Exploring Innovations and Challenges in The Study of Hadith in The Digital Era

Latifah Abdul Majid¹, Mohd Nasir Abdul Majid², Hazlin Kader @Shahar³ & Wan Siti Norjannah W Sulong⁴

¹Research Centre for al-Quran dan al-Sunnah, Faculty of Islamic Studies, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, ²Faculty of Syariah and Law, Islamic Science University of Malaysia (USIM), Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia, ³Jabatan Kemajuan Islam Malaysia (JAKIM), Blok A dan B, Kompleks Islam Putrajaya, No 23, Jalan Tunku Abdul Rahman, Presint 3, 62100 Putrajaya, ⁴Faculty of Islamic Studies, National University of Malaysia, 43600, Bangi, Selangor, Malaysia

Email: umilm@ukm.edu.my, wsnjannah12@gmail.com

Abstract
This literature review aims to highlight the importance of exploring innovations and challenges in the study of hadith in the digital era. Hadith is the second source of Islam after the Qur’an which is attributed to the Prophet Muhammad SAW in terms of words, deeds, actions and the nature of the body (physical) or spiritual. In the digital era, the study of Hadith has undergone both innovations and challenges. The integration of technology has revolutionized the way Hadith is taught, learned, and disseminated. However, alongside these innovations, some challenges need to be addressed to ensure the authenticity and proper understanding of Hadith in this digital age. The method of this review begins with the evaluation processes involved doing a systematic search, followed by ethically assessing and determining the suitability of articles on hadith study. This review was also done by reviewing and combining information from 119 articles that were analysed from several electronic databases such as Scopus, ScienceDirect, and ERIC. In the final process, there were 32 papers successfully selected and recorded in a 5-year period, from mid-2019 until early 2024 to answer the research questions. The analysis findings indicate that several articles examining the digital platforms of hadith study, multimedia learning, global connectivity, electronic publications, and references tools. Furthermore, there are several challenges in implementing educational hadith such as proliferation of inauthentic Hadiths, misinterpretation and misuse, and security concerns. This study demonstrates the major findings is the integration of Hadith with technology addresses ethical discrepancies and moral issues emerging in cyberspace. It also demonstrates that the digital era has brought both innovation and challenges to the study of Hadith. Embracing technological advancements while addressing associated challenges is essential for fostering a robust, authentic, and globally connected Hadith
education system. There are some proposed areas for further research for example investigate advanced machine learning techniques for automating the extraction, classification, and analysis of Hadith texts.

**Keywords:** Hadith Study, Digital Platforms, Innovations, Multimedia Learning, Malay World

**Introduction**

The hadith is something attributed to Prophet Muhammad (SAW) in terms of his words, actions, acknowledgments, and physical characteristics (bodily) or character (spiritual). The study of hadith is a demand for the Muslim community to learn it because it is the second source of Islamic law, serving, among other functions, as an elucidation of unclear verses in the Quran. The digital era, on the other hand, refers to a period or age in which the world is flooded with advanced technological systems and the flow of information without any geographical boundaries or obstacles. Therefore, through its existence, the study of hadith can further expand its dissemination.

The study of hadith in contemporary times is not only focused on formal and informal institutions but has also expanded to include studies through mass media such as broadcasting, social media, and the application of the latest technologies such as mobile applications, websites, and computer software. According to Hassan (2016), there are several goals and objectives of using technology in the study of hadith, namely, facilitating the teaching and learning process (T&L), and saving time, energy, and money. Students can understand a subject more quickly, optimize energy, and save money using technology. Furthermore, it can attract the interest and attention of students through interactive hadith T&L methods, providing diversity in learning methods. In addition, it can prevent misunderstandings or misinterpretations of the meaning of hadith through sensory perception. The use of technology will involve various senses of students. For example, the use of visuals followed by audio will involve the senses of sight and hearing and possibly touch. This involvement of senses will enhance students' memory of a hadith. Additionally, it can help students achieve maximum learning effects with minimal time usage and enrich students' learning experience in T&L with the use of Information and Communication Technology (ICT).

However, with the development of open-ended hadith studies, it becomes more susceptible to various problems and challenges such as the spread of false hadiths, the influence of ideologies that seek to undermine Islam, and so on. Therefore, this article aims to explore the forms of hadith studies in Malaysia in general, then specifically focusing on hadith studies in the digital era that align with current technological developments. Subsequently, challenges faced in the era of globalization are discussed, along with proposed strategies to address these challenges, ensuring that its modern development remains in line with the original purpose, which is to provide understanding to the Muslim community in Malaysia.

