increasing dimensionality are not feasible for classification when increasing the amount of missing data due to widespread sparsity. For example, Hill Valley, UrbanLand Cover, Epileptic Seizure Recognition, Semeion, LSVT Voice Rehabilitation, HAR Using Smartphones and Isolet all become mostly infeasible.

Table III The Artificial Datasets With Different Scenarios Of Missing Data That Are Not Feasible When Applying The Classification Algorithms Are Marked With C.

		Scenario								
Dataset		1	2	3	4	5	6	7	8	9
Post-Operative Patient		✓	✓	✓	✓	✓	✓	✓	✓	C
Ecoli		✓	✓	✓	✓	✓	✓	✓	✓	✓
Tic-tac-toe		✓	✓	✓	✓	✓	✓	✓	✓	✓
Breast Tissue		✓	✓	✓	✓	✓	✓	✓	✓	C
Statlog		✓	✓	✓	✓	✓	✓	✓	✓	C
Flags		✓	✓	✓	✓	✓	✓	C	✓	C
Breast Cancer Wisconsin	✓	✓	✓	✓	✓	C	C	✓	C	C
Chess		✓	✓	✓	✓	✓	✓	✓	✓	C
Connectionist Bench		✓	✓	C	✓	C	C	✓	C	C
Spect		✓	✓	✓	✓	✓	✓	C	✓	C
Hill Valley		✓	✓	C	✓	C	C	✓	C	C
UrbanLandCover		✓	C	C	✓	C	C	C	C	C
Epileptic Seizure Recognition	✓	✓	✓	C	✓	C	C	✓	C	C
Semeion		✓	C	C	✓	C	C	C	C	C
LSVT Voice Rehabilitation	✓	C	C	C	C	C	C	C	C	C
HAR Using Smartphones		✓	C	C	✓	C	C	C	C	C
Isolet		C	C	C	C	C	C	C	C	C

Fig. 3 illustrates the average accuracy of the classifiers and standard deviation for the datasets that are feasible for classification. In scenario 1, the average and the standard deviation are nearly equal to those on the original data. However,

with a decreasing number of feasible datasets, the standard deviation increases and the classifiers' performance deteriorate as we increase missing data.

Table 4 shows the average %Diff in accuracy between classifiers obtained with the original (complete) data and the datasets with increasing missing data for the different data handling approaches and algorithms. For complete case analysis, the deterioration in accuracy reached more than 18% for J48, RF, and SMO in different scenarios. However, Naïve Bayes behaved better gaining 2% in

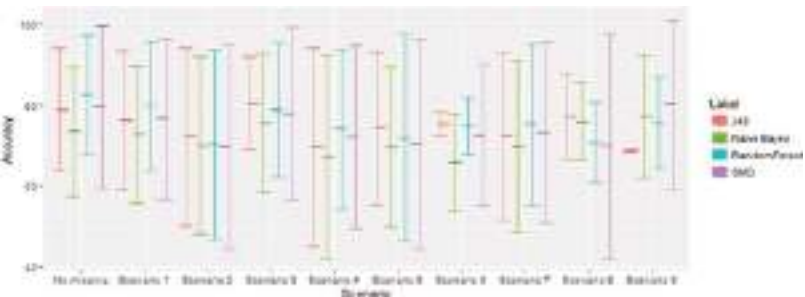


Fig. 3 The average accuracy of classifiers and standard deviation (as error bars) for all artificial datasets in all scenarios of missing data including the original (complete) datasets when applying complete case analysis.

some scenarios. We do not produce statistical analysis due to the small number of datasets that produce a feasible classification with complete analysis.

B. Simple Imputation

Table 4 also shows the average of all the percentage differences in accuracy (%Diff) between a classifier obtained with the original (complete) datasets and the imputed data for each scenario and each algorithm. %Diff increases when missing data increases in all classifiers, however simple imputation performs much better than complete case analysis. Accuracy decreased in a small range between [-0.54,-5.59] for J48 and by -6.94% for RandomForest in the worst case. For Naïve Bayes, the differences with the original data where smaller with a maximum deterioration of -2.67%. SMO sees deteriorations of up to 5.71% in the scenarios of most missing data. We applied the Wilcoxon Signed Rank test to check statistical significance over the differences. Significant values are marked with * and tend to be those for the higher scenarios, except for SMO where the differences are more often statistically significant. From this we can conclude that simple imputation may work well for low amounts of missing data, and is beneficial over complete case analysis, but performance deteriorates significantly when the amount of missing data increases.

We also applied the Friedman test described by Demšar [3] and found statistically significant differences over multiple datasets in all scenarios except scenario 9 so we proceeded with the Nemenyi Test. We perform the post test between the classifiers over the imputed datasets for each scenario separately. The resulting Critical Difference diagrams in most scenarios in Fig. 4 show that RandomForest and SMO outperform J48 and Naïve Bayes. Random Forest seems to outperform SMO as the amount of missing data increases but not significantly. There is no statistical difference between RandomForest, SMO, and J48 in most scenarios. Overall, RandomForest was the most accurate classifier when the uncertainty increases and Naïve Bayes was the worst.

Table IV Average % Diff In Accuracy With Respect To Complete Data. Wilcoxon Signed Rank Is Used To Test Statistical Significance With Significant Results Marked By *.

Scenario #	Complete Case				Simple Imputation				Algorithms Only			
	J48	NB	RF	SMO	J48	NB	RF	SMO	J48	NB	RF	SMO
Scenario 1	-3.27	0.26	-2.28	-2.07	-0.54*	0.01	-0.10	-0.57*	-0.19	0.05	-0.41*	-0.59*
Scenario 2	-6.88	-3.92	-12.08	-8.00	-0.57	0.11	-0.82	-1.34	-0.38	0.22	-0.72	-1.38
Scenario 3	-1.82	-3.81	2.82	-4.04	-0.96*	-0.30	-1.10*	-2.03*	-0.64	-0.48	-1.33*	-2.04*
Scenario 4	-11.50	-9.43	-14.29	-6.75	-0.83*	-0.17	-0.56	-1.05*	-0.53	0.00	-0.66*	-1.08*
Scenario 5	-8.99	-10.01	-11.26	-12.97	-1.24*	-0.14	-1.62*	-2.26*	-0.56	0.00	-1.50*	-2.31*
Scenario 6	-8.35	-16.03	-6.58	-12.03	-1.62*	-0.84	-2.31*	-3.07	-0.99	-0.78	-1.85*	-2.95
Scenario 7	-6.80	-4.11	-4.27	-1.14	-1.27*	0.22	-2.03*	-1.39	-1.02*	0.10	-1.94*	-1.25
Scenario 8	-3.64	-2.30	-8.75	-14.04	-3.86*	-1.41	-5.11*	-5.11*	-2.56*	-1.15*	-4.78*	-5.04*
Scenario 9	-18.17	-2.10	-4.31	-13.83	-5.59*		-6.94*	-5.71*	-3.95*	-1.42*	-5.85*	-5.82*

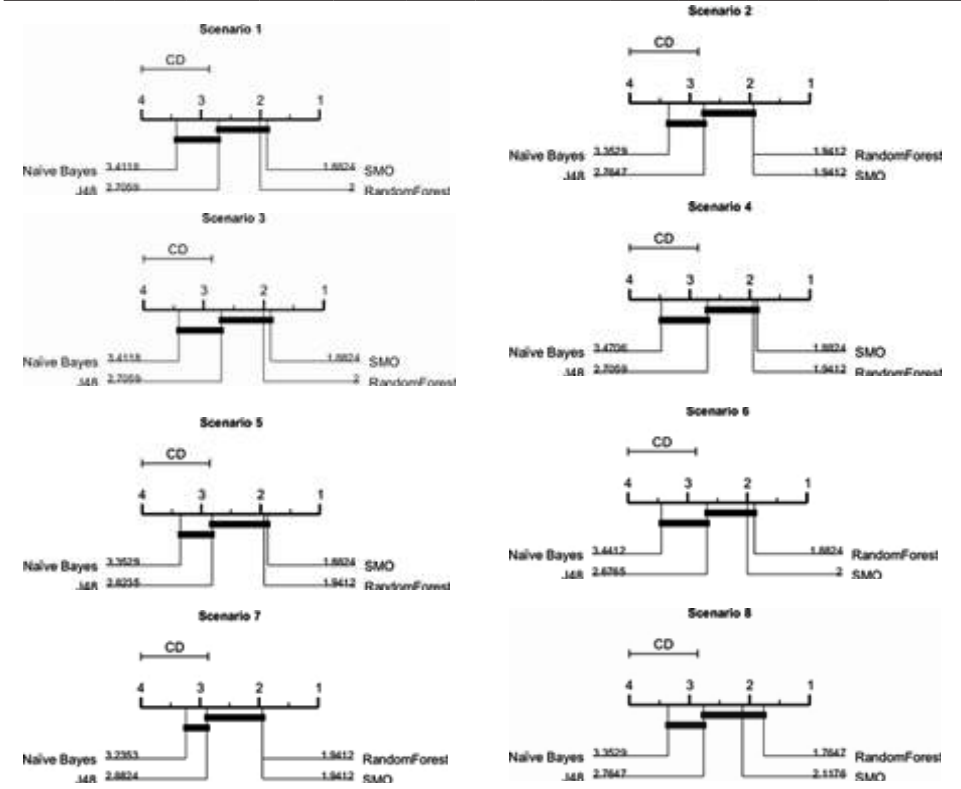


Fig. 4 Critical Difference diagrams show the statistical significant differences between classifiers using simple imputation. We exclude scenario 9 where all classifiers are not statistically different with the Friedman test.

C. Building models with missing data

In Section 3.1 we discussed that some of this algorithm have their own ways of dealing with missing data. We therefore pass all the data including missing data to the algorithms without preprocessing. We again compare (%Diff) in ac- curacy between a classifier obtained with the original (complete)

datasets and the models built with missing data and show results in Table 4 with statistically significant differences marked by *. %Diff increases when missing data increases in all classifiers. However, for J48 in most of scenarios the deterioration is within a small range [-0.19%,-3.95%] and similarly for RandomForest [-0.41%,-5.85%]. Naïve Bayes only ignores the missing values when computing the probability and the differences ranged between [+0.22%,-1.42]. SMO uses (mean/mode) im- putation so behaves similarly to the imputed data performance in Table 4. In scenarios 8 and 9, the accuracy of all classifiers are statistically different from the classifiers’ accuracy for the original datasets. Thus, the capabilities of classifiers dealing with missing data seem to deteriorate when the ratio of missing data increases.

As before we apply the Friedman test and Nemenyi post test. The resulting Critical Difference diagrams in most scenarios show that RandomForest and SMO outperform J48 and Naïve Bayes. However, there is no statistical difference between all classifiers in scenario 9 whereas no statistical significant between RandomForest, SMO and J48 and between Naïve Bayes and J48. SMO was the most accurate classifier in the first six scenarios, however, when increasing missing data RandomForest outperforms other classifiers and Bayes was the worst in all scenarios. Fig. 4 represents the Critical Difference diagrams of all scenarios.

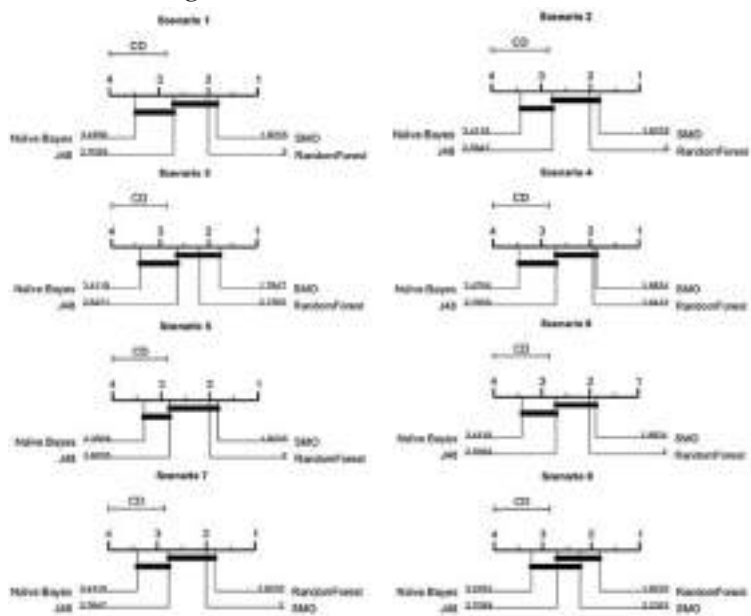


Fig. 5 Critical difference diagrams show the statistical difference between classifiers with no preprocessing of missing data, excluding scenario 9 where all classifiers are notstatistically different.

VI. DISCUSSION

With complete data, Naïve Bayes and J48 perform worse than SMO and Random Forest. Complete case analysis results in many datasets becoming infeasible for analysis due to sparsity of the data for the algorithms we tested, thus it is not recommended if missing values are spread among records in high dimensional

data. Simple imputation works well for low amounts of missing data but not when the amount of missing data increases substantially (scenarios 8,9), as the performance of all classifiers becomes statistically significantly worse than classifying with complete data. RandomForest and SMO behave better than J48 and Naïve Bayes in all scenarios (including when complete data is available). The capability to cope with missing data for RandomForest by using fractional method when uncertainty increases seems to outperform the SMO handling of missing data using mean/mode but not significantly.

VII. CONCLUSION

Accuracy deteriorates for most classifiers when increasing percentages of missing data are encountered. Complete case analysis is not recommended if missing values are spread among (Features/Records) in high dimensional data. Simple imputation may help when a dataset has low ratio of missing values but not with increasing uncertainty. When applying the algorithms without preprocessing, again the trend is for some deterioration in performance with increasing missing data with those differences becoming statistically significant for the higher scenarios. So overall, we expect models to become worse as the amount of missing data increases though different algorithms do not perform significantly differently under those scenarios. As future work, we will expand on our imputation to include multiple imputation that combines models generated from multiple imputed datasets with data ensemble techniques to improve the performance of data mining classification algorithms for data with missing values.

References

1. Leo Breiman. Random forests. *Machine learning*, 45(1):5–32, 2001.
2. Xiaoyong Chai, Lin Deng, Qiang Yang, and Charles X Ling. Test-cost sensitive naive bayes classification. In *Data Mining, 2004. ICDM'04. Fourth IEEE International Conference on*, pages 51–58. IEEE, 2004.
3. Janez Demšar. Statistical comparisons of classifiers over multiple data sets. *Journal of Machine learning research*, 7(Jan):1–30, 2006.
4. Mark Fichman and Jonathon N Cummings. Multiple imputation for missing data: Making the most of what you know. *Organizational Research Methods*, 6(3):282–308, 2003.
5. Pedro J García-Laencina, Jos'e-Luis Sancho-Gómez, and An'ibal R Figueiras-Vidal. Pattern classification with missing data: a review. *Neural Computing and Applications*, 19(2):263–282, 2010.
6. Sachin Gavankar and Sudhirkumar Sawarkar. Decision tree: Review of techniques for missing values at training, testing and compatibility. In *Artificial Intelligence, Modelling and Simulation (AIMS), 2015 3rd International Conference on*, pages 122–126. IEEE, 2015.
7. Theofilis George-Nektarios. *Weka classifiers summary*. Athens University of Economics and Business Intracom-Telecom, Athens, 2013.
8. Jerzy W Grzymala-Busse and Ming Hu. A comparison of several approaches to missing attribute values in data mining. In *International Conference on Rough Sets and Current Trends in Computing*, pages 378–385. Springer, 2000.

9. Nicholas Horton and Ken P. Kleinman. Much ado about nothing: A comparison of missing data methods and software to fit incomplete data regression models. *The American Statistician*, 61:79–90, 2007.
10. Mohammed Khalilia, Sounak Chakraborty, and Mihail Popescu. Predicting disease risks from highly imbalanced data using random forest. *BMC medical informatics and decision making*, 11(1):51, 2011.
11. Ron Kohavi, Barry Becker, and Dan Sommerfield. Improving simple bayes. In *Proceedings of the European Conference on Machine Learning*. Citeseer, 1997.
12. Sotiris B Kotsiantis, I Zaharakis, and P Pintelas. Supervised machine learning: A review of classification techniques. *Emerging artificial intelligence applications in computer engineering*, 160:3–24, 2007.
13. M. Lichman. UCI machine learning repository. <http://archive.ics.uci.edu/ml>, 2013.
14. Roderick JA Little and Donald B Rubin. *Statistical analysis with missing data*. John Wiley & Sons, 2014.
15. J Ross Quinlan. *C4. 5: programs for machine learning*. Elsevier, 2014.
16. J Ross Quinlan et al. Bagging, boosting, and c4. 5. In *the Association for the Advancement of Artificial Intelligence (AAAI)*, Vol. 1, pages 725–730, 1996.
17. Donald B Rubin. Multiple imputation after 18+ years. *Journal of the American statistical Association*, 91(434):473–489, 1996.
18. Judi Scheffer. Dealing with missing data. *Research Letters in the Information and Mathematical Sciences*, 3(1):153–160, 2002.
19. Bernhard Schölkopf, Christopher JC Burges, and Alexander J Smola. *Advances in kernel methods: support vector learning*. MIT press, 1999.
20. Marina Soley-Bori. *Dealing with missing data: Key assumptions and methods for applied analysis*. Boston University School of Public Health, 2013.
21. Barbara G Tabachnick, Linda S Fidell, and Steven J Osterlind. *Using multivariate statistics*. Allyn and Bacon Boston, 2001.
22. Cao Truong Tran, Mengjie Zhang, Peter Andrae, Bing Xue, and Lam Thu Bui. Multiple imputation and ensemble learning for classification with incomplete data. In *Intelligent and Evolutionary Systems: The 20th Asia Pacific Symposium, IES 2016, Canberra, Australia, November 2016, Proceedings*, pages 401–415. Springer, 2017.
23. Geert JMG van der Heijden, A Rogier T Donders, Theo Stijnen, and Karel GM Moons. Imputation of missing values is superior to complete case analysis and the missing-indicator method in multivariable diagnostic research: a clinical example. *Journal of clinical epidemiology*, 59(10):1102–1109, 2006.
24. Ian H Witten, Eibe Frank, Mark A Hall, and Christopher J Pal. *Data Mining: Practical machine learning tools and techniques*. Morgan Kaufmann, 2016.
25. Xindong Wu, Vipin Kumar, J Ross Quinlan, Joydeep Ghosh, Qiang Yang, Hiroshi Motoda, Geoffrey J McLachlan, Angus Ng, Bing Liu, S Yu Philip, et al. Top 10 algorithms in data mining. *Knowledge and information systems*, 14(1):1–37, 2008.

Redefining Borders in the Era of Digital Globalisation: A Study of India-China Border Disagreements

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INTRODUCTION

The notion of digital globalisation has played a pivotal role in eliminating limitations related to location and distance. The way corporations, governments, and individuals communicate with each other has been changed by the real-time transfer of data, speech, and video across continents. The use of video conferencing, social networking, and instant messaging has transformed cross-cultural communication. People can instantly communicate with friends, relatives, and coworkers who are in different time zones. Global exchange of ideas and the sharing of literature, music, and art are made possible by digital networks, which promote cross-cultural appreciation and understanding (Osler & Zahavi, 2023) friends, and colleagues. Even as lockdowns and restrictions ease many are encouraging us to embrace the replacement of face-to-face encounters with technologically mediated ones. Yet, as philosophers of technology have highlighted, technology can transform the situations we find ourselves in. Drawing insights from the phenomenology of sociality, we consider how digitally-enabled forms of communication and sociality impact our experience of one another. In particular, we draw attention to the way in which our embodied experience of one another is altered when we meet in digital spaces, taking as our focus the themes of perceptual access, intercorporeality, shared space, transitional spaces, and self-presentation. In light of the way in which technological mediation alters various dimensions of our social encounters, we argue that digital encounters constitute their own forms of sociality requiring their own phenomenological

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analysis. We conclude our paper by raising some broader concerns about the very framework of thinking about digitally and non-digitally mediated social encounters simply in terms of replacement.”,”container-title”:”Foundations of Science”,”DOI”:”10.1007/s10699-022-09861-1”,”ISSN”:”1572-8471”,”issue”:”4”,”journalAbbreviation”:”Found Sci”,”language”:”en”,”page”:”1125-1142”,”source”:”Springer Link”,”title”:”Sociality and Embodiment: Online Communication During and After Covid-19”,”title-short”:”Sociality and Embodiment”,”URL”:”https://doi.org/10.1007/s10699-022-09861-1”,”volume”:”28”,”author”:{{”family”:”Osler”,”given”:”Lucy”},{”family”:”Zahavi”,”given”:”Dan”}},”accessed”:{{”date-parts”:[[”2024”,4,9]]},”issued”:{{”date-parts”:[[”2023”,12,1]]}}},”schema”:”https://github.com/citation-style-language/schema/raw/master/csl-citation.json”} . Digitalisation changes the economics of globalization in several ways (Gawel et al., 2023) SMEs represent as much as 99% of businesses, but only 3 out of 10 companies have some international involvement. EU policy makers perceive SMEs internationalization as a desired path for global growth; thus, they have put forward certain tools which aim to boost the pace and scope of internationalization, i.e., by creating and facilitating access to support activities, sharing information, promoting cluster and networking initiatives, making support schemes consistent throughout the EU, etc. (Della Corte, Handbook of research on strategic Management in Small and Medium Enterprises. IGI Global, 2014).

The physical features of border regions have changed significantly in recent years; national boundaries grow ever more porous in most part of the world (Gülzau et al., 2021). Global trade is now practically acknowledged as the standard in business dealings. Together with the digital technology revolution, the globalisation period promises to keep challenging preconceived concepts by introducing fresh perspectives on how to comprehend international borders and the areas they affect. Borders are no longer obstacles to connectivity; they are only lines on a map that can be easily traversed by digital information (Herzog, 2014). As global processes transcended borders and brought societies on either side closer together socio-economically, borders were seen as becoming “softer.” Cross-border change studies in different places brought attention to the new borders discourse (Deiana et al., 2022).

The significance and complexity of borders have also increased with rising digital technology and globalisation. While border security issues like migration allowed for “the importance of territoriality as central component of sovereignty, and as an ordering principle in world politics,” increased trade and commerce between states, among other global processes, have come to erode the reality of borders under the influence of the global economy (Rudolph, 2005). To put it another way, borders have transformed into linear points of contact between nations, cultures, and communities as a result of digital globalisation, opening up the possibility of both collaboration and conflict in the areas where states border. In the current political atmosphere, anything “global,” “world,” or “united” is essentially demonised, but anything “national,” “us versus them,” or “protectionist” is applauded. People often ignore, nevertheless, the basic and undeniable truth that nationalism and protectionism have never historically resulted in prosperity for the entire community (“Digital Globalisation vs Geopolitical Globalisation,” 2017).

BRIEF INTRODUCTION OF INDIA-CHINA BORDER DISPUTE

The history of the current border disagreements between India and China dates back to the 1950s. Their relationship was friendly for a short while following India's independence and the Chinese People's Liberation Army (PLA) overthrew the Kuomintang, creating the People's Republic of China (PRC), but it quickly gave way to a period of mistrust and hostility, especially after China annexed Tibet in 1950–1951 (Karackattu, 2018).

The 1962 War prompted India and China to view their borderlands as national security frontiers, with both armies deployed (Panda, n.d.). Disagreements over border demarcation have increased friction along the Line of Actual Control (LAC), resulting in contested borders and a volatile relationship. The India-China border is divided into three sectors, viz. Western, Middle and Eastern (Sali, 1998).

There have been several meetings between Indian and Chinese officials to try to resolve the issue over the border since the first round of negotiations took place in 1981. The two countries are also engaged in Confidence Building Measures (CBMs) on the border with bilateral agreements signed in 1993, 1996, 2005, 2012 and 2013. It was agreed upon by both parties at the start of the twenty-first century that the boundary dispute would not impact their bilateral relations (*Agreement between the Government of the Republic of India and the Government of the People's Republic of China on the Political Parameters and Guiding Principles for the Settlement of the India-China*, n.d.). Nevertheless, even after over four decades of official level talks and several agreements signed, border incidents persisted, and the breach at the LAC has developed into one of the longest-running border conflicts globally (Kalyankar et al., 2024).

APPROACHES TO THE STUDY OF 'BORDERS' IN INTERNATIONAL RELATIONS

Across fields, a number of viewpoints and methods for studying "borders" have evolved. Nonetheless, two main methods for studying "borders" in international relations can be distinguished or examined in the context of the current study, namely:

(a) The Traditional/Classical Approach (b) The Modern or Liberal Approach

The Traditional/Classical Approach

Borders have historically been viewed primarily from a military perspective in Europe, with the goal of defending a country against intruders, attacks, and other powers. This conventional method of boundaries in international relations, which place a strong emphasis on the authority and sovereignty of the state, is consistent with the realist approach to "borders" in international relations, which sees borders in terms of secure states (Nail, 2016). In the minds of realists like Gilpin, Kenneth Waltz, and John Mearsheimer, boundaries are viewed as military locations. In their view, boundaries essentially refer to areas associated with a state's security and the pursuit of its national interests in a world where governments compete with one another to gain the most power possible to forward their own agendas (Harknett & Yalcin, 2012). From their perspective, dangers to a nation's security and interests are external and of a military origin.

The Realist approach views borders as strategic places for defense or breaking, linked to the formation of the modern state as a war machine. Charles Tilly argues that the modern state has been built on the practice of war, which has transformative value (Ganster, 1997). Borders are strategically separated from the state's authority and sovereignty for national security and interests.

The Liberal Approach

Liberal approaches view borders as the movement of trade and commerce between states in the international system, in contrast to the Realist interpretation of borders in military terms. Scholars like Robert Keohane and Joseph S. Nye Jr. in their work, *Power and Interdependence* (Nye, 1987), came out with the idea of 'complex interdependence' to describe the emerging nature of the global political economy and international relations. Their key argument was that the old ideas of state authority and sovereignty are being challenged by the "increasing complex webs of economic interdependence," which also serve to increase the influence of transnational actors in international relations. Further, in his work, *The Rise of the Trading State* (Rosecrance, 1987), Richard Rosecrance's highlights that states that prioritized international commerce and investment over military control were the most prosperous in the late 20th century. Technological advancements have made it easier to communicate and move commodities, reducing international business costs and increasing benefits for states. Therefore, borders are viewed as transaction points rather than as lines in this sense.

From the above discussions of the traditional and liberal perspectives on the concept of "borders" in international relations, it is evident that the liberals view "borders" as points of socio-cultural or economic contact, or as transaction points in international relations, whereas the traditionalists' view "borders" from the perspective of the military and security. It is true that ideas of state sovereignty and the significance of borders have diminished in today's increasingly interdependent and digital globalised society. Consequently, a more crucial subject for academics and researchers is the study of borders and how they alter in the digitally globalised world.

CONCLUSION

Several studies have emphasised, from various angles and viewpoints, the connection between borders, territory, and international conflict (Diehl & Goertz, 1988). Wallenstein's research on major states between 1815 and 1976 highlights the role of contiguity in generating conflict that escalates into military skirmishes (Wallenstein, 1981). According to Bremer's research (Bremer, 1992), proximity is the most significant of seven theoretically critical factors that are thought to increase the likelihood of war: geographic proximity, roughly equal power, major powers, allies, undemocratic, economically advanced, and militarised. Similarly, India and China coexisted peacefully for more than 2,000 years. After China annexed Tibet in 1950–1951, the current border disagreements between the two nations began in the 1950s. This resulted in the border between India and China taking the place of the one between Tibet and India (Sali, 1998), which gave rise to one of the longest-running border disputes in history.

However, numerous other studies have contended that more opportunities for engagement do not inevitably translate into an increase in disputes between nations. Research has indicated that increased opportunity could potentially result in states acting more cooperatively (Hataley & Leuprecht, 2018) (Aleprete Jr. & Hoffman, 2012). According to Starr and G. Dale Thomas (Starr & Thomas, 2005), there is a positive correlation between favourable interdependence and integration effects between states and high levels of cross-border interaction ease, or increased interaction chances. To put it briefly, more interaction levels bring with them the possibility of greater benefits, which nations can achieve by choosing how much or little to open their borders.

Academics have suggested that if border officials from two adjacent states have greater opportunities to contact, they will likely cooperate (Hataley & Leuprecht, 2018). As such, digital globalisation has created a global bond that transcends national boundaries, dismantling geographical barriers for knowledge exchange, economic collaboration, and cross-cultural interaction. As connectivity increases and technology develops, this will remain the backbone of globalisation, paving the way for an infinite future of collaboration and opportunity. Rather of being mired in conflict, India and China, the two emerging nations utilising these advantages, may gain from each other and open the door to a bright future. Though it is still too early to tell if the decades' efforts to rebuild China-Indian relations and cooperation will have a discernible and positive impact on the overall growth of diplomatic ties and ultimately result in the settlement of the primary roadblock—the border disputes between the two nations—they are encouraging nonetheless.

Bibliography

1. Agreement between the Government of the Republic of India and the Government of the People's Republic of China on the Political Parameters and Guiding Principles for the Settlement of the India-China. (n.d.). Retrieved April 9, 2024, from <https://www.mea.gov.in/bilateral-documents.htm?dtl/6534/Agreement+between+the+Government+of+the+Republic+of+India+and+the+Government+of+the+Peoples+Republic+of+China+on+the+Political+Parameters+and+Guiding+Principles+for+the+Settlement+of+the+IndiaChina+Boundary+Question>
2. Aleprete Jr., M. E., & Hoffman, A. M. (2012). The Strategic Development of Border Areas: Explaining Variation in Interaction Opportunity Across Land Borders. *International Interactions*, 38(1), 1–28. <https://doi.org/10.1080/03050629.2012.640207>
3. Bremer, S. A. (1992). Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1816-1965. *Journal of Conflict Resolution*, 36(2), 309–341. <https://doi.org/10.1177/0022002792036002005>
4. Cardoso, G. (n.d.). Edited by Manuel Castells.
5. Castells, M. (1991). *The Informational City: A New Framework for Social Change* [Working Paper]. Centre for Urban and Community Studies, University of Toronto. <https://tspace.library.utoronto.ca/handle/1807/94355>
6. Deiana, M.-A., Komarova, M., & McCall, C. (2022). *Cross-Border Cooperation as Conflict Transformation: Promises and Limitations in EU Peacebuilding*. Routledge.
7. Diehl, P. F., & Goertz, G. (1988). Territorial Changes and Militarized Conflict. *Journal of Conflict Resolution*, 32(1), 103–122. <https://doi.org/10.1177/0022002788032001005>

8. Digital globalisation vs geopolitical globalisation: A tale of two worlds. (2017, June 18). *The Economic Times*. <https://economictimes.indiatimes.com/tech/internet/digital-globalisation-vs-geopolitical-globalisation-a-tale-of-two-worlds/articleshow/59173111.cms?from=mdr>
9. Ferguson, Y. H., & Mansbach, R. W. (2012). *Globalization: The Return of Borders to a Borderless World?* Routledge. <https://doi.org/10.4324/9780203121382>
10. Ganster, P. (1997). *Borders and Border Regions in Europe and North America*. SCERP and IRSC publications.
11. Gaweł, A., Mroczek-Dąbrowska, K., & Pietrzykowski, M. (2023). Digitalization and Its Impact on the Internationalization Models of SMEs. In R. Adams, D. Grichnik, A. Pundziene, & C. Volkmann (Eds.), *Artificiality and Sustainability in Entrepreneurship: Exploring the Unforeseen, and Paving the Way to a Sustainable Future* (pp. 19–40). Springer International Publishing. https://doi.org/10.1007/978-3-031-11371-0_2
12. Gülzau, F., Mau, S., & Korte, K. (2021). Borders as places of control. Fixing, shifting and reinventing state borders. An introduction. *Historical Social Research*, 46(3), 7–22. Scopus. <https://doi.org/10.12759/hsr.46.2021.3.7-22>
13. Harknett, R. J., & Yalcin, H. B. (2012). The Struggle for Autonomy: A Realist Structural Theory of International Relations. *International Studies Review*, 14(4), 499–521. <https://www.jstor.org/stable/41804152>
14. Hataley, T., & Leuprecht, C. (2018). Determinants of Cross-Border Cooperation. *Journal of Borderlands Studies*, 33(3), 317–328. <https://doi.org/10.1080/08865655.2018.1482776>
15. Herzog, L. A. (2014). Globalisation, Place and Twenty-First-Century International Border Regions: An Introduction to the Special Issue. *Global Society*, 28(4), 391–397. <https://doi.org/10.1080/13600826.2014.948542>
16. Kalyankar, A. (Vasudeva), Jordan, Z., & Schuchert, B. (2024). On the Precipice: Crisis and Confrontation on the China-India Border. In *China's Use of Armed Coercion*. Routledge.
17. Karackattu, J. T. (2018). India–China Border Dispute: Boundary-Making and Shaping of Material Realities from the Mid-Nineteenth to Mid-Twentieth Century. *Journal of the Royal Asiatic Society*, 28(1), 135–159. <https://www.cambridge.org/core/journals/journal-of-the-royal-asiatic-society/article/indiachina-border-dispute-boundarymaking-and-shaping-of-material-realities-from-the-midnineteenth-to-midtwentieth-century/FF1BC86F0A052D5491083ED7DE6882C1>
18. Nail, T. (2016). *Theory of the Border*. Oxford University Press.
19. Nye, J. S. (1987). Power and Interdependence Revisited. *International Organization*, 41(4), 725–753. <https://www.jstor.org/stable/2706764>
20. Osler, L., & Zahavi, D. (2023). Sociality and Embodiment: Online Communication During and After Covid-19. *Foundations of Science*, 28(4), 1125–1142. <https://doi.org/10.1007/s10699-022-09861-1>
21. Panda, A. (n.d.). Why the 'Old Normal' Along the Sino-Indian Border Can No Longer Stand. Retrieved April 9, 2024, from <https://thediplomat.com/2020/07/why-the-old-normal-along-the-sino-indian-border-can-no-longer-stand/>
22. Rosecrance, R. (1987). *Rise Trading State*. Basic Books.
23. Rudolph, C. (2005). Sovereignty and Territorial Borders in a Global Age. *International Studies Review*, 7(1), 1–20. <https://www.jstor.org/stable/3699618>
24. Sali, M. L. (1998). *India-China Border Dispute: A Case Study of the Eastern Sector*. A.P.H. Publishing Corporation.

25. Starr, H. (2006). International Borders: What They Are, What They Mean, and Why We Should Care. *The SAIS Review of International Affairs*, 26(1), 3–10. <https://www.jstor.org/stable/26999290>
26. Starr, H., & Thomas, G. D. (2005). The Nature of Borders and International Conflict: Revisiting Hypotheses on Territory. *International Studies Quarterly*, 49(1), 123–139. <https://www.jstor.org/stable/3693627>
27. Wallensteen, P. (1981). Incompatibility, Confrontation, and War: Four Models and Three Historical Systems, 1816–1976. *Journal of Peace Research*, 18(1), 57–90. <https://doi.org/10.1177/002234338101800104>

Impact of Digital Globalization on the Indian Education System

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INTRODUCTION

- Digital globalization refers to the interconnectedness and integration of digital technologies, communication networks, and information systems on a global scale. It encompasses the rapid spread of digital tools, platforms, and content across borders, enabling seamless communication, collaboration, and exchange of information among individuals, organizations, and societies worldwide. Digital globalization has revolutionized various sectors, including education, business, healthcare, and entertainment, by breaking down traditional barriers and facilitating the flow of data, ideas, and resources across geographical boundaries.
- The Indian education system, one of the largest globally, encompasses primary, secondary, higher education, and vocational training levels. Governed by entities like the Ministry of Education, state boards, UGC, and AICTE, it features a blend of public and private institutions emphasizing academic excellence and competitive exams. The curriculum includes core subjects with a rote learning focus. Challenges such as access disparities, outdated teaching methods, and limited vocational training opportunities persist. Ongoing reforms aim to leverage digital technologies, enhance skill development, and elevate teaching quality in response to these challenges.
- The impact of digital globalization on the Indian education system is a multifaceted phenomenon that influences teaching methods, learning outcomes, access to education, and the overall educational landscape in India. This research aims to explore how the integration of digital technologies

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in education, driven by global interconnectedness, is reshaping traditional educational practices, addressing educational inequities, and preparing students for the demands of the digital age in India.

DIGITAL GLOBALIZATION AND EDUCATION

- Digital globalization encompasses various components that shape the interconnected world we live in today:

 1. **Digital Connectivity:** Digital globalization facilitates instant global communication through various digital platforms such as social media, messaging apps, and video conferencing tools. This connectivity allows individuals and businesses to interact across borders in real-time, fostering collaboration and relationships on a global scale.
 2. **Information Flow:** One of the key aspects of digital globalization is the global exchange of data and knowledge. Information can now be shared swiftly and effortlessly, enabling access to a vast pool of resources and expertise from around the world. This flow of information contributes to innovation, education, and the dissemination of ideas on a global level.
 3. **Technological Innovation:** Digital globalization is closely linked to the continuous development of digital tools and technologies. The rapid advancements in areas such as artificial intelligence, blockchain, and cloud computing drive innovation and create new opportunities for businesses and individuals to enhance productivity and efficiency.
 4. **Cultural Exchange:** Through digital platforms, people can engage in cultural exchange by sharing ideas, traditions, and practices worldwide. This exchange of cultural knowledge promotes diversity, understanding, and unity among different communities globally.
 5. **Economic Integration:** Digital globalization plays a significant role in global market integration and trade opportunities. E-commerce platforms, online marketplaces, and digital payment systems facilitate cross-border transactions, enabling businesses to reach a broader customer base and participate in the global economy.
 6. **Cybersecurity:** With the increased reliance on digital systems, cybersecurity becomes a critical component of digital globalization. Protecting digital infrastructure, data, and privacy is essential to ensure the secure functioning of the interconnected global network and to safeguard against cyber threats and attacks.

- Digital technologies revolutionize education by enhancing access to information, enabling interactive learning platforms, and facilitating personalized teaching methods. They empower students with diverse resources, promote collaboration among learners globally, and prepare individuals for the digital age job market, fostering a more dynamic and inclusive educational experience.
- Digital globalization reshapes education systems worldwide by facilitating online learning, expanding access to educational resources, and fostering cross-cultural collaboration. It challenges traditional teaching methods,

promotes lifelong learning, and prepares students for a digitalized workforce. However, it also exacerbates the digital divide, requiring equitable access to technology for all learners.

DIGITAL TRANSFORMATION IN INDIAN EDUCATION

- The Indian education sector is undergoing a digital transformation, integrating technology to enhance teaching, learning, and administrative processes. This shift enables personalized learning experiences, improves educational access, and fosters innovation in pedagogical approaches. It aims to prepare students for a technology-driven world, revolutionizing the education landscape in India.
- The Indian government has launched initiatives like the Digital India campaign, National Digital Literacy Mission, SWAYAM platform, and PM eVIDYA program to promote digital learning. These efforts aim to enhance digital literacy, provide online education resources, and bridge the digital divide by ensuring access to quality education for all.
- Schools and universities are increasingly adopting digital technologies such as online learning platforms, virtual classrooms, educational apps, and digital assessments.
- These tools enhance teaching effectiveness, student engagement, and access to educational resources, transforming traditional learning environments into more dynamic and interactive spaces.

BENEFITS OF DIGITAL GLOBALIZATION IN INDIAN EDUCATION

1. Improved Access to Education

Digital technologies have democratized access to education by breaking down geographical barriers. Students from remote areas can now access quality educational resources online, thereby expanding educational opportunities for all.

2. Enhanced Learning Experiences

Interactive learning platforms, multimedia content, and virtual classrooms have revolutionized the way students engage with educational material. These innovative tools make learning more engaging, immersive, and effective, leading to better retention and understanding of concepts.

3. Personalized Learning Opportunities

Digital platforms enable personalized learning experiences tailored to individual student needs and learning styles. Adaptive learning algorithms analyse student performance data to provide customized learning paths, ensuring that each student receives education at their own pace and level.

4. Skill Development and Employability

Digital globalization fosters the development of 21st-century skills such as digital literacy, critical thinking, problem-solving, and collaboration. By integrating technology into education, students are better prepared for the demands of the modern workforce, enhancing their employability and career prospects.

CHALLENGES FACED BY INDIAN EDUCATION SYSTEM

1. Digital Divide among Urban and Rural Areas

Disparities in access to digital infrastructure and internet connectivity create a significant digital divide between urban and rural areas. Many rural schools lack the necessary technology and internet access, hindering students' ability to benefit from online learning resources.

2. Infrastructure Limitations

Inadequate infrastructure, such as lack of computers, poor internet connectivity, and power outages, pose significant challenges to the effective implementation of digital technologies in schools and universities. Without proper infrastructure, the potential of digital learning remains largely untapped.

3. Quality of Online Education

Ensuring the quality of online education poses a challenge, as the effectiveness of digital learning platforms and content varies widely. Maintaining standards of teaching, assessment, and student engagement in the online environment requires continuous monitoring and evaluation to uphold educational quality.

4. Regulatory Challenges and Policy Implications

Complex regulatory frameworks, outdated policies, and lack of clear guidelines for digital education create uncertainty and hinder innovation in the education sector. Adapting regulations to accommodate new technologies, ensuring data privacy, and addressing issues of digital literacy are crucial policy considerations.

CASE STUDIES OR EXAMPLES

Successful Implementation of Digital Technologies in Indian Education

1. Khan Academy

- **Overview:** Khan Academy, a non-profit organization, offers free online educational resources covering various subjects.
- **Impact:** Khan Academy has been widely adopted in Indian schools to supplement traditional teaching methods. It provides interactive lessons, practice exercises, and personalized learning paths, improving student engagement and academic performance.

2. Byju's - The Learning App

- **Overview:** Byju's is an online learning platform offering interactive video lessons and adaptive learning modules.
- **Impact:** Byju's has revolutionized the way students learn by providing engaging content, real-time feedback, and personalized learning experiences. Its data-driven approach has shown significant improvements in student comprehension and retention.

Impact of Digital Tools on Student Learning Outcomes

1. Virtual Labs for Science Education:

- **Scenario:** Several Indian institutions have implemented virtual labs to simulate science experiments.

- **Impact:** Virtual labs allow students to conduct experiments in a safe and cost-effective manner, enhancing their practical understanding of scientific concepts. This hands-on experience improves critical thinking skills and boosts overall learning outcomes.

2. Gamification in Learning Platforms:

- **Scenario:** Educational apps and platforms in India incorporate gamification elements to make learning more interactive.
- **Impact:** Gamified learning tools motivate students through rewards, challenges, and competition, leading to increased engagement and improved learning outcomes. Students develop problem-solving skills, perseverance, and subject mastery through these interactive digital tools.

FUTURE TRENDS AND RECOMMENDATIONS

In the foreseeable future, digital education in India is poised to witness increased EdTech adoption, blended learning models, and a heightened focus on skill development. Policymakers should prioritize infrastructure investments, educators must undergo digital training, and stakeholders should foster collaborations for innovation. Strategies include digital literacy initiatives, quality assurance mechanisms, and policy reforms to ensure effective digital education delivery. By implementing these recommendations, India can address challenges, maximize benefits, and create a conducive environment for leveraging technology to enhance learning outcomes, empower educators, and provide inclusive and quality education for all students nationwide.

CONCLUSION

In exploring the landscape of digital education in India, key findings reveal a shift towards increased adoption of EdTech, blended learning models, and a focus on skill development. Challenges such as the digital divide, infrastructure limitations, and quality concerns underscore the need for strategic interventions and collaborative efforts.

Digital globalization presents opportunities for improved access to education, enhanced learning experiences, personalized learning opportunities, and skill development for employability. However, it also highlights challenges like the digital divide, infrastructure constraints, and quality assurance issues that must be addressed for equitable and effective digital education delivery.

As India navigates the digital era in education, a proactive approach involving infrastructure investments, teacher training, collaboration, digital literacy initiatives, quality assurance mechanisms, and policy reforms is crucial. The future holds promise for a more inclusive, flexible, and innovative education system that leverages technology to empower learners, educators, and stakeholders, ultimately shaping a knowledge-driven society equipped to meet the demands of the future. Embracing digital transformation in education will be pivotal in fostering a culture of lifelong learning, creativity, and adaptability in the evolving landscape of the digital era.

References

1. [Digital Education Challenges and Opportunities in India] (Title: Digital Education Challenges and Opportunities in India)
2. [DIGITAL EDUCATION: FUTURE OF TEACHING-LEARNING] (Title: DIGITAL EDUCATION: FUTURE OF TEACHING-LEARNING)
3. [The Future of Online Education in India (Updated 2024) - IIM SKILLS] (Title: The Future of Online Education in India (Updated 2024) - IIM SKILLS)
4. [India Report Digital Education] (Title: India Report Digital Education)
5. [Challenges and future direction of online and blended education] (Title: Challenges and future direction of online and blended education)

English Literature in Digital Globalization: Effects and Impacts

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INTRODUCTION

Digital globalization refers to how the world is becoming more connected through digital technologies like the internet, smartphones, and social media. Just like how people can talk to each other from different countries using phones, now they can also share ideas, information, and even

work together online. A renowned scholar Manuel Castells describes it as "the process by which digital technologies and communication networks transcend national boundaries, connecting individuals, businesses, and governments in unprecedented ways" (Castells, 2010). Digital globalization makes it easier for people from all over the world to communicate, trade, and connect with each other. Imagine being able to watch movies, read books, or listen to music from another country without even leaving your home - that's the power of digital globalization! It's like the whole world is becoming a big digital neighbourhood where everyone can interact and learn from each other. As more and more people use digital tools and platforms, the world becomes smaller and more accessible, breaking down barriers and creating new opportunities for collaboration and understanding. Digital globalization is changing the way we live, work, and interact with each other, shaping our world into a more connected and inclusive place. Digital globalization, as defined by Joseph Nye, a prominent political scientist, characterizes digital globalization as "the increasing flow of information, ideas, and capital across borders, driven by advancements in digital technologies" (Nye, 2019). Like other aspects of life, digital globalization has transformed English literature by transcending borders, democratizing

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publishing, and fostering innovative literary forms. Through digital platforms, literature reaches global audiences, enabling cultural exchange and expanding creative possibilities. This interconnectedness enriches the literary landscape, shaping the evolution of English literature in the digital age.

CREATION, DISTRIBUTION AND ACCESSIBILITY

Digital globalization has democratized the production and creation of English literature. Writers from diverse backgrounds can now publish their works online without the need for traditional publishing houses. Platforms such as Medium, Wattpad, and Kindle Direct Publishing have empowered aspiring authors to reach a global audience directly (Castro, 2018). According to

Castro (2018), “the rise of self-publishing platforms has allowed writers to bypass traditional gatekeepers and bring their stories directly to readers, thereby democratizing the production process.”

The digital landscape has transformed the distribution and accessibility of English literature. E-books and audiobooks have made literary works more accessible to readers across geographical and socio-economic boundaries (Liu, 2019). Liu (2019) argues that “the availability of e-books has democratized access to literature, allowing readers from diverse backgrounds to explore English literary works conveniently.” Furthermore, online retailers like Amazon have revolutionized the book market, offering a vast selection of English literary works that can be delivered instantly or downloaded digitally (Smith, 2020).

Consumption and Reception

Digital globalization has altered the ways in which English literature is consumed and received by audiences. The rise of social media, blogs, and online forums has transformed the reader-author relationship, enabling direct communication and interaction between writers and their audience (Williams, 2017). Williams (2017) notes that “social media platforms have facilitated meaningful engagement between authors and readers, creating opportunities for literary discussions and collaborative storytelling.” Moreover, the internet has enabled the dissemination of multimedia storytelling, blending text with audio, video, and interactive elements to create immersive reading experiences (Jackson, 2021).

Technology has changed the face of literature in modern times. New communication channels like the Internet and social media offer authors new expression opportunities. Nowadays, e-books and audiobooks have changed the reading process. E-readers and e-books have revolutionized how

readers get hold of literature. What makes e-books a desirable alternative because they enable one to carry around as many books as one could ever possess. All the required information about any book from across the globe is available only with a few taps. On the other hand, the digital world has questioned the future of print, with many readers having regrets about the tactile pleasure they enjoy in handling, smelling, and feeling physical books. Conversely, audiobooks have extended easier accessibility of literature to people who do not have enough time for conventional readings. They have created possibilities for multi-tasking whereby those in transit can read while on the commute and at home. Even some authors like Neil Gaiman and Stephen Fry have become popular by narrating

their audiobooks, giving the literature experience a special feel.

The advent of podcasts has also added another medium through which literature can be spread. Literary podcasts, such as “The New Yorker: The two platforms, “Fiction” and “The Moth,” give a chance to authors to present their work during audio performances.” The podcasts provide audiences with different literary genres and authors from across borders, thus giving them unconventional tales they could not find elsewhere. Podcasts are also a good means of discussing literature, making it a popular platform for literary criticism and analyses.

EVOLUTION OF LITERARY FORMS

The digital age has catalysed the evolution of literary forms and genres within English literature. The emergence of hypertext fiction, interactive narratives, and digital poetry has challenged traditional notions of storytelling and pushed the boundaries of literary expression (Gomez, 2018). Gomez (2018) suggests that “digital technologies have enabled authors to experiment with nonlinear narratives and multimedia elements, creating dynamic and immersive literary experiences.” Additionally, the internet has facilitated the dissemination of serialized fiction, fan fiction, and other non-traditional literary forms, fostering a culture of participatory storytelling and collective creativity (Lee, 2020).

PRESERVATION AND ARCHIVING

Digital globalization has revolutionized the preservation and archiving of English literature, ensuring the longevity and accessibility of literary works for future generations. Digital libraries, archives, and repositories have digitized rare manuscripts, historical texts, and out-of-print books, making them available for online access and study (Johnson, 2019). He argues that “digital preservation efforts play a crucial role in safeguarding the cultural heritage and literary legacy of English literature.” Initiatives such as Project Gutenberg and Google Books have undertaken large-scale digitization projects to digitize and archive millions of English literary works in the public domain, ensuring that they remain accessible and discoverable in the digital age (Roberts, 2020).

RISE OF DIGITAL LITERATURE

However, today's world is marked by a fast-paced technological development characterized by the emergence of digital platforms, which have significantly affected literature. New prospects and problems have arisen for authors, readers, and literature at large in the era of technocratic age. Literary expression has found new fertile ground in social media platforms like Twitter, Instagram, and Tumblr. Through short but sharp posts, authors are now interacting with audiences worldwide; their words reach far and wide. Twitterature or Twitter-literature, in short, takes the form of storytelling, with authors telling stories within a limit of 280 characters or less. With this short, direct mode of expression, the writers have been able to interact with their readers and other authors right on the spot. Smith (2017) points out, —Twitterature squeezes writers to reduce their thoughts to the bare essentials — every word counts, and the narrowness of medium pushes authors to invent new ways of narration.

The phenomenon of —Instagram poetry || has grown out of Instagram, a website famous for its visual content. It is where poets craft very short, visually effective poems with compelling imagery. It can revolve around global challenges,

personal stories, or general sentiments and emotions. The platform has a large and heterogeneous audience it can reach, which enhances its ability to be popular worldwide. As Martinez (2010) noted, the blend of visionary and textual features in Instagram poetry allows readers to examine literature within the multimedia mode.

CONCLUSION

In conclusion, digital globalization has had a profound and multifaceted impact on English literature, influencing its production, distribution, consumption, and evolution. While digital technologies have democratized access to literary works and expanded the possibilities for storytelling, they have also raised questions about copyright, authenticity, and the future of the publishing industry. Nevertheless, the digital age presents exciting opportunities for English literature to thrive in a globalized world, connecting readers and writers across borders and fostering a vibrant literary culture that reflects the diversity and interconnectedness of contemporary society.

References

1. Liu, B. (2019). E-books and the democratization of literature. *Journal of Digital Lit*, 12(2), 78-91.
2. Smith, J. (2020). The impact of online retailers on the book market. *Kurb Journal of Research*, 45(3), 234-248.
3. Williams, K. (2017). Social media and the reader-author relationship. *D&C Review*, 28(4), 189-202.
4. Smith, Z. (2019). The New Global Novel: Writing in the 21st Century. *The New York Review of Books*.
5. Jackson, M. (2021). Multimedia storytelling in the digital age. *Journal of Media Studies*, 15(1), 45-58.
6. Gomez, R. (2018). Exploring the boundaries of digital literature. *Digital Humanities Quarterly*, 22(3), 176-189.
7. Lee, S. (2020). Participatory storytelling in the age of the internet. *Storytelling Studies*, 7(2), 102-115.
8. Johnson, E. (2019). Digital preservation and the safeguarding of cultural heritage. *Library Quarterly*, 40(4), 321-335.
9. McLean, I. (2009). *Digitizing collections: Strategic issues for the information manager*. Facet Publishing.

Digital Environment: VNSG University's Departmental Libraries

Dr. Shaileshkumar C. Patel* & Dr. Shishir Mandalia**

INTRODUCTION

The developments in Information Communication Technology, especially the World Wide Web and Internet, have controlled to the large number of digital libraries. They are being created today for diverse communities and in different fields e.g. education, science, culture, development, defence, health, security, governance and so on. With the availability of several free digital Library software packages at the recent time, the creation and sharing of information through the digital library collections has become an attractive and feasible proposition for library and information professionals around the world. Library automation has helped to provide easy access to collections through the use of computerized library catalogue such as On-line Public Access Catalogue. Digital libraries differ significantly from the traditional libraries because they allow users to gain an on-line access to and work with the electronic versions of full text documents and their associated images. Library is providing information resources and services. In new era digital networking and communication infrastructure provides a global platform over which the users and organization devise strategies, interact, communicate, collaborate and search for information at Veer Narmad South Gujarat University's departmental libraries. There are digitalization products like databases, e-resources, news, information, books, magazines, online programming and software which are delivered over the digital infrastructure anytime, anywhere in the world.

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DIGITAL LIBRARY

A digital library is a collection of digital documents. This definition is the leading perception of many users of today. Though the focus of this definition is on the document collection, it stresses the fact that the digital libraries are much more than a random assembly of digital objects. They retain the several qualities of traditional libraries such as a defined community of users, focused collections, long-term availability, the possibility of selecting, organizing, preserving and sharing resources.

DEFINITION

"Digital libraries are organized collections of digital information. They combine the structuring and gathering of information, which libraries and archives have always done, with the digital representation that computers have made possible."

- Lesk (1997) [Mishra, Rakesh. (2016)]

"The digital library as Digital libraries are organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities.

- Digital Library Federation, USA [Mishra, Rakesh. (2016)]

CHARACTERISTICS

Digital libraries are needed to provide quality based service at the user desktop. A digital library provides equitable access to knowledge to all the users, irrespective of place, caste, colour or economic status. Digital library unites rather than divide. Therefore, there is a need of time to develop digital libraries. The main characteristics of digital libraries are as follows:

1. The function of acquisition, storage, preservation, retrieval is carried out through the use of digital technology.
2. Organized collection of information objects may be a digital text or any other.
3. Resources are available in technology readable form.
4. Access to the entire collection is globally available directly or indirectly.
5. Support users in dealing with information objects.

PURPOSE

1. Expedite the systematic development of procedures to collect, store, and organize, information in digital form.
2. Promote efficient delivery of information economically to all users.
3. Encourage co-operative efforts in research resource, computing, and communication networks.
4. Strengthen communication and collaboration between among institutions.
5. Take leadership role in the generation and dissemination of knowledge

FUNCTIONAL COMPONENTS:

Most digital libraries share common functional components. These include:

1. Digital Library provides access to very large information resources.
2. It supports multimedia contents.
3. Network accessible.
4. It provides user friendly interface.
5. Unique referencing of digital objects.
6. Enable link representation to local / external objects.
7. It supports advanced search and retrieval.
8. Information available for a very long time.
9. Also supports traditional library missions of collection development organization, access and preservation of information.
10. Support editing, publishing annotation and integration of information.
11. Integrate personal, group, enterprise, public digital libraries.

DIGITIZING DOCUMENTS

University Library provides six stages in digitizing documents for a digital library are Registering, Scanning, Optical Character Recognition, Proof reading, Reformatting and Final Version.

ADVANTAGES OF THE DIGITAL LIBRARY

A digital library is not confined to a particular location, it is virtually distributed all over the world. The user can get information on computer screen by using the internet. Actually, it is a network of multimedia system which provides fingertip access. The spoken words or the graphical display of a digital library is again having a different impact from the words that are printed. In the new environment owning a document will not be a problem for the library because the user will pay for its uses.

- (a) No Physical Boundary: The user of a digital library need not go to the library physically; users from all over the world could gain access to the same information.
- (b) Round the Clock Availability: Digital libraries can be accessed at any time, 24 hours a day and 365 days of the year.
- (c) Multiple Accesses: The same resources can be used at the same time by a number of users.
- (d) Wider access: A digital library can meet simultaneous access requests for a document by easily creating multiple instances or copies of the requested document. It can also meet the requirements of a larger population of users easily.
- (e) Improved access: Digital libraries are typically accessed through the Internet. They can be accessed virtually from anywhere and at any time. They are not tied to the physical location and operating hours of traditional library.
- (f) Structured Approach: Digital library provides access to much richer content in a more structured manner i.e. we can easily move from the catalogue to the particular book then to a particular chapter and so on.

- (g) Information Retrieval: The user is able to use any search term bellowing to the word or phrase of the entire collection. Digital library will provide very user-friendly interfaces, giving clickable access to its resources.
- (h) Preservation and Conservation: An exact copy of the original can be made any number of times without any degradation in quality. Since the electronic documents are not disposed to physical wear and tear, their exact copies can easily be made, the digital libraries facilitate preservation of special and rare documents and objects by providing access to digital versions of these entities.
- (i) Space: Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information, because digital information requires very little physical space. When the library had no space for extension digitization is the only solution.
- (j) Networking: A particular digital library can provide the link to any other resources of other digital library very easily.
- (k) Improved information sharing. Through the appropriate metadata and information exchange protocols, the digital libraries can easily share information with other similar digital libraries and provide enhanced access to users.
- (l) Cost: The cost of digital library is much lower than a traditional library. A traditional library must spend large sums of money paying for staff, book maintenance, rent, and additional books. Digital libraries do away with these fees.

Disadvantages of the Digital Library

The computer viruses, lack of standardization for digitized information, quick degrading properties of digitized material, different display standard of digital product and its associated problem, health hazard nature of the radiation from monitor, etc. makes digital libraries at times a handicap.

- (a) Copyright: Digitization violates the copy right law as the thought content of one author can be freely transferred by others without his acknowledgement. One difficulty to overcome for digital libraries is the way to distribute information. How does a digital library distribute information at will while protecting the copyright of the author?
- (b) Speed of Access: As more and more computer is connected to the internet its speed of access is reasonably decreasing. If new technology will not evolve to solve the problem then in near future internet will be full of error messages.
- (c) Initial Cost is high: The infrastructure cost of digital library i.e. the cost of hardware, software, leasing communication circuit is generally very high.
- (d) Band width: Digital library will need high bandwidth for transfer of multimedia resources but the band with is decreasing day by day.
- (e) Efficiency: With the much larger volume of digital information, finding the right material for a specific task becomes increasingly difficult.

- (f) Environment: Digital libraries cannot reproduce the environment of a traditional library. Many users also find reading printed material to be easier than reading material on a computer screen.
- (g) Preservation: Due to technological developments, a digital library can rapidly become out-of-date and its data may become inaccessible.

Veer Narmad South Gujarat University:

Veer Narmad South Gujarat University Act was passed by the end of 1965, in August 1966 the government of Gujarat appointed Shri Chandravadan Chunilal Shah was the first Vice-Chancellor and Shri Priyadatt Motiram Joshi as the first Registrar of the University. Thus, the University was incorporated during the Third five-year Plan period. It's vision "To be an institute of excellence in higher and technical education segment, sensitive to its regional needs and changing global realities". In pursuance of its vision, Veer Narmad South Gujarat University offers different programmes through well designed curricular, co-curricular and extra-curricular activities; undertakes research and reaches out to society at large with various extension activities, in order to empower its stakeholders for the world class skills in terms of: Research and enquiry, Creativity and Innovation, Capacity to use high technology and Value-based ethical leadership. Veer Narmad South Gujarat University has central library have all departments student's related physical and electronics reading materials with open access system.

University's Departmental Library

Sr. No.	Name of the Department	Library	Digitalization
1	Architecture - SFP	Yes	Not available
2	Aquatic Biology	No	Not available
3	Bio-Sciences	Yes	Not available
4	Biotechnology - SFP	Yes	Available
5	Business and Industrial Management	Yes	Available
6	Chemistry	Yes	Not available
7	Commerce - SFP	Yes	Not available
8	Comparative Literature	No	Not available
9	Computer Science	Yes	Available
10	Economics	Yes	Available
11	Education	Yes	Available
12	English	No	Not available
13	Fine Arts & Interior Design - SFP	Yes	Not available
14	Gujarati	No	Not available
15	Human Resource Development	Yes	Available

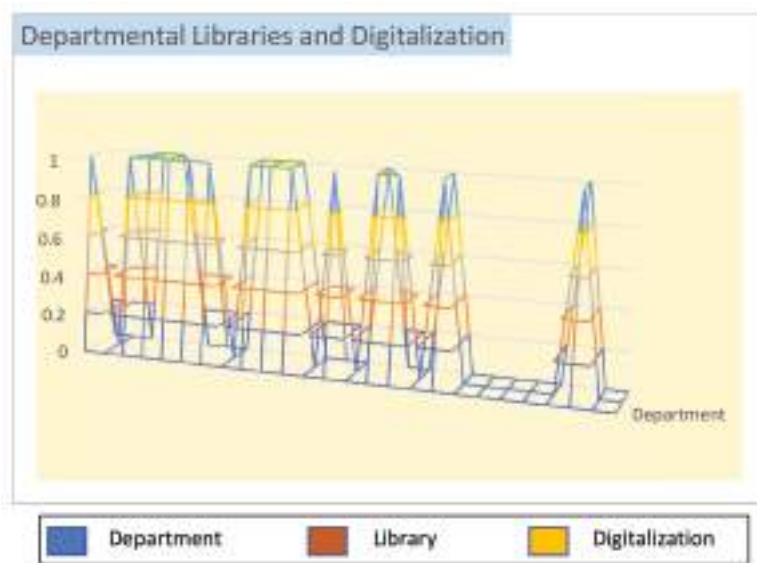
16	Information & Communication Technology - SFP	Yes	Available
17	Journalism and Mass Communication - SFP	No	Not available
18	Law - SFP	Yes	Available
19	Library and Information Science - SFP	No	Not available
20	Mathematics	No	Not available
21	Physics	No	Not available
22	Public Administration	No	Not available
23	Rural Studies	No	Not available
24	Sociology	Yes	Available
25	Statistics	No	Not available
26	University Science Instrumentation (USIC)	No	Not available

ROLE OF LIBRARIAN

Though the digital environment is built as a system which can be used by its ultimate end user directly from their desktops but the role of librarian cannot be overlooked. In digital environment also, the librarian and information scientist will be needed for packaging and repackaging of information, for electronic publishing, for reference purpose, to advice the user about the strategy to identify relevant electronic sources, etc. Thus, the librarian will be more or less an engineer. In the new digital environment, it will be very difficult for the librarian to decide what should be organized; how to give citation; how to organize the collection; etc because the new digital environment will be really challenging era.

CONCLUSION

Digital libraries are in fact probably too young to define in any permanent way, but how we think about them will have a great deal to do with how future generations of librarians conceptualize their mission in the digital world. At present academic biggest university's libraries facilitate users to access electronic versions of full-text documents and their associated images. but they haven't extra facilitated of digitalization some department hasn't library facility, their users use central library of university, so don't bring significant benefits to the users in this digital environment. Digital libraries are not going to replace the physical existence of document completely but no doubt to meet the present demand, to satisfy the non-local user digitization must be introduced so that at least libraries becomes of hybrid nature. The initial cost of digitization is high but experiment shows that once digitization is introduced then the cost to manage this collection will be cheaper than that of any traditional library. So, it is the pick time to all library and informational science professional to gear them in building digital library and taking it as a challenge. many departmental



libraries have digitization projects are underway with continued improvement and handling the technologies and e-books, digital libraries are rapidly growing in popularity.

References

1. Amudvalli, A. (2008). Dynamics in Digital Information Systems. Delhi: Ess Esss, p.223.
2. Anuradha P. (2017). The impact of digital technologies on academic libraries: challenges and opportunities. IP Indian Journal of Library Science and Information Technology, vol.2 (2), pp.46-50.
3. Arora, J. (2001). Building Digital Libraries: An Overview. DESIDOC Journal of Library & Information Technology, vol.21(6), pp.5-31.
4. Bera, S. K. (2016). Digital Library and its Services in the Modern IT Era. International Journal of Library and Information Studies, vol.6(4), pp.44-51.
5. Hertzum, M. and Hansen, P. (2019). Empirical studies of collaborative information seeking: A review of methodological issues. Journal of Documentation, vol.75(1), pp.140-163.
6. Kalpalatha, N. (2015). Digital Libraries - Digital Librarians and Future Roles. International Journal of Library and Information Science, vol.5(3), pp.135-139.
7. Kumar, M. S. (2020). Digital Library, Features, Strategies, Infrastructure and their Benefits for Users in Digital Era. Journal of Emerging Technologies and Innovative Research, vol.7(9), pp.964-975.
8. Mishra, Rakesh Kumar. (2016). Digital libraries: Definitions, issues and challenges. Innovare journal of education, vol. 4(3), pp.23-29.
9. Muthu, M. and Others (2013). A Changing Role of Libraries in Digital Era. International Journal of Emerging Trends in Library and Information Society, vol.1(2), pp.55-71.

10. Naik, Ramesh R. (2009). Changing Role of The College Library Professionals in the Internet Era: Trends, Opportunities and Challenges, Retrieved from: [<http://dliskud.over-blog.com/article-36027362.html>] Accessed on 03.03.2024.
11. Sadeh, T. (2008). User experience in the library: A case study. *New Library World*, vol.109(1/2), pp.7-24.
12. Seadle M. and Greifeneder, E. (2017). Defining a digital library. *Library Hi Tech*, vol.25(2), pp.169-173.
13. Shah, C. (2014). Collaborative information seeking: A literature review. *Advances in information science. Journal of the Association for Information Science and Technology*, vol.65(2), pp.215-236.
14. Singh, G. (2011). *Digital Libraries and Digitization*. Delhi: Ess Ess Publications, p.239.
15. Trivedi Mayank. (2010). Digital Libraries: Functionality, Usability, and Accessibility. *Library Philosophy and Practice*, vol.27(5), pp.1-5.
16. Veer Narmad South Gujarat University, Retrieved from [<https://www.vnsgu.ac.in>]
17. Whitten, Ian H., Bainbridge, David and Boddie, Stefan J. (2001). Greenstone: Open-Source digital library Software. *D-Lib Magazine*, vol.7(10), pp.64-68.

Impact of Digital Globalization on Folk Culture and Folk Artists of Assam

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INTRODUCTION

India is the meeting ground of diverse culture which represent cultural heritage of Indian region. Indian culture is very rich and developed. India culture represent the beauty of their region and holds the cultural practices of different cast and class groups. Indian culture is very colorful who identify the simplicities of Indian people and their richness of developing art and crafts. Indian culture is including with different traditional art forms – like Folk Arts and classical arts. In India different region are practices different art forms which is not recent but dates back to the times when human civilization came into existence and the charm of Indian culture is in all the cuisines, dresses, monuments, old heritage, festivals, music, dance, literature, drama etc. Assamese folk culture is the very popular folk culture in India because Assam is the land of vibrant traditions, diversity and heritage and it showcases the diverse traditions and lifestyles. Folk culture is important part of cultural heritage. The literal meaning of folk culture is that “Folk culture is the cultural traditions that are done at a local or regional level which are derived from the longstanding cultural practices. But it is separated from popular and high culture by its traditional and localized nature. Assamese Folk culture holds the beauty of their nature and their smell of authenticity which is performed through the Dance, Music and Drama, Assamese folk culture is very entertaining and, in some point, it is deviational so it is basically performed in a religious occasion.

In the era of digital globalization, the popularity of Assamese folk culture is becoming very heigh. Digital globalization refers to the interconnectedness

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of nations, industries, companies and individuals in worldwide through the exchange of digital data, information, goods, services and investments. It involves the use of digital technologies to facilitate global interaction and transactions across borders. Because of digital globalization Folk art forms like – Folk Music, Folk Drama, Folk Dance etc became globalized. In the era of globalization folk artists are became highly influenced. And Folk artists are the person who is the representative of their own culture and they are the resource persons of the society who display their culture and very carefully save or preserve their culture. But they are very simple so they faced many challenges in the era of digital globalization.

REVIEW OF THE LITERATURE

‘Na Hang’s’ study on “Digital -Media -Based Interaction dissemination of traditional cultural Integrating using Social Media Data Analytics” highlights that—Digital Media helps the public to civilized culturally and internet development has created opportunities for the communication of cultural elements to the public and representing the cultural lineage and Digital Media is a young and dynamic player in the Public Culture Service .And it helps to meet the actual cultural needs of people to enjoy.

Mariella Combi’s study – “cultures and technology: An analysis of some of the changes in progress- Digital, Global and local culture” found that, technology influenced the communication of cultural element and it provides a flexible relation between all groups of human beings and their have lots of positive and negative effect but the positive effect is raised heigh.

METHODOLOGY OF THE STUDY

Objectives

- To understand and the concept of Digital globalization, Folk Culture and Folk artists of Assam.
- To study the impact of globalization on Folk Culture and Folk Artists in the context of espouser, standard of living and popularity.

Sampling

With the help of interview schedule researcher will collect the primary data through the respondent. Here researcher will select Folk Artists from Assam and analyzed it properly.

Limitation

- To study only Assamese Folk Culture and Folk Artist.
- To study the impact of Digital Globalization an Assamese culture and Folk Artists.
- To study globalization in the field of Folk Art community.

DATA ANALYSIS

Folk Culture is the cultural phenomena which identify the cultural practices and it transform orally from generation to generation in a human society. By analyzing the data, the research found that, Folk culture and folk artists are

the important part in Assamese society, but the impact of modernization and westernization are very noticeable. This study found that the effect of digital globalization is very positive and negative in folk culture and the life of folk artists. Some positive impacts of digital globalization on Folk Culture and Folk artists life are-

- **Increased exposure:** Digital platforms provide Folk Artists with greater visibility and access to global audiences, which helps the Folk art and Artists on recognition and appreciation.
- **Preservation of Cultural Heritage:** Digital tools helps the documentation and preservation of Folk culture and folk Artists can share their knowledge and skills through online tutorials, virtual exhibitions and digital archives, ensuring the continuity of traditional practices for future generation.
- **Networking Opportunities:** Digital globalization facilities connect folk artists to cultural organizations and enthusiasts worldwide. This networking enhances collaboration, knowledge, exchange and cultural exchange, fostering creativity and innovation within folk traditions.

This positive impact helps the folks' artists to connect very easily in the global worldwide which develop their financial situation and make them empowered in the global world. Financially folk artists are imbalanced but the uses of digital globalization tools improved their financial status which developed their Socio -economic status and helps folk artists by exposing their talent easily or develop standard of living and spread them in a worldwide view. But there have lots of negative impacts in the uses of digital globalization on Folk culture and Foll Artists life. These negative impacts are-----

- As traditional folk-art forms become digitalization and commercialized for mass consumption, there is a risk of cultural homogenization where distinct cultural identities are slowly destroyed in favor of globalization trends.
- **Digital Divide:** Digital technology and internet connectivity is not uniform across all regions and communities. Folk artists are basically from marginalized or remote areas so, the back of necessary infrastructure make them or access them to participate fully in digital globalization.

The research also found that, folk artists are educationally backward so, they are technologically underdeveloped that's why folk artists are not beneficiary under the profit of Digital globalization. Technologically folk artists are not aware or familiar so, they fell that they are alienate from our society and society neglects their art and talent. Because of their fair and the lack of digital knowledge they feel alienate from their society and sometimes producers, directors etc are humiliating them and dominate or used them very easily because artists are not aware about their socio-cultural value or demands in a digital world.

CONCLUSIONS

Assamese Folk culture is the raw form of original cultural practices and performances which includes Assamese Folk Drama, Assamese Folk Music and Assamese Folk Dances, all this art forms are represent in the beauty of Assam and the perspective of Assamese Society. These art forms are specially performed by the folk artists. Folk Artists are the person who display their art and protect them very carefully. In the earlier period Folk Artists are very famous and popular in

social outlook but gradually their popularity is decreased, and it hampers their social, cultural and economic status. Also, in the era of digital globalization Folk Culture and Folk Artists are became popular and it develops their cultural life. But there have lots of positive and negative effects of digital globalization in the life of Folk Artists. Because of digital globalization Assamese Folk culture and Folk Artists are spread in everywhere in all the regions. Sometimes they became espouser, which helps artists to show their talent. which develops their cultural identity and helps in their recognition. and it also improved their socio-economic status. But Folk Artists are mostly educationally backward so they can't easily cope up with the technology. And artists are hesitating to show this talent in a digital platform and sometimes directors, producers are used their talent and mixed match the original tunes and used it in a modern form and get the huge number of benefits but folk artists don't get the benefit and recognition they deserve. And this privacy loses the authenticity of folk culture and also hamper the socio-economic status of Folk Artists.

Thus, we can conclude that, Digital Globalization helps the Artists very much but their lack of technical knowledges leads them deprived and marginalized group in our society and this situation are related to the theory of Karl Marx Alienation theory and the theory of Marx Class conflict theory

The upper-class people like Music director, producer etc are dominated to the Folk Artists in the field of culture because artists are digitally not aware or advanced, that leads to class conflict between folk artists and directors/producers. And Folk artists are always separated from their products and they don't know their cultural value in digital marked which leads them alienate from their society. So, Folk Artists are faced many challenges in their social, cultural and occupational life.

SUGGESTIONS

After completing the entire study, the Researcher has furnished few suggestions based on the findings some of the suggestions are as follows -----

- Folk Artists are Technologically not advanced so it is important to improved their technological knowledge.
- Folk Artists are educationally backward that's why they can't fully cop up with the digital world. So, it is important to focused on their educational status which helps them to aware their rights and knowledge and their digital values in global market.
- Government should organize different free training institutes or programmed which will helps the folk artists to easily learn about digital knowledge
- Local NGO should organize different streaming programs, online galleries which helps the artists to show their knowledge and develops their digital identities.
- Ministry of cultural affairs should establish and assist folk artists to maintain online presence through websites, social media and marketplaces to reach wider audiences and connect with fans globally that will help the artists to grow their financial status.
- Media should organize different cultural programs and focused on the problems of piracy.

References

1. Appadurai, A. (1996). *Modernity at large: Cultural dimensions of globalization*. Minneapolis: University of Minnesota Press.
2. Appadurai, A. (2013). *The future as cultural fact. Essays on the global condition*. New York: Verso Book.
3. Auge', M. (2015). *The future*. New York: Verso Book.
4. Combi, M. (1992). The imagery, the computer, artificial intelligence: A cultural anthropological approach. *AI & Society: The Journal of Human-Centred Systems and Machine Intelligence*, 6 (1), 41–49. London: Springer.
5. Combi, M. (2006). The construction of flexible identities and negotiation of meanings on the Internet. In M. Negrotti (Ed.), *Yearbook of the artificial. Kyosei, culture and sustainable technology* (pp. 10–16). New York: Peter Lang.
6. Gardner, H. (2006). *Five minds for the future*. Boston: Harvard Business School Press.
7. Gardner, H. (2012). *Truth, beauty, and goodness reframed*. New York: Basic Books.
8. Gardner, H., & Davis, K. (2014). *The APP generation*. New Haven, CT: Yale University Press.
9. Gibson, W. (1984). *Neuromancer*. New York: Ace Books.
10. Hunnerz, U. (2010). *Anthropology's world: Life in a twenty-first-century discipline*. London: Pluto press.
11. Le'vy, P. (1997). *Cyberculture. Rapport au Conseil de l'Europe*. Paris: E' ditions Odile Jacob.
12. Le'vy, P. (1999). *Collective intelligence: Mankind's emerging world in cyberspace*. New York: Basic Books.
13. Prensky, M. (2001, October). Digital natives, digital immigrants. *Horizon*, 9(5), 1–6.
14. Wolton, D. (1999). *Internet et apre's? Une the'orie critique des nouveaux medias*. Paris:

Transforming Knowledge Access: A Study on the Digitization of Academic Libraries

Kinjal N. Mistry* & Dr. Bhavina Naik**

INTRODUCTION

In today's digital world, academic libraries are changing how they offer information. Instead of just having books and papers, they're turning everything into digital formats. This means you can access information online instead of going to the library. This shift is not just about using computers; it's about making knowledge easier to get and use.

The move to digital libraries is happening because people want to access information from anywhere, not just from the library shelves. Also, many old books and papers are falling apart, so digitizing those helps preserve them for the future. Plus, new technologies can help make searching for information faster and easier.

DIGITIZATION

Digitization in libraries refers to the process of converting analog materials such as books, manuscripts, photographs, maps, and audiovisual resources into digital formats. This transformation enables libraries to create digital copies of their collections, making them accessible online or through digital platforms. Digitization typically involves scanning or digitizing physical materials using specialized equipment and software to capture images or text in electronic form. Once digitized, these materials can be stored, preserved, and accessed digitally, allowing users to explore and utilize library resources remotely. Digitization

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enhances access to information, facilitates research and learning, and helps libraries preserve valuable cultural heritage for future generations.

REASONS FOR DIGITIZATION

Digitization in academic libraries serves multiple purposes, each contributing to the enhancement of knowledge access, preservation, and dissemination. Firstly, digitization expands access to library collections by overcoming physical limitations. Digital copies of materials can be accessed remotely, enabling users to explore resources from anywhere at any time, thus making information accessible to everyone. Secondly, digitization contributes to the preservation of fragile or deteriorating materials. By creating digital copies of physical resources, libraries can mitigate the risk of damage or loss due to wear and tear, environmental factors, or disasters. Thirdly, digitization facilitates the dissemination of scholarly works and research outputs. Academic libraries can digitize scholarly journals, theses, dissertations, and other academic publications, making them openly accessible to researchers, educators, and the public, thereby fostering knowledge sharing and collaboration.

Moreover, digitization enhances discoverability and usability of library resources. Digital materials can be easily searched, browsed, and navigated through simple interfaces and advanced search functionalities, improving the overall user experience. Additionally, digitization supports innovative research and teaching methodologies. By providing access to a diverse range of digital resources, academic libraries empower scholars and educators to incorporate multimedia content, primary sources, and interactive materials into their curriculum and research projects. Overall, digitization in academic libraries serves as a catalyst for advancing research, education, and scholarly communication in the digital age.

PROCESS OF DIGITIZATION OF ACADEMIC LIBRARY RESOURCES:

According to Fabunmi, Paris and Febunni (2006). The setting of digitization projects entails the following stages:

Policy Enactment: A policy is a guiding statement. The top management should enact a policy on the project. Such a policy will serve as a reference point and guide for implementing the project. The policy should contain the goals of the digitization project. Good goal setting is important for any new initiative. To make our materials more accessible on the web is not specific enough, There is a need to be specific, particularly on the categories of users that will access the collection, the type of material they may be interested in, how they will use it, how many people are envisaged to use it, the planned "procedure for its advertisement, and the benefit of the material to users and institutions, Contacting current and potential users is an excellent way of having clues to all these issues. One may consider sending out a survey to the project's intended audience in order to learn how they are currently using the material, and how they might use it differently if it was digitized. It may be helpful to contact other institutions that have digitized similar collections and learn from their successes and failures.

Policy Approval: The policy should be approved by appropriate authorities before project for digitization, is implemented. For instance, a university library

may need the approval of the university management and other funding agencies before any digitization project can be embarked upon.

Planning, Budgeting and Monitoring: It is the most essential and desirable to set up a planning committee that will draw the plan and budget for the digitization exercise. Budgets for digitization projects should include the following categories:

- Salaries, wages and benefits (likely to be about 50% of the project cost);
- Staff training
- Equipment and supplies
- Services, contracts and legal fees;
- Overhead and indirect costs (including offices and workspace);
- Maintenance, licenses, and communications charges;
- Contingency (setting aside about 10% of the total project budget for unexpected expenses)

The purposes of the digitization project, the source of fund and the amount available for the project should also be taken into consideration. At the regional or national level, effective planning for digitization can bring together all types of libraries, museum, academic/professional societies, historical societies and archives to take advantage of the exercise.

Acquisition of Appropriate Technology: This step involves procuring or acquiring the necessary hardware, software, and infrastructure to support digitization efforts. Technology considerations include scanners, digitization software, metadata management systems, storage solutions, servers, and networking equipment.

Administrative Decision on the Procedure to be adopted: Decision has to be made on the mode of operation, whether to just establish-links with existing digital libraries or to digitize in-house or to contract it out. There is a need to establish time limit for the project.

Preparing Staff for Digitization: Many library staff members may feel uneasy about digitization projects because they're unfamiliar with the changes or worry about how it could impact their jobs. Some might not feel confident with computers and may be reluctant to adapt. These concerns are normal, but it's up to library management to help staff understand and feel more comfortable with the changes. By providing education and support, management can address staff fears and ensure everyone feels prepared for the transition.

Legal/Copyright issues: Libraries must adhere to copyright laws and intellectual property rights when digitizing materials. This involves obtaining permissions from copyright holders, assessing fair use exemptions, and complying with licensing agreements. Libraries may also implement digital rights management (DRM) technologies to protect copyrighted materials from unauthorized access or distribution.

Document Selection Criteria: Document selection criteria determine which materials are prioritized for digitization based on factors such as relevance, uniqueness, scholarly significance, condition, and user demand. Selection criteria may vary depending on the library's mission, collection strengths, institutional priorities, and available resources.

Document Verifications: Having selected materials for digitization, the next thing to do is to verify or ascertain whether digital copies of such materials already exist. Duplication of efforts is not necessary. Before digitization begins, librarians verify the authenticity, condition, and suitability of selected materials for digitization. Verification may involve assessing the physical condition of items, confirming their provenance, and ensuring that they meet digitization standards and objectives.

Metadata: Metadata simply means information about information that describes digital objects and enables users to find, manage and use digital objects. Metadata is essential for organizing and describing digital resources to facilitate search and retrieval. Metadata creation involves assigning descriptive, administrative, and technical information to each digitized item, including title, author, date, subject, format, and copyright information.

BENEFITS OF DIGITIZATION OF ACADEMIC LIBRARY RESOURCES

- Accessing digitized library resources becomes convenient as they are available round the clock from any location with an internet connection. Users can retrieve materials remotely, eliminating constraints of physical distance and restricted library operating hours. This accessibility proves especially beneficial for individuals with restricted mobility or residing in areas lacking adequate library services.
- Digitization is essential for safeguarding delicate or valuable materials in libraries. By creating digital copies, libraries can reduce physical handling and exposure, protecting the original resources from damage or deterioration. This ensures long-term access to valuable materials while preserving their physical integrity.
- Digitized materials are organized and labeled with tags and descriptions, making them easy to find when searched for. This helps users quickly locate the information they need without spending too much time looking. Also, digitization allows for advanced search options, like searching for specific words in the text, which helps users to explore content in-depth and find related materials.
- Digitization helps users to find information fast and easily. Digital resources are sorted and grouped in different ways, so users can search by topic, author, date, or other factors. This makes it simpler for researchers to find what they need and helps with their studies.
- Digitizing library materials can save money and space. Digital collections require less physical storage space, so libraries have more space for other things. Also, it costs less to organize, store, and take care of digital items compared to physical ones, which means libraries can use their money for different purposes.
- Digitized materials can include things like videos, music, and interactive features, making learning more interesting. Having different types of content keeps users engaged and helps them understand and remember information better.
- Digitized materials are kept safe in strong digital storage places with reliable methods for keeping them in good condition. This means the important resources will be available for a long time and won't get damaged or lost.

CHALLENGES OF DIGITIZATION OF ACADEMIC LIBRARY RESOURCES

The management of digital assets presents new challenges to the academic library community in terms of administering complex hardware and software, but mass digitization has not changed the fundamentals of library services. Below are some challenges of digitization of academic library resources:

Legal Aspects: Compliance with copyright laws and intellectual property rights presents a significant challenge, requiring careful navigation of licensing agreements, fair use exemptions, and permissions from copyright holders. This is an aspect where librarians and researchers need to take precaution.

Changing Software and Hardware: The challenge of constantly changing software and hardware in digitization refers to the rapid evolution and updates of technology tools and equipment used in digitizing library resources. As software applications and hardware devices regularly undergo advancements and modifications, libraries must continually adapt to these changes to maintain compatibility, efficiency, and effectiveness in their digitization efforts. This challenge requires libraries to allocate resources for regular updates, training, and staying informed about emerging technologies to ensure the seamless operation and sustainability of their digitization projects.

Funding: Digital projects are expensive. Digitization of archival/library automation requires enormous funding due to frequent hardware and software upgrades, and increasing cost of subscription to electronic databases. Securing enough money to cover the expenses associated with digitization projects, including equipment, software licenses, and personnel.

Technophobia: Overcoming resistance to technology adoption among library staff and users who may be apprehensive or unfamiliar with digital tools and platforms requires targeted training, support, and awareness-raising efforts.

Technical Expertise: Acquiring and retaining skilled personnel with expertise in digitization techniques, metadata creation, digital preservation, and information technology is crucial for the success of digitization initiatives.

Inadequate Technology Infrastructures: Insufficient infrastructure, such as inadequate network bandwidth, storage capacity, and computing resources, can impede digitization efforts and limit access to digital collections.

Technological Obsolescence: The risk of technological obsolescence poses a challenge, as digitized materials may become inaccessible or incompatible with future software and hardware systems without ongoing migration and preservation efforts.

Continuous Migration: The need for continuous migration of digital content to new formats and platforms to prevent loss due to format obsolescence, software incompatibility, or hardware degradation requires sustained effort and resources.

Deterioration of Digital Media: Despite being in digital format, digital media can deteriorate over time due to factors such as data corruption, hardware failures, or degradation of storage media, necessitating proactive preservation strategies.

CONCLUSIONS

Digitization is an important aspect for academic libraries in this digital era, as it provides new ways to search and access library contents irrespective of location and time. Digitization has revolutionized how we access knowledge through academic libraries. By converting physical materials into digital formats, libraries have made information more accessible and convenient for users worldwide. Digitization preserves valuable resources, enhances searchability, and supports diverse learning styles with multimedia elements. Moreover, it promotes collaboration, innovation, and lifelong learning in the digital age. As we continue to navigate the benefits and challenges of digitization, it is clear that it has profoundly transformed academic libraries, empowering users and advancing scholarly pursuits. Overall, digitization is a vital tool for democratizing knowledge access and shaping the future of education and research.

References

1. Dhule, S. (2018). Digitization of Libraries: Benefits and Challenges. *Knowledge Librarian* , 312-315.
2. Fabunmi, B. A., Paris, M., & M., F. (2006). Digitization of Library Resources: Challenges and Implications for Policy and Planning. *International Journal of Africa America Studies* , 5 (2), 23-36.
3. Malipatil, B. (2020). Digitization of Library: A Brief Introduction. *International Journal of Advances in Engineering and Management* , 2 (10), 698-701.
4. Mandalwar, A. L. (2023). Importance of Digitization of Library Resources. *International Journal of Multidisciplinary Research* , 5 (1), 1-7.
5. Nnenna, O. B., & Ume, L. E. (2015). Digitization of Library Resources in Academic Libraries: Challenges and Implication. *IOSR Journal of Mobile Computing & Application*, 2 (2), 35-40.
6. Pandey, P., & Mishra, R. (2014). Digitization of Library Materials in Academic Libraries: Issues and Challenges. *Journal of Industrial and Intelligent Information* , 2 (2), 136-141.
7. Rathee, H. (2019). Digitization of Library: Beginning of New Era for Indian Libraries. *Journal of Emerging Technologies and Innovative Research* , 6 (4), 360-372.

Digitalization in Libraries : Techniques & Tools

Dr. Sanjeev Kumar Sharma* & Vikash**

INTRODUCTION

In today's digital age, the preservation and digitization of cultural heritage and valuable information are more important than ever before. Digitization involves converting analog materials, such as books, documents, photographs, and audiovisual recordings, into digital formats that can be accessed and preserved electronically. Preservation, on the other hand, refers to the strategies and techniques used to ensure the long-term accessibility and usability of digital content. The digitization and preservation of cultural heritage and valuable information are essential for several reasons. First, digitization helps to protect and preserve fragile and deteriorating materials, ensuring that they can be accessed and enjoyed by future generations. Second, digitization increases access to cultural heritage by making it available online, thereby reaching a wider audience. Third, digitization allows for the creation of digital surrogates, which can be used for research, education, and exhibition purposes without risking damage to the original materials. However, digitization and preservation come with their own set of challenges. These include technological obsolescence, which can make it difficult to access digital content created using outdated formats or software. Additionally, digitization and preservation require significant resources, including funding, expertise, and infrastructure. Furthermore, issues such as copyright, privacy, and ethical considerations must be carefully considered when digitizing and preserving cultural heritage and valuable information. Despite these challenges, the benefits of digitization and preservation are significant. By ensuring the long-term accessibility and usability of cultural heritage and valuable information, digitization and preservation help

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to safeguard our shared cultural heritage and promote access to knowledge and information for all.

DIGITIZATION

According to UNESCO (2003), digitization is the creation of digital objects from physical, analogue model by employing a scanner, camera and other electronic gadgets. Digitization involves conversion from analogue to digital for easier access and longevity. It includes an extensive array of activities intended to extend the working lifetime of machine-readable files and safeguard them from media catastrophe, physical damage and obsolescence. Digitization process involves selection, valuation comprising of requirements, priorities, planning of prototypes for digitization, metadata gathering, metadata formation, formation of data assortments, presentation of digital assets to delivery systems and storehouses (Brown A. , 2008).

DIGITAL PRESERVATION

Digital preservation means the preservation of rare, delicate materials and objects through digitization using computers, electronic equipment's, mobile phone, digital cameras, recorders, and digital displays (Chen, 2007). The digital preservation activities are undertaken for an object that is prone to be lost or ruined because of bit decay, degenerate activities, obsolete, etc. however, in digital preservation, there is no 100% assurance that all objects will be protected and well-maintained (Kastellec, 2012). A proven method is required for functioning and managing records; steps to be considered for digital preservation are given below (Rothenberg, 1999; UNESCO, 2003; Holdsworth, 2006).

PROCESS OF DIGITIZATION OF LIBRARY RESOURCES

(A) Policy Enactment

Identify the need for a digitization policy based on the library's goals and strategic objectives.

Form a committee or task force to draft the policy, considering factors such as copyright, preservation, access, and user needs.

Consult with stakeholders, including library staff, administration, and users, to gather input and feedback on the draft policy.

Revise the policy based on feedback and finalize it for approval.

(B) Policy Approval

Submit the finalized policy to the library's governing body or administration for approval.

Present the policy, highlighting its objectives, benefits, and implementation plan.

Address any concerns or questions raised by the governing body or administration.

Obtain approval for the policy and any associated resources or funding.

(C) Planning

Develop a digitization plan based on the approved policy, outlining the goals, scope, timeline, and resources required for the digitization project.

Identify the library resources to be digitized, prioritizing them based on factors such as relevance, rarity, and demand.

Determine the technical requirements for digitization, including equipment, software, and staffing needs.

Establish procedures for quality control, metadata creation, and access to digitized materials.

(D) Budgeting

Estimate the costs associated with digitization, including equipment, software, staff training, and ongoing maintenance.

Develop a budget that aligns with the digitization plan and the library's overall budget priorities.

Seek funding sources, such as grants, donations, or internal reallocations, to support the digitization project.

Monitor and track expenditures to ensure they stay within the budget.

(E) Monitoring

Establish metrics and key performance indicators (KPIs) to measure the progress and success of the digitization project.

Regularly review and evaluate the digitization process, including scanning quality, metadata accuracy, and user access.

Address any issues or challenges that arise during the digitization project, such as technical problems or staff shortages.

Adjust the digitization plan and budget as needed based on monitoring and evaluation results.

LIBRARY DIGITIZATION INITIATIVE: CHALLENGES FACED

1. **Legal Aspects:** Libraries must navigate complex copyright laws and permissions when digitizing materials to ensure compliance and avoid legal issues. Failure to comply with copyright laws can result in legal action and damage to the library's reputation. Libraries can seek guidance from legal experts, use open access materials, or obtain permissions for digitization.
2. **Constantly Changing Software & Hardware:** Libraries must continuously update their software and hardware to keep pace with technological advancements. Outdated software and hardware can lead to inefficiencies, security vulnerabilities, and compatibility issues. Libraries can invest in flexible and scalable technologies, establish regular upgrade cycles, and provide staff training.
3. **Funding:** Digitization projects require substantial financial resources for equipment, software, personnel, and ongoing maintenance. Inadequate funding can hinder the success of digitization initiatives and limit access to digital collections. Libraries can seek grants and funding from government

or private sources, collaborate with other institutions, or prioritize projects based on available resources.

4. **Technophobia:** Resistance to new technologies among staff or users can impede the adoption and success of digitization initiatives. Technophobia can lead to delays in project implementation, increased training costs, and reduced user satisfaction. Libraries can provide comprehensive training programs, engage staff and users in the digitization process, and emphasize the benefits of digitization.
5. **Technical Expertise:** Libraries need staff with specialized skills in digitization, metadata creation, and digital preservation. Lack of technical expertise can result in poor-quality digitized materials, data loss, and security breaches. Libraries can invest in training and professional development for staff, collaborate with experts, or outsource certain tasks to qualified vendors.
6. **Inadequate Technology Infrastructure:** Lack of reliable internet access or outdated infrastructure can impede the digitization process. Inadequate technology infrastructure can lead to project delays, data loss, and limited access to digital collections. Libraries can upgrade their infrastructure, explore alternative connectivity options (e.g., mobile networks), or partner with organizations that can provide access to technology resources.
7. **Technological Obsolescence:** Formats and standards for digital files can become obsolete, requiring libraries to regularly update and migrate their digital collections. Technological obsolescence can result in the loss of digital content, compatibility issues, and increased maintenance costs. Libraries can adopt open and widely used formats, implement migration plans, and collaborate with digital preservation experts.
8. **Refreshing:** Periodic refreshing of digital content is necessary to maintain quality and accessibility. Failure to refresh digital content can lead to data degradation, loss of information, and decreased usability. Libraries can establish regular refreshment schedules, use reliable storage solutions, and implement quality assurance processes.
9. **Emulation:** Ensuring that digital content remains accessible as hardware and software evolve requires emulation or other preservation strategies. Without emulation, digital content may become inaccessible due to changes in technology. Libraries can use emulation software, maintain documentation on file formats and software, and collaborate with preservation experts.
10. **Ceaseless Migration:** Migration of digital content to new platforms or formats is necessary to ensure long-term accessibility and preservation. Ceaseless migration can be costly and time-consuming, requiring ongoing effort and resources. Libraries can plan for migration from the outset, use standardized formats and metadata, and automate migration processes where possible.
11. **Deterioration of Digital Media:** Digital files can deteriorate over time due to technological issues or data corruption. Deterioration of digital media can lead to loss of information and reduced usability of digital collections. Libraries can implement robust data backup and recovery plans, regularly check the integrity of digital files, and use reliable storage solutions.

CHALLENGES FOR PRESERVING DIGITAL CONTENT

- **Dynamic Nature of Digital Content:** Digital content can be easily changed, updated, or deleted, requiring strategies to manage and preserve different versions over time. This includes ensuring the authenticity and integrity of the content.
- **Machine dependency:** Digital content often relies on specific hardware, software, or operating systems for access. This dependency can lead to challenges in accessing older content as technology evolves, requiring emulation or migration to newer systems.
- **Fragility of the media:** Digital media, such as hard drives, optical discs, and flash drives, can degrade over time due to physical damage, environmental factors, or technological limitations. This can result in data loss if not properly stored and maintained.
- **Technological obsolescence:** Rapid advancements in technology can lead to the obsolescence of hardware, software, and file formats used to create and access digital content. This can make it challenging to access or migrate content stored in outdated formats.
- **Shorter lifespan of digital media:** Digital media has a limited lifespan compared to traditional media like paper or film. Factors such as degradation, technological changes, and format obsolescence contribute to the shorter lifespan of digital media, necessitating regular migration to newer media.
- **Formats and styles:** Digital content is created in various formats and styles, which can become obsolete or unsupported over time. This can make it difficult to access or render content in its original form, requiring conversion to more sustainable formats.
- **Copyright and intellectual property rights issues:** Preserving digital content while respecting copyright and intellectual property rights can be challenging. This includes ensuring that the preservation activities do not infringe on the rights of content creators or owners and complying with legal requirements and permissions.

DIGITAL PRESERVATION STRATEGIES

Short-Term Preservation Strategies: Short-term preservation strategies are focused on ensuring the immediate accessibility and usability of digital content. These strategies typically involve creating backups of data, ensuring that metadata is accurate and up to date, and storing content on reliable and stable storage media. One of the most fundamental short-term preservation strategies is to regularly create backups of digital content. This involves making copies of data and storing them in separate locations to protect against loss due to hardware failures, natural disasters, or other unforeseen events. Backup systems should be regularly tested to ensure that they can be used to recover data if needed.

Medium-Term Preservation Strategies: Medium-term preservation strategies are concerned with preserving digital content for a period that is shorter than

indefinite but longer than immediate access. These strategies typically involve regular refreshing of storage media, ensuring that content is stored in widely used formats, and creating multiple copies in geographically distributed locations. Storage media, such as hard drives or optical discs, can degrade over time, leading to the loss of data. To mitigate this risk, it is important to regularly refresh storage media by copying data to new media. This can help ensure that the data remains accessible and usable over the medium term.

Long-Term Preservation Strategies: Long-term preservation strategies are focused on ensuring that digital content remains accessible and usable over very long periods of time, potentially indefinitely. These strategies often involve more complex and resource-intensive approaches, such as regular migration to new formats or systems, regular integrity checks, and ensuring that metadata is maintained and updated. Long-term preservation also involves considerations related to legal and ethical issues, such as copyright and intellectual property rights. It is important to ensure that digital content is preserved in a manner that complies with applicable laws and regulations, and respects the rights of content creators and owners.

CONCLUSION

The digitalization of libraries has revolutionized access to information, making it more convenient and efficient for users. Techniques such as scanning, optical character recognition (OCR), and metadata tagging have played a crucial role in digitizing physical documents. Tools like digital library software, content management systems (CMS), and preservation systems have further streamlined the digitalization process. Digitalization has not only enhanced the preservation and accessibility of content but has also enabled libraries to offer innovative services such as remote access, multimedia resources, and digital exhibitions. However, challenges such as the dynamic nature of digital content, machine dependency, technological obsolescence, and copyright issues need to be addressed to ensure the long-term sustainability and usability of digital libraries. Digitalization has transformed libraries into dynamic and accessible repositories of knowledge, enhancing learning and research opportunities for users worldwide. Embracing new technologies and best practices will be key to the continued success of digital libraries in the future.

References

1. Arora, Jagdish. (2009). Digitisation and Digital Preservation. DESIDOC Journal of Library & Information Technology. 29. 10.14429/djlit.29.245.
2. Awamleh, M.A. and Hamad, F. (2022), "Digital preservation of information sources at academic libraries in Jordan: an employee's perspective", *Library Management*, Vol. 43 No. 1/2, pp. 172-191.
3. Baucom, Erin, "A Brief history of Digital Preservation" (2019). Mansfield Library Faculty Publication. https://scholarworks.umt.edu/ml_pubs31
4. Osedo, Onyinye Alexander, Challenges of Digital Preservation in Africa (March 12, 2013). Available at SSRN: <https://ssrn.com/abstract=3496885>
5. Pachua, Lalduhzuali & Chanchinmawia, F. & Boro, Bhaigyashree. (2024). View of Digitization and Digital Preservation of Library Resources in the Contemporary Era. *Annals of Library and Information Studies*. 10.56042/alis.v70i4.6363

6. Pandey Prabhat. (2014). Digitization of Library Materials in Academic Libraries: Issues and Challenges. *Journal of Industrial and Intelligent Information* 2(2), 136-141.
7. Patra, Sasmita & Sahoo, Jyotshna. (2022). A Literature Review on Digitization in Libraries and Digital Libraries. *Preservation, Digital Technology & Culture*. 51. 17-26. 10.1515/pdtc-2021-0023.
8. Routhier Perry, S. (2014). Digitization and Digital Preservation: A Review of the Literature. *School of Information Student Research Journal*, 4(1). <https://doi.org/10.31979/2575-2499.040104>
9. Shimray, Somipam & Ramaiah, Chennupati. (2018). Digital Preservation Strategies: An Overview.
10. Tanwar, Sundar Singh. (2012). Digital preservation. *PEARL- A Journal of Library and Information Science*. 6(2), 83-88.

Tribal Identity and Digital Globalization: With Special Reference to Sagar District of Madhya Pradesh

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INTRODUCTION

Our country India has always been very rich in terms of its culture, civilization, language etc. many types of culture have flourished here. That is why India has a unique identity in the world. India has always been creating its own distinct identity in the entire world because of its rich culture. In India, people follow many different cultures and civilizations. Similarly; there is a very important part of our society which we call tribal society. Whose culture, language, food pattern, and festivals everything is different. Before digital globalization, very few people knew about them because there was lack of medium due to which their culture was not able to spread fast, they were limited to a particular area. They used to live in fixed areas and they used to follow their customs there only, but other people did not know much about their culture but after digital globalization came in our society, we saw a change in perspective. Just like globalization gave economic strength to India, in the same way digital globalization gave social strength to India. Through digital globalization, people got to know about our culture, which was not able to spread very fast earlier, but now it has reached everywhere in country and abroad. People know about our culture and like it very much and also follow it. Due to digital globalization, our culture is progressing very fast and because of all these things, India is making a huge contribution in becoming a world power. Many foreigners are adopting our India culture and due to this our culture is reaching abroad as well and people love our culture very much.

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REVIEW OF LITERATURE

Liquid Modernity was published in 1999. The concept of liquid modernity was coined by the Bauman as a metaphor to describe the condition of constant mobility and change he sees in relationships, identities, and global economics within contemporary society. Instead of referring to modernity and post modernity, Bauman visualized a transition from a solid modernity to a more liquid form of social life.

Castells describes a culture that is organized around electronic media. He says that the space of flows and timeless time are the material foundations of a new culture, that of the network society. Castells most well-known work is a trilogy of books, entitled, *The Information Age: Economy, Society and Culture*. Overall, it comprehends three sociological dimensions—production, power and experience—stressing that the organization of the economy of the state and its institutions, and the ways that people create meaning in their lives through collective action, are irreducible sources of social dynamics—that must be understood as both discrete and inter-related entities.

Friedman investigates the relations between the global and the local, to show how cultural fragmentation and modernist homogenization are equally constitutive trends of global reality. This fascinating book explores the interface between global processes, identity formation and the production of culture. Examining ideas ranging from world systems theory to postmodernism, Jonathan Friedman investigates the relations between the global and the local, to show how cultural fragmentation and modernist homogenization are equally constitutive trends of global reality.

TRIBAL IDENTITY AND DIGITAL GLOBALIZATION

Since the advent of globalization in Indian society, it has not only changed our economic condition but it has solved many social problems. Digital globalization provides us a virtual space where there is no hierarchy, everyone is equal, that platform is equally open for all on which everyone can present their thoughts, which is why people participate there with great enthusiasm. We can see the effect of digital globalization that today every home has a mobile phone, every small child, even the tiniest of kids knows about technology. Gradually, the role of technology is increasing rapidly in our society.

Basically in this paper we are talking about Sagar district of Madhya Pradesh and how tribal identity is getting stronger there through digital globalization. According to Census-2011, the number of scheduled tribes in India is 10,42,81,034. It is 8.6% of the total population of India. A total of 9,38,19,162 people belonging to scheduled tribes reside in rural areas whereas 1,04,61,872 people in urban areas. The scheduled tribes are 11.3% of the total population of rural areas and 2.8% of urban areas. There are about 550 tribes in India. The largest tribal population of the country resides in Madhya Pradesh. The rainbow tribal world of Madhya Pradesh has been especially attracting anthropologists, cultural scholars and researchers because of its specialties. The tribes of the state have always been an inseparable part of the pride of the state with their multi-faceted culture, arts, customs and traditions. In the past years, due to development works, there has also been a vast change in the social, educational and economic condition of the tribes of the state.

Sagar Data as Per Census 2011

As per the Population Census 2011 data, following are some quick facts about Sagar district.

	Total	Male	Female
Children (Age 0-6)	356,903	185,400	171,503
Literacy	76.46%	72.33%	56.77%
Scheduled Caste	501,630	266,306	235,324
Scheduled Tribe	221,936	114,771	107,165
Illiterate	832,739	347,650	485,089

Source: <https://www.censusindia.co.in/district/sagar-district-madhya-pradesh-427>

Caste-wise Population - Sagar District

Schedule Caste (SC) constitutes 21.1% while Schedule Tribe (ST) were 9.3% of total population in Sagar district of Madhya Pradesh.

	Total	Male	Female
Schedule Caste	501,630	266,306	235,324
Schedule Tribe	221,936	114,771	107,165

Source: <https://www.censusindia.co.in/district/sagar-district-madhya-pradesh-427>

Tribes of Sagar District

Many tribal communities live in Sagar district. They are very rich in their culture, tradition, civilization and they are living a very good life. As per the tireless efforts of government, they have all kinds of basic facilities like food, cloth, shelter etc. a lot of attention is also being given to health and education.

How Tribal Identity is Getting Stronger Through Digital Globalization

Tribal identity is growing very fast through digital globalization. Tribal community is also realizing their powers that they too have their own identity. Awareness is also increasing very fast in them. Sagar has been selected as one of the hundred Indian cities to be developed as a smart city under Prime Minister Narendra Modi's flagship Smart Cities Mission and listed top safest city of India 2018.

Internet facility: internet facility is available in all tribal areas of Sagar district. Through this every work become very easy, whether it is any work related to any scheme of government, or anything like education, medical etc. all the information are available at one place that is why internet facility has a huge contribution to develop and strengthen the tribal identity. They have created groups on whatsapp and other messaging apps, in which they talk to each other about their society, culture, identities etc. there is a lot of unity among them and in the groups formed on social media, and they talk about their society forward. Internet has a huge contribution in this. They talk about taking their society forward in the group.

E-Panchayat: most of the Panchayats coming under the tribal areas have become E-Panchayats, so all the information is available there in one click. Computers with internet facility are available in the panchayat office. It is very

easy to update about any type of government schemes. So that people can get the benefits easily.

Skill development center: skill development centers are also available in this area where people are taught computer related skills, so that they can remain connected with the world of technology and use it properly. They can use technology well to strengthen their identity. For this skill development centers have been established in all the areas. Through skill development center people can provide themselves with means of employment instead of running behind jobs, you yourself become a job provider for other people. We all know that computer makes life very easy; it can do multiple tasks in a single click. Therefore, skill development center is being conducted very well in Tribal areas. In which enrolment ratio is also very high.

Health facility: to improve healthcare facilities, many types of schemes are being run by the government, Such as National Health Mission, Ayushman Bharat. Whose aim is to provide good health care facilities. The government is paying a lot of attention to the health care facilities. All the basic equipment for basic treatment has been provided in rural areas. All the basic facilities are provided at the local hospitals so that villagers do not have to wander around to get good health treatment and do not have to travel from village to city again. Therefore, basic health care facilities, ambulance facilities, have been provided. ASHA workers are also very active. For the pregnant women, all the basic things were available.

Education facility: for the convenience of education, schools and collages were made I the village, where exchange of education and training is provided. There mid-day meal is arranged for the children so that the children are attracted towards school and grow up. The enrolment ratio in schools is gradually increasing. The ratio of girls in schools is gradually increasing. It can be said that the inclination of girls is increasing towards education. Their parents are also moving forward to educate them and various types of scholarships are also run for their further development. From time to time, awareness programs are also run for them.

CONCLUSION:

The identity of tribal community is developing rapidly through digital globalization. digital globalization is affecting every aspect equally. with the increasing spread of digital globalization, we are witnessing and experiencing many changes in every field, whether it is the field of health or education. Due to digital globalization every section of the society has benefitted. Its involvement is growing rapidly in every field. By using technology, we can make every task very easy. That is why everyone uses it enthusiastically. By using digital globalization, tribal strengthen their identity and are making their mark in the world, hence it has a huge contribution in the life of tribes. After the advent of digital globalization, tribal society is changing. Hence digital globalization has become an important part of their life.

References and Bibliography

1. Appadurai, A. (1996). "Modernity at large: Cultural Dimensions of Globalization", University of Minnesota Press.
2. Bauman, Z. (1998) Globalization : The Human Consequences. John Wiley and Sons.
3. Friedman, J. (1994) Cultural Identity & Global Process. SAGE Publications.
4. Naik, TB. (1961) Changing tribes of Madhya Pradesh . Indore: Govt Regional Press.
5. Kirby, A. (2009) Digimodernism: How New Technologies Dismantle the Postmodern and Reconfigure Our Culture. Continuum.
6. Castells,M. (1999) The Information Age: Economy, Society and Culture .Wiley Blackwell.
7. Kothari, R. (1995) Globalisation and Revival of Tradition : Dual Attack on Model of Democratic Nation Building. Economic and Political Weekly.
8. Combi, M. (2006). The Construction of flexible identities and negotiation of meanings on the Internet. In M. Negrotti (Ed.), Yearbook of the artificial. Kyosei, culture and sustainable technology (pp. 10–16). New York: Peter Lang.
9. Combi, M. (1992). The imagery, the computer, artificial intelligence: A cultural anthropological approach. *AI & Society: The Journal of Human-Centred Systems and Machine Intelligence*, 6(1), 41–49. London: Springer.
10. Featherstone, M. (1996). Localism, Globalism, and Cultural Identity. Durham, NC: Duke University press.
11. Featherstone, M. (1995). Lash , S., & Robertson R. (1995). Glocalization: Time-Space and Homogeneity-Heterogeneity. *Global Modernities*. SAGE:London
12. Giddens, A. (1990). The Consequences of Modernity. Stanford, CA: Stanford University Press.
13. Tomlinson, J. (1999). Globalization and Culture. Chicago, IL: University of Chicago Press. USA
14. Andre Beteille. (1986). "The Concept of Tribe with Special Reference to India" in *European Journal of Sociology*, Volume 27, pp. 297-318.
15. Andre Beteille. (2008). "Concept of Tribe with Special Reference to India," in Sukant K. Chaudhury and Saumendra Mohan Patnaik (ed.) *Indian Tribes and Mainstream*, Jaipur: Rawat Publications, pp. 21-40.
16. Bailey, F.G. (1957). *Caste and Economic Frontier*. OUP, Bombay. Dash K.N. (2004). *Invitation to Social and Cultural Anthropology*. New Delhi: Atlantic Publishers, pp. 242-264.
17. David L. Sills. (1976). *International Encyclopedia of Social Sciences*, (Vol.16), New York: MacMillan and Free Press, pp. 147-150.
18. <https://www.censusindia.co.in/district/sagar-district-madhya-pradesh-427>