

IMPACT OF TECHNOLOGY ON HISTORICAL RESEARCH

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ABSTRACT

Historical research explains the events that occurred in the past. This has to do with looking into, documenting, and analysing historical events in light of current viewpoints. A researcher's method for making observations is called historical research. Digital technology have completely changed historical research since the mid-1990s with the introduction of the World Wide Web. The paper has structured on the secondary sources from journals, books, reports etc.,. The paper is based on descriptive with historical research approach used in the research. The paper followed the following objectives: To Understand the Historical Research with Technology and to know the Impact of Technology on Historical Research. In the terms of researching and writing about the past, historians are depending more and more on digital and computational techniques. With just a mouse click, digital technology provides historians with access to a multitude of materials. Every day, new digital archive websites spring up. Online publications include diaries, travelogues, letters, images, magazines, books, artifacts, and newspapers.

KEY WORDS: Technology, Historical Research, IT

INTRODUCTION

Historians have frequently expressed dissatisfaction with the limited availability of primary sources and the significant expenses and exhaustion associated with visiting archives. The advent of the digital age, with its vast array of computer tools and electronic resources, has brought about a revolutionary transformation in the field of historical study. Historical research is a crucial element in comprehending our history, and it is always progressing alongside the development of new technologies. Isaac and Michael define historical research as the systematic and objective process of reconstructing the past. This is done by gathering, assessing, confirming, and synthesizing material in order to establish facts and draw well-supported conclusions, frequently in connection to specific hypotheses. Technological breakthroughs in recent years have fundamentally transformed the methods historians employ for research and dissemination of their results. Historical research is becoming more efficient, accurate, and accessible than ever before due to the growing digitalization of historical archives, the utilisation of data visualisation tools, and the incorporation of artificial intelligence. Nevertheless, these emerging technologies present difficulties for conventional research methods and provoke inquiries regarding the dependability and ethical considerations of digital historical research. Historical inquiries can also employ the scientific approach. History is a discipline that encompasses both scientific and artistic elements. Proficient historians employ scientific methodologies to gather, authenticate, and scrutinize data; the skill of crafting imaginative and captivating prose for historical narratives enhances the scientific approach by using the power of technology.

OBJECTIVE OF THE PAPER

The paper followed the following objectives

1. To Understand the Historical Research with Technology
2. To know the Impact of Technology on Historical Research

METHODOLOGY

The paper has structured on the secondary sources from journals, books, reports etc.,. The paper is based on descriptive with historical research approach used in the research.

Review of Literature:

Bhat, R.M. (2020) Recent technological advancements have completely changed the area of historical study by iving historians new tools for data organisation, research methodology, and presentation. According to study, historians are now able to ask new questions, consider fresh angles, and communicate with a larger audience thanks to the advent of new technology.

Chouchene (2019) When using digital resources for historical study, there are serious worries about the legitimacy of the materials being lost. The latter is described as the "quantity in a thing of being what it is claimed to be (valid, real, and genuine) verified through an investigative process known as authentication in archives and special collections."

S. Monga (2018) one country cannot afford to pay the enormous expense of preserving human history. For expensive, rare books, for example, the problem is even worse because the rate of deterioration is faster than restorers can fix them. The second half of the 20th and the first decade of the 21st centuries have seen significant changes in every facet of society, which have coincided with several key socio-cultural revolutions. Analysis of the development of human communication mechanisms by Cartelli et al. (2001) The authors propose that the experiences they are leading are precisely in the direction of their hypothesis, which is the expansion of an online knowledge paradigm to historical study.

DIGITAL ARCHIVES AND DATABASES: The advent of digital archives has significantly enhanced the accessibility of primary sources for historians. Researchers can now conveniently access digitised collections online, eliminating the need to spend extensive time searching through physical records in libraries and archives. The Library of Congress and the British Library have digitally converted millions of pages of historical documents, newspapers, and books, thereby providing access to researchers worldwide.

GEOGRAPHIC INFORMATION SYSTEMS (GIS) AND NETWORKING: Geographic Information Systems (GIS) have revolutionised the methodology that historians employ for spatial study. Historians can gain valuable insights on the influence of space and place on historical events by examining and interpreting historical data in conjunction with geographical information. For instance, researchers have using Geographic Information Systems (GIS) to analyse the dissemination of diseases such as cholera in 19th-century London, thereby revealing the correlations between urban infrastructure and public health. Emerging technologies have enabled enhanced collaboration and networking among historians. Platforms such as GitHub and Zotero facilitate the sharing of data, resources, and ideas among scholars, promoting a collaborative and interdisciplinary approach to studying history.

Historians have experienced a substantial transformation in their research methods due to the utilisation of digital archives, text mining, GIS, and collaboration tools. These technological advancements have enabled historians to discover novel insights and perspectives on historical events. Historians are progressively employing novel technology to display their discoveries in captivating and participatory manners. These technologies encompass digital storytelling, interactive displays, and virtual reality simulations. They enable historians to effectively communicate intricate historical narratives in a manner that is both educational and engaging. Digital storytelling is an ideal technique for historical narrative. This method integrates auditory, visual, and graphic components to construct a multimedia storyline that captivates viewers in a manner that conventional written accounts are unable to achieve. As an illustration, the Smithsonian National Museum of American History has employed digital storytelling to develop an internet display concerning the historical events of the Civil Rights Movement. This exhibit encompasses interviews with activists, archive footage, and interactive timelines.

COLLABORATION AND NETWORKING FOR HISTORICAL RESEARCH: The advent of new technologies has bestowed numerous advantages upon historical study; but, it also brings out potential biases and constraints that necessitate meticulous contemplation. Historians must possess awareness of these concerns and strive to guarantee the accuracy, objectivity, and inclusivity of their research. Historians must ensure responsible and ethical integration of new technologies into their research procedures. Attention must be given to concerns such as data management, digital preservation, and ensuring openness in algorithmic decision-making. Here are some suggestions for historians to incorporate modern technologies into their research techniques in a responsible and ethical way.

1. Establish optimal methodologies for the management of data and the preservation of digital information. Given the extensive data that historians gather and scrutinise, it is crucial to establish optimal methods for maintaining and safeguarding this data. This encompasses the tasks of verifying the correct formatting and documentation of data, as well as guaranteeing its secure and easily retrievable storage.

2. Take into account the constraints of digitised sources. Although digital archives have enhanced the accessibility of

several original documents, they can also give rise to inaccuracies and exclusions. Historians must exercise caution when depending on digitised sources and make efforts to corroborate their veracity using different sources and methodologies.

Promote cooperation and encourage research that spans multiple disciplines.

3. Emerging technologies provide the capacity to enhance collaboration and promote multidisciplinary study. Historians should actively pursue collaborations with researchers from other fields including as computer science, data science, and library science. This will help ensure that their research is firmly rooted in the most effective methodologies and ethical standards.

4. Continuously engage in critical reflection. Historians must consistently engage in critical reflection regarding the utilisation and consequences of emerging technology. This entails taking into account the possible prejudices and constraints of these technologies, as well as their wider societal and moral ramifications.

Historians can incorporate new technologies into their research methods responsibly and ethically by adhering to these recommendations. This will ensure that their work maintains a strong foundation in best practices and ethical standards.

APPLICATION IN LIBRARY AND INFORMATION SERVICE (LIS): The historical research approach is relevant to all academic disciplines, encompassing science and technology, social sciences, the humanities, and more. The historical approach is suitable in any field where the study encompasses the origins, growth, development, effect, use, theories, personalities, crisis, and other related aspects. Historical research is widely embraced in the discipline of library and information science (L&IS). Simultaneously, it is the least comprehended. Often, it is regarded as less significant in comparison to other sorts of research, as the latter focus on practical difficulties encountered by librarians. Librarians prioritise practical issues that directly affect them.

IMPACT OF TECHNOLOGY IN HISTORICAL RESEARCH FOR CULTURAL HERITAGE PRESERVED IN ARCHIVES:

A society's intangible and tangible assets, artefacts, and characteristics that have been passed down from generation to generation and that embody its standards and viewpoint are collectively referred to as its cultural heritage. Included are intangible resources like folklore, traditions, language groups/dialects, crafts, and expertise; tangible assets like buildings, memorials, and landscapes; scientific and literary products like manuscripts; and culturally significant natural assets like biodiversity and natural landscapes. With the use of contemporary computing, artwork can be replicated that is nearly identical to the original. A replica is worth as much to the typical buyer as the original is to collectors. The most prestigious educational and cultural institutions in the world are prioritising humanistic values. A number of academic fields prioritise humanities and heritage studies of education.

i. As technology develops, people's perspectives on and understanding of history and heritage are evolving. From the most recent 3D modelling of priceless treasures like the Lion of Mosul to the deciphering of ancient manuscripts using image processing and machine learning, technology is bringing us closer to the past and creating opportunity for millions of people worldwide.

ii. Across the world, libraries, museums, and private collections are utilising technology to broaden their offerings and ensure that historical records will be accessible in decades or centuries to come, for instance, by digitising them.

Scientific debate has focused on virtual technologies' role in cultural heritage conservation, particularly museum heritage preservation. Cultural studies, museum research, psychology, art history, and perceptual psychology experts address the merits and cons of virtual cultural preservation. UNESCO's 2003 General Conference adopted a Charter for Digital Heritage Protection. In the late 20th century, museums and galleries began digitising their holdings. All major museums now have an online portal or virtual museum in addition to their physical exhibits. While new technologies have many benefits, it is important to analyse museum and gallery websites in the context of how people view new information objects, as mass culture and Internet-compilation of art blur the lines between authentic art and

abundance of materials. History researchers worldwide can now collaborate remotely. All of these digital advantages have expanded historical research.

THE DIGITAL REVOLUTION AND HISTORICAL RESEARCH: CHALLENGES: This optimistic view of the digital revolution and its benefits to historical study must be balanced. Using digital materials creates context loss risks. The latter impacts researchers' understanding of the past and ability to assess material significance. Analogue archive material gives researchers collecting context. Since digital primary sources are typically isolated from their original collections, scholars using them struggle to get contextual information. Historians struggle to comprehend the past due to “a vast void of knowledge filled by myth and speculation.” Selection of primary sources for digitization depends on economic, financial, and political concerns. The procedure isn't neutral. Each institution prioritises digitization for different reasons. Selectors consider the collection's content value, user demand, intellectual property rights, religious, ethnic, or community sensibility, and technical issues like digitization and its potential harm. Online, only limited analogue archives are available. Researchers may overlook important non-digitized historical material. This contradicts scholars' hopes that all material has been digitised.

HISTORICAL RESEARCH IN MODERN TIME: In contemporary times, the utilisation of technology in historical research has become more prevalent. Researchers have recognised the necessity and significance of investigating social institutions and organisations that have played a role in historical events. This includes delving into the background of these institutions, which may have been previously overlooked or inadequately studied. Consequently, the relevance of institutions such as the caste system, family marriage, and diversity was examined through historical research. The researcher endeavoured to investigate the origins of many reasons pertaining to society, as well as the diverse faults and strengths of these institutions. The researchers conducted a study in the field of social sciences, where they posit that historical research is valuable for comprehensively examining many aspects of institutions. The data for this form of research is characterised by a higher degree of imagination and subjectivity, rather than objectivity and reality. The available records for analysis were disorganised, making it arduous to segregate them for the purpose of investigation. In addition to the challenges, historical research is valuable for addressing contemporary social issues. The primary reasons for studying with the aid of historical research are to gain a comprehensive understanding of the issues at hand and to identify effective solutions.

DISCUSSION AND SUGGESTIONS FOR SOCIAL IMPLICATION: Modern technologies allow historians to portray their results in more engaging and dynamic ways through digital storytelling, interactive displays, and virtual reality simulations. Since algorithmic analysis can add biases and digitised sources have limitations, new technologies pose questions about historical research's accuracy, objectivity, and inclusivity. Thus, historians must responsibly and ethically integrate new technology into their research by following data management, digital preservation, and algorithmic decision-making best practices. Overall, this study article sheds light on how new technology affect historical research and the evolving field. Keeping global culture connected and intact helps pass on knowledge, beliefs, and skills from generation to generation. The preservation and diffusion of historical and cultural legacy depends on the public's ability to recall and reflect on key historical events, occurrences, processes, and the activities of famous historical figures. As communication and information technology improves, it is being integrated into more sectors of human existence. Historical study using digitised sources raises concerns regarding source legitimacy. The latter is the “quantity in a thing of being what it is claimed to be (valid, real, and genuine) verified in archives and special collections through an investigative process known as authentication”.

CONCLUSION

The advent of new technology has had a profound impact on historical research, resulting in alterations to the methodologies employed by historians and the manner in which they communicate their discoveries. The advent of digital archives, online databases, data visualisation tools, and machine learning algorithms has significantly transformed the pace and effectiveness of data gathering, arrangement, and examination. The historical method necessitates the availability of systematic data for evaluations in relation to the gathered evidence. The data undergoes meticulous processing, distinguishing actual evidence from fake evidence, irrelevant misleading documents, or information. Historical evidence is derived from historical data, which requires accurate information and the use of cutting-edge technologies.

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