**Research Methodology**

The researchers have employed the Literature Review writing guidance utilized by (Murad et al., 2023). Three processes, as proposed by Kitchenham and Charters (2007), were implemented to ensure the alignment of the acquired and assessed data with the study questions. The preliminary stage is executed to formulate a strategy. Initially, it is important to establish a systematic procedure for identification. This is a procedure for identifying papers that specifically address the problem statements that have been delineated.
Furthermore, throughout this phase, the search for the papers will be conducted using a standardized and methodical search protocol. During this phase, it is necessary to accomplish numerous tasks, including identifying the databases that should be utilized, determining the keywords and structure of the search query, and establishing the criteria for selecting relevant papers for the study. Data collection is conducted through a search method based on keywords in major databases such as Malaysian Theses Online (MyTo), Malaysian Citation Index (MyCite), Google Scholar, Dimensions, and others. Various keywords are used to ensure maximum access levels. Descriptive content analysis aims to identify trends and themes in hadith studies based on information technology. The focus is on the background, discussion, method, and findings of previous studies related to hadith and information technology. A Literature review is categorized based on themes and their relevance to technology, thereby presenting trends in related studies. Furthermore, during the second phase, a literature review is conducted as part of the process. It signifies that the chosen databases are queried using the constructed search phrase, and the selected results are then saved and documented. The selection of certain papers is determined by predefined criteria and the information derived from them. The concluding stage involves documenting the review.

**Brief Overview of Hadith Studies in the Malay World**
The rapid development of Hadith studies in the Malay world is succinctly summarized as follows: The Islamic process in the Malay world, which intensified since the 13th century, gave rise to a literary system known as Malay literature. This literature is based on the Malay language as the primary medium for discourse on the thoughts and religious beliefs of the Malay society in general. In this context, Islam plays a crucial role as a unifying force among the people in this region, making Malay literature not only a shared heritage but also a symbol of one of the most significant achievements ever produced. However, scholarly developments in religious works using Jawi script with a focus on Islamic fundamentals such as theology, jurisprudence, and mysticism are said to have emerged in the mid-16th century (Majid, 2019). Despite the acknowledgment of Hadith as a primary source after the Quran, it is consistently integrated with subjects like theology, jurisprudence, and mysticism in the form of religious texts and evidence, commands, and directives from Prophet Muhammad (PBUH), as well as spiritual guidance. Perhaps due to the practical functions of Hadith grounded in the three religious pillars, the production of separate Hadith-related works or studies was not popular among early Malay authors.

Observations by scholars indicate that in the 19th century, there was a significant development in the knowledge and documentation of Hadith. This progress was partly the result of efforts and contributions from earlier Sufi-Hadith scholars in Mecca who successfully implanted the importance of studying Hadith in the minds of the Malay society, not only for religious practice but also as a scholarly endeavor that should be pursued. Consequently, in addition to a noticeable increase in the quantity and types of Hadith works, attention was also given to the higher-level study of Hadith, especially in Mecca. This century also witnessed the resurgence of past Hadith works by Malay scholars in new publications, aligning with the advancements and acceptance of printing technology in the Middle East and the Islamic world in general.

The teaching and learning of Hadith in the Malay world, generally, and in Malaysia specifically, traditionally fall into two forms: informal and formal. Rosdi et al (2019) state that the study of Hadith began with traditional methods held in religious schools or madrasas, as well as in mosques, and gradually evolved into formal education in schools, colleges, and
higher education centers. The progression of Hadith studies continued with the integration of modern technology into the teaching and learning processes.

**Informal Hadith Studies**

Informal Hadith studies are the earliest form of education that originated from the time of Prophet Muhammad (PBUH) and continues to the present day. Informal studies in the context of the Malay Peninsula or Malaysia involve learning in acquaintances' homes, mosques, or traditional religious schools known as Pondok or madrasah. The Pondok institution represents the earliest form of Islamic education, particularly in the Malay Peninsula. Hadith studies in these institutions employ traditional methods that involve only teachers and students. According to Ishak et al. (2019), due to the absence of standardized curricula for Pondok institutions, each institution emphasizes its curriculum, making them different from one another.

Informal studies are also conducted in mosque and surau (smaller prayer halls) institutions, playing a crucial role in disseminating Hadith to the community. This is essential in helping the community practice Islam correctly and adhere to accurate evidence, as Hadith is the second source of Islam. Hadith studies in mosques and surplus are typically conducted after the Fajr (dawn) and Maghrib (evening) prayers. In contemporary times, Hadith studies in mosques or suraus often refer to books such as Hadith 40, Riyadh al-Salihin by Imam al-Nawawi, Bulugh al-Maram by Ibn Hajar, and others.

Informal Hadith studies usually follow traditional methods, including talaqqi (face-to-face delivery by a teacher to students), question-and-answer sessions to facilitate two-way communication between the teacher and students, discussion methods that stimulate students' minds to think creatively and critically, memorization methods to master specific Hadiths (Rosdi et al. 2019), and so on.

**Formal Hadith Studies**

Formal Hadith studies, on the other hand, are studies that follow a specific methodology and curriculum. Additionally, they integrate traditional and modern forms of education, utilizing the latest technology such as mobile applications, websites, and computer software in the learning process. One example of formal Hadith studies is at the secondary level in schools across Malaysia, mostly under the administration of the Ministry of Education Malaysia (MOE) and some schools under the administration of the State Islamic Religious Department. This knowledge has become a branch of study for every student with a background in Islamic education (Rosdi et al., 2019).

However, this subject is not offered as a standalone subject but is integrated into other subjects. For instance, in National Secondary Schools, the Hadith subject has been incorporated into the Islamic Education subject, where students are taught selected Hadiths from lower to upper secondary levels. In Religious Secondary Schools (SMKA), the Hadith subject is merged into the Islamic Education subject for lower secondary levels, while for upper secondary levels, it is integrated into the Islamic Legal and Syariah Education (PSI) subject and the Education of the Quran and Sunnah (PQS) subject. For schools with the STAM stream, it becomes a specialized subject, with more in-depth studies following the curriculum set by the Ministry of Education Malaysia (MOE), not only focusing on Hadith but also covering related sciences such as the sciences of Hadith (ulum hadis).

Furthermore, formal Hadith studies have a place in higher education. Hadith studies are taught to students following curricula set by faculties, especially in the field of Islamic studies.
at institutions like the University of Malaya (UM), National University of Malaysia (UKM), Islamic Science University of Malaysia (USIM), International Islamic University Malaysia (UIA), Sultan Zainal Abidin University (UNISZA), Islamic University of Selangor (UIS), and others.

The subjects taught at this level include 'Ilm Mustalah al-Hadith, 'Ilm al-Takhrij, Dirasat al-Asanid, 'Ilm al-Jarh wa ala-Ta'dil, Manahij al-Muhaddithin, Maktabah al-Hadith, 'Ilm Rijal al-Hadith, Hadith and IT Applications, Hadith and Current Issues, 'Ijaz in Nabawi Hadith, and more. In addition to attending classes in these subjects, students also need to complete scientific exercises, a requirement for obtaining an undergraduate degree. Many studies related to the field of Hadith have been produced in this regard. Furthermore, the offering of undergraduate and doctoral programs has contributed to the advancement of Hadith studies in Malaysia.

Concept of Hadith Studies in The Digital Learning Era

The use of technology has been advocated since 2013. However, in Malaysia, its significance became apparent after the emergence of the pandemic in early 2020. It was not due to the pandemic forcing us to yield to technology, but the times demanded a change in line with modern trends and high technology. Since then, the country has faced the threat of the pandemic and embraced a new normal. The difference is that we have faced all of this with challenges and our own set of standard operating procedures (SOP).

These are innovations in educational hadith in Malaysia for examples

i). Digital Platforms for Hadith Study: The advent of digital platforms, including websites, mobile applications, and online forums, has provided new avenues for the study of Hadith. Students and scholars can access a vast repository of Hadith collections, scholarly discussions, and educational materials with just a few clicks.

ii). Multimedia Learning: The use of multimedia elements, such as audio and video recordings, enhances the learning experience. Lectures, explanations, and discussions on various Hadith topics are now available in diverse formats, catering to different learning preferences.

iii). Global Connectivity: Digitalization has facilitated global connectivity, enabling individuals from different parts of the world to engage in the study of Hadith collaboratively. Live sessions, webinars, and virtual forums connect students and scholars, overcoming geographical barriers.

iv). Electronic Publications: Traditional Hadith books are now available in electronic formats (e-books and PDFs), making them easily accessible for reading, downloading, and sharing. This digital transformation has expedited the dissemination of Hadith literature.

v). Search and Reference Tools: Digital platforms offer advanced search functionalities, allowing users to find specific Hadiths quickly. Reference tools and databases aid scholars in verifying the authenticity of Hadiths, promoting meticulous research. This change demands the implementation of new delivery methods in teaching and learning (T&L) to adapt to the current situation. The adoption of technology and applications is now widespread at all levels of education. Currently, this endemic way of life seems to push global society, including Malaysia, towards the comprehensive use of technology and digitization of
materials. On average, universities and all levels of education are also actively delivering virtual PdP.

The preparation of digital materials is crucial in this era. It is not easy to transform printed materials into digital ones, but it is a contemporary necessity. It is not surprising that academics are currently grappling with enhancing Information and Communication Technology (ICT) skills and digitizing materials. This pure effort is not something easy to explore; it requires high skills with various up-to-date applications.

Moreover, educational institutions are generally striving to improve ICT facilities and capabilities to make digital learning more efficient. For educators, not everyone is capable of using technology, and a significant portion still adheres to traditional learning concepts. Various new approaches are being attempted to be applied to educators to achieve the goals of this learning aspiration. However, not everyone can accept the impact of this surge. In conclusion, the provision of digital materials needs to consider the needs and demands of the current generation by delving into their minds and tastes so that the delivered learning outcomes are more effective and meaningful.

The current generation comprises students who are easily adaptable to change and more open-minded. This concept is based on the students' needs, as they prefer new and fresh things. Since printed materials are less favored and receive little response, the concept of digitization is suitable for this generation of students. Among the characteristics estimated to be suitable for digital materials are simplicity and conciseness. Learning through video, audio, interactive multimedia, platforms, AR and VR applications, MR, and so on are some elements of digital learning. Immediate or non-immediate delivery should be brief, concise, and to the point. Fast and dynamic learning provides enjoyment for active and dynamic students. Importantly, the learning outcomes need to be effective as they have the right to assess and choose according to their preferences. In this way, they easily get bored and are quick to change direction. The convenience of web 2.0 access at their fingertips is more appealing, making it easier and faster for them to explore. All information and global facilities that offer free and paid services can be sought without flipping through books right in front of their eyes.

Hadith Studies through Mass Media
The rapid development of technology has bridged the gap in human relationships. Through social media applications such as Facebook, WhatsApp, Telegram, Instagram, and others, humans are connected without being limited by distance, space, and time. Information dissemination occurs rapidly in various forms, whether in writing, audio, or video. Therefore, Nabawi Hadiths appear on social media in various formats: digital, video, memes, or images. As a result, social media users can easily access information about Hadiths without being constrained by time and place. Thus, the existence of social media has provided opportunities and convenience for users to learn and study Hadiths Istianah (2020), concurrently serving as an effective e-dawah medium. In summary, the digitization of Hadith knowledge can be highlighted in formal and non-formal institutions to make this study more beneficial and comprehensive in the era of the Fourth Industrial Revolution (Ismail et al., 2019; Ummah, 2019). The ease of digital access to Hadith knowledge needs to be enhanced to an optimum and dynamic level for the benefit of various parties, especially scholars in the field of Hadith (Suryadilaga, 2016).

Moreover, in facing challenges in the digitization of Hadith knowledge, scholars and Hadith experts need to collaborate with those involved in the field of ICT. Consultation
services and monitoring of Hadith-related materials on websites, portals, and applications need to be conducted regularly. This is essential to prevent the dissemination of inaccurate information related to Hadith, liberal ideologies, anti-Hadith groups rejecting the validation of Hadith (Zulkifli, 2023; Usman et al., 2017), misinterpretation of Hadith texts or meanings, and the spread of unauthentic and false Hadiths among the general public (Ahmad, 2019).

Hadith studies through mass media have gained prominence in the present, especially through broadcasting media such as television and radio. This is because studying Hadith through this method makes it easier for the Islamic community to acquire knowledge without attending classes in mosques prayer halls, and the like. There are various educational programs in a scientific format that can be watched on television and listened to on the radio, which is highly beneficial in increasing knowledge and information for the community and, in turn, helping them practice Islam with accurate and authentic guidance.

Television stations have offered Hadith studies, including TV Al-Hijrah, TV3, Astro Oasis, and others. For example, the establishment of TV Al-Hijrah aims to provide a television platform that educates, entertains, and unites the ummah. It also serves as a space to promote Islam while countering Western propaganda that labels Islam as a terrorist religion, oppresses women, and causes its followers to regress. To realize the goals of establishing TV Al-Hijrah, various educational programs related to Hadith studies are broadcast, such as "Cinta Ilmu – Celik Hadith," which elaborates in detail on Hadiths based on the Collection of 40 Hadiths by Imam Nawawi, and capsules providing concise explanations of Hadith texts, such as "Kapsul Hadith Ramadan," "Kapsul Isra’ Mikraj (HR Imam Bukhari)," and others (Razali, 2019).

Radio stations also play a crucial role in the dissemination of knowledge through broadcasting, as the information and knowledge conveyed are not only visual but can also be acquired through the sense of hearing (Hassan, 2016). The community is seen to be more exposed to radio than television, especially for those who work, as the time allocated for work in a day, including commuting, is more than the time spent at home. Therefore, Hadith studies broadcast on the radio can fill their leisure time, especially when stuck in traffic.

IKIMfm is a 24-hour radio station operating every day throughout Peninsular Malaysia, Sabah, and Sarawak. The programs provided are conceptualized to educate the soul and also include entertaining programs that do not distract while presenting various useful information. This radio station has broadcasted many religious programs focused on Quranic exegesis, Hadith studies, the biography of the Prophet, the biography of the companions, jurisprudence of worship, and the like. The program Tafaqquh Fiddin discusses Hadiths based on the book "Mukhtasar Riyadh al-Salihin," and capsule programs cover hadith figures and concise explanations of hadith texts, such as "Kapsul Tokoh Hadith Radio IKIM fm: Imam Abu Dawud," and others (Razali, 2019).

Hadith studies through social media platforms such as Facebook, WhatsApp, Telegram, Instagram, Youtube, Tiktok, and others have rapidly flourished in the era of globalization. Hadith studies via social media have connected humans without being limited by distance, space, and time. According to Nasir et al (2021), Hadith studies have emerged on social media in various forms, including text, audio, video, or images. For examples of Hadith studies through social media include the study of the book "Sahih Muslim" with Ustaz Azri Hisyam bin Abdul Rahman, broadcasted live on Facebook, and the study of the book "Syarah Hadis 40 Imam Nawawi" by Datuk Dr. Zulkifli Mohamad al-Bakri on his own YouTube channel. Additionally, forums and Q&A sessions related to Hadith have also been extensively featured on social media.
Hadith studies on social media also broadcast studies conducted in mosques and prayer halls, either live or as recordings. This has made it easier for the community to follow Hadith studies online without the need for physical attendance. Moreover, these studies have also broadcast sessions involving scholars from within the country and abroad. Therefore, social media users can easily access information related to Hadith without being restricted by time and place. Thus, the existence of social media has provided opportunities and convenience for users to learn and study a particular Hadith, simultaneously serving as an effective edawah medium (Istianah, 2020).

Hadith Studies Through the Application of Modern Technology

The Fourth Industrial Revolution is closely related to the advancement of digital technology, the Internet, and cyberspace. This phenomenon requires swift action from all parties, aligning with the rapid development of smarter technological products and automation systems. To address this, the field of Nabawi Hadith is also being developed through the creation of websites, software, digital books, and ICT applications related to Hadith. These media continue to evolve and improve in tandem with technological advancements.

Hadith studies through modern technology provide search functions to facilitate online Hadith searches and enable Muslims to get closer to the second most important source, thereby expanding their knowledge. Among the modern technologies available are, firstly, mobile applications. According to Nasir et al. (2021), the development of mobile applications is focused on Mobile Learning (M-Learning) systems. It provides a new experience for society by offering easier access and broader networks covering the desired scope of knowledge. Zulkefli et al. (2017a) mentioned Hadith software developed for Android and IOS, including (i) Mawsu‘ah al-Hadith al-Nabawi al-Sharif, collecting Hadith from Muwatta’ Malik, Kutub al-Sittah, Sunan Imam Ahmad, Sunan al-Darimi, and Riyad al-Salihin, (ii) 9 Imam Encyclopedia Mobile Version, collecting Hadiths from the nine books, equipped with Arabic text and Indonesian translations, and chain of narrations for referenced Hadiths, and (iii) Al-Arba’un al-Nawawiyyah, a software collection of 40 Hadiths by Imam al-Nawawi.

Secondly, websites related to Hadith have also been developed and have grown rapidly in both Arabic and Malay languages. According to Zulkefli (2017b), some Arabic websites include (i) al-Durar al-Saniyyah, which has compiled nearly 583 Hadith books with 300,000 Hadiths, including repeated Hadiths, (ii) Islamweb with 1384 books, including 543 unpublished manuscripts with 70,000 Hadith chains, (iii) al-Jami’ al-Hadis al-Nabawi containing Hadiths from authentic collections, Sunan books, Masa’id and Ma’ajim books, etc., and (iv) Mawsu’ah al-Syamilah with 1106 books covering various fields of Hadith.

For Malay-language websites, most of them are general, covering discussions on Hadith sciences, collections of Hadith books for download, and presentations of Hadith books in visual text format on the internet. Examples include Mutiara Hadis developed by Prof. Dr. Zainab Abu Bakar and colleagues, which provides over 18,000 Hadiths from six renowned Hadith books. Another website is Ansarul Hadis, built by Dr. Fathi al-Sakandary, using a web application in the form of a blog. Additionally, many other Hadith websites have been developed in Malaysia, such as Mastika Hadith, Semak Hadis.Com, E-Hadith Jakim, Digital Hadith, Irsyad al-Qari, Fikrah.net, al-Nidaa’, Projek My Masjid, and others (Ahmad et al., 2019).

Thirdly, specialized computer software for the field of Hadith has also seen significant development. As early as 1985, a Hadith software called Mawsu’ah al-Hadis al-Sharif was released by Sakhr li Baramij al-Hasib. Subsequently, in 1997, the company Markaz al-Turath li
Abhath al-Hasib al-Ali published software called al-Mawsu‘ah al-Dhahabiyyah li al-Hadis al-Nabawi wa ‘Ulumuhu. The success of these software developments led to the creation of other software, such as Al-Maktabah al-Alfiyyah li al-Sunnah al-Nabawiyyah, containing 1300 volumes and Hadith books, and Mawsu’ah al-Takhrij wa al-Atraf al-Kubra, with almost 250,000 content texts of Hadiths from primary Hadith books. Furthermore, a company known as Markaz al-Juffal al-Tijari, based in Riyadh, Saudi Arabia, also produced several Hadith software programs, including Mawsu’ah Talab al-’Ilm, a software with 350,000 Hadiths, 250,000 narrations with chains, and 45,000 biographies of narrators, Al-Mawsu’ah al-Dhahabiyyah al-Maysarah li al-Hadis al-Nabawi wa ‘Ulumihi, containing 21 main Hadith books, 3 books on Fiqh al-Hadith, 6 books on ‘Ilm al-Rijal, and 3 books on Mustalah al-Hadith.

Study of Hadith through Hadith books in PDF and electronic format
The study of Hadith involves numerous references to old books written by renowned scholars of the past. The main element in this study is the scrutiny of the authenticity of Hadith. Despite the sophistication of information technology, the credibility of past scholars in recording important information and the methodology for verifying the authenticity of Hadith still cannot be surpassed. Works of Hadith scholars are still printed, and verification is conducted on various manuscripts by scholars in modern times to obtain quality and authentic print copies (Suhaimi & Sha’ri, 2021).

Typically, Hadith works are printed in the form of books that refer to bound paper sheets, containing writing, and so on, for reading or having blank spaces for writing. The advancements in current technology introduce new methods of storing manuscripts for Hadith works. E-books, or electronic books, are a medium of information delivery that refers to the use of electronic data. E-books can be obtained for a fee or for free. Most e-books come in the form of .pdf (Portable Document Format) files or similar formats to facilitate reading on computers or specialized devices. The .pdf document format was developed by Adobe Systems. Additionally, e-books are also released in other formats such as *.htm, *.txt, *.doc (Othman et al., 2022).

An e-book is a digital format publication consisting of text, images, or both, and can be read on a flat panel display on a computer or other devices (Gardiner et al., 2010). The approach of reading books through e-books can enhance interest among readers. User-friendly concepts enable e-books to be accessed through smartphones or computers with small document sizes, making search and storage easier. One of the largest platforms that hosts a collection of Hadith works in .pdf format is al-Maktabah al-Waqfiyyah, launched in 2013. This website categorizes Hadith works into [first] collections of al-Kutub al-Sittah, [second] books on mustalah al-hadith, [third] books on al-jarh wa al-ta’dil, [fourth] books on jawami’, masanid, and al-ajza’, and so on (Othman et al., 2022). Hadith e-books in .bok format are also provided. Therefore, references to Hadith knowledge can be downloaded for free, expanding its accessibility to readers.

Challenges Of Hadith Studies in The Globalization Era
In the era of globalization and digital advancements, along with the widespread use of technology in Hadith studies, it cannot be denied that it poses a threat to the sanctity of Hadith as the second reference source for the Muslim community, despite its many benefits in facing this challenging world. According to Zukefli et al (2021), the emergence of modern technology in this new era has brought significant challenges to the Muslim community because it brings with it various forms of information that can no longer be easily filtered.
This results in not all matters related to Hadith or Sunnah being accepted directly, as the sources used may not be considered valid evidence or reliable information. Among the challenges faced in the study of Hadith in Malaysia in this era of globalization are:

i) Proliferation of Inauthentic Hadiths: The ease of sharing information on digital platforms has led to the rapid spread of both authentic and inauthentic Hadiths. Discerning between genuine and fabricated Hadiths has become a significant challenge, contributing to misinformation. Hadith studies sourced from the internet are challenging to filter, making them susceptible to the spread of fabricated or false Hadith. MD Ariffin & Ahmad (2016) explained that false Hadith can be divided into two categories: falsifying something, then attributing it as the words or sayings of Prophet Muhammad SAW, and falsifying something that is not the saying of Prophet Muhammad SAW, such as statements of companions, tabi’in, or narrations from isra’iliyyat sources, then linking them to Prophet Muhammad SAW to gain public trust.

According to Shah (2016), the spread of false Hadith is rooted in the hasty attitude of the community in sharing the Prophet's Hadith without verifying their authenticity first. Additionally, the scholars' reliance on Hadiths found in books that have not been critically examined and their lack of emphasis on the science of Hadith verification (takhrij) also contribute to the dissemination of false Hadith. It becomes more lamentable when these Hadiths are used as arguments and conclusions for religious rulings, which constitute a significant deviation (Hassan et al., 2016). Furthermore, the dissemination of false Hadith is also an agenda of groups aiming to undermine Islam.

ii) Misinterpretation and Misuse: Digital platforms may inadvertently encourage misinterpretations of Hadiths. Individuals, lacking proper knowledge, might misunderstand Hadiths and misuse them to justify actions that contradict Islamic teachings.

iii) Security Concerns: The digitalization of Hadith materials raises cybersecurity concerns. Unauthorized alterations, hacking, or dissemination of manipulated Hadiths pose threats to the integrity of the information shared online.

iv) Quality Control: The vastness of digital content poses challenges in ensuring the quality and accuracy of Hadith materials available online. Proper validation and quality control mechanisms are needed to maintain the standards of Hadith studies.

v) Overreliance on Technology: There is a risk of overreliance on digital platforms, leading to a decline in traditional methods of Hadith study. Balancing technological innovation with the preservation of traditional scholarship is crucial.

vi) Attitude of the Community in Understanding and Adopting Hadith: The community's attitude towards understanding a Hadith obtained through mass media or social media, interpreting it on their own, and then adopting and practicing it in daily life is a challenge in Hadith studies in this era of globalization. Some even use it as an argument or evidence to justify their actions, even if they contradict Islamic law. According to Halim et al (2020), this issue arises because the understanding of a Hadith does not refer to religious scholars. People often use logical reasoning in interpreting Hadith, comprehend them without considering maqasid (objectives of Islamic law), misunderstand contextual approaches, and more. Zulkefli et al (2021), argued this problem is also due to a
lack of knowledge about the science of Hadith or laziness in verifying Hadiths accessed through the internet, leading to deviations in understanding the true meaning of Hadith. It becomes even more severe when these misunderstandings are spread to others.

The next challenge is the spread of the influence of groups with ideologies seeking to undermine Islam by employing deception, distortion, and falsehoods regarding Hadith. This includes anti-Hadith groups that exploit specific ICT applications such as social media to damage and confuse the understanding of Islamic teachings, casting doubt on the authenticity of prophetic Hadiths, and more (MD Ariffin & Ahmad, 2016). Usman et al (2020), assumed these anti-Hadith groups use the Internet to disseminate their beliefs and ideologies without easy detection by authorities.

Furthermore, there is the emergence of liberal Islamic groups that promote their ideology, claiming to bring progress and modernity to the Muslim community. According to Wazir et al (2018), they hide behind the name of religion but, in reality, attack the Muslim community from various angles. The most dangerous aspect is their attack on Prophet Muhammad SAW and his Hadiths, especially regarding the rejection of Aḥad Hadiths, labeling them as unclear and mere conjectures. Their understanding has led to misunderstandings in religious matters, advocating pluralistic interpretations of Islam and questioning Allah's Sharia and fiqh laws with rational arguments (MI et al., 2013).

vii) Cybercrime Attacks: The study of Hadith in this era of globalization has also created opportunities for cybercrime attacks. Although digitizing Hadith is an effort to preserve it in a new dimension, it is not exempt from cybercrime attacks such as software breaches and virus attacks. Therefore, digital Hadith developers are advised to outline security principles, continuously monitor Information and Communication Technology (ICT) security systems, and adhere to ICT security policies (Zulkifli et al. 2021). The study by Zulkifli & Sulaiman (2013) focused on two categories of digital Hadith security on the internet: maintaining Hadith through the installation of website software security systems and ICT security policies.

viii) Weaknesses in the Process of Transferring Hadith Texts into Digital Visuals: The process of transferring Hadith texts into digital media, such as copying texts from paper to computer software, requires not only expertise and knowledge in Hadith but also involves other skills such as computer literacy and a conducive environment. It also requires careful planning, commitment, high dedication, and thorough research and focus to avoid any errors. Neglecting this aspect may lead to significant errors, such as swapping Hadiths and placing them in the wrong section, or minor errors, such as changes in punctuation and letter shapes. Therefore, cyber preservation of Hadith is crucial to ensure the authenticity and authority of Hadith data.

Recommendations and Suggestions
Based on the challenges of Hadith studies mentioned above, several things need attention and emphasis to ensure that Hadith studies in this era of globalization are in good and satisfactory condition, preserving Hadith from any misunderstanding and distortion. Firstly, it is recommended to integrate traditional and modern forms of study. Technological advancements have undeniably introduced a new dimension to Hadith studies, but traditional methods should not be neglected. For instance, if someone is confusion about a Hadith obtained from social media, they should refer to a teacher or Hadith expert to verify its authenticity. Therefore, combining these two forms of study is better to ensure an effective and meticulous Hadith study process while meeting current needs in this era of globalization.
Secondly, mass media such as television and radio need to strive to increase religious programs, especially in the field of Hadith. These programs can be diversified, including not only lectures but also in the form of Q&A sessions, discussions, forums, and more. Thirdly, everyone in the society should be aware of ensuring the authenticity of a Hadith before practicing or spreading it to others by checking its status first. This is to avoid errors in argumentation and prevent the widespread dissemination of false Hadith. Fourthly, all lecturers or religious figures responsible for disseminating knowledge to the public must ensure the status of the Hadith they use. Therefore, it requires expertise in areas such as Hadith verification (takhrij), al-Jarh wa al-Ta’dil, etc., to ensure the authenticity of a Hadith and avoid mistakes when providing evidence or arguments. Fifthly, authorities must establish a committee responsible for ensuring the dissemination of Hadith in mass media, social media, etc., is safe and to block access when misinformation is spread. Sixthly, Hadith software or applications created should combine the expertise of Hadith scholars and Information and Communication Technology (ICT) developers to form more authoritative Hadith software or applications, ensuring the authenticity of the included Hadiths. ICT developers should maximize their expertise and human resources utilization to produce high-quality software. Authorities must also be responsible for tightening approval for the use of such software or applications after ensuring their authority.

Conclusion
In conclusion, the research and published data support the conclusion that the study of Hadith has developed in terms of information delivery, presentation, and innovative teaching and learning methods. Information about Hadith is no longer exclusive to students but is accessible to the general public, aligning with the progress in information technology and digitalization. This study will unravel, explain, and provide new perspectives for researchers in the field of Hadith for future studies. In summary, technological advances have brought a new dimension to the study of Hadith. The study of Hadith in this era of globalization, utilizing technological facilities, has many advantages, such as saving time and money, interactive efforts, and borderless accessibility. However, the rapid pace of technology has presented challenges to various parties in ensuring its authenticity, preventing the spread of false Hadith, and countering the ideologies of groups seeking to undermine Islam. This technology-oriented study is more open and prone to deviation and falsification. Moreover, reliance on this technology has led to the neglect of referring to sources. Therefore, this article is expected to provide clarification to the public regarding the study of Hadith in the era of globalization. Additionally, it aims to raise awareness of the challenges faced with the progress of current Hadith studies. From this explanation and awareness, it is hoped that all parties can work together to ensure the continuous development and authenticity of Hadith studies, making it one of the most important studies in Malaysia. Here are some proposed areas for further research in exploring innovations and challenges in the study of Hadith in the digital era:
1. Machine Learning Applications in Hadith Studies - Investigate advanced machine learning techniques for automating the extraction, classification, and analysis of Hadith texts. Explore deep learning models (such as neural networks) for improving the accuracy of Hadith classification and authentication.
2. Digital Authentication of Hadith: Investigate novel methods for digitally authenticating Hadith texts to ensure their reliability and prevent the spread of fabricated or weak
narrations. Explore blockchain technology for securely recording and verifying the chain of transmission (isnad) of Hadith.

3. Ethical and Moral Challenges in Digital Hadith Studies: Examine the ethical implications of digitizing sacred texts, including issues related to privacy, copyright, and cultural sensitivity. Investigate how digital platforms impact the interpretation and dissemination of Hadith, considering the potential for misrepresentation or distortion.

4. Integration of Hadith and Technology: Explore innovative ways to integrate technology with traditional Hadith scholarship, such as creating digital databases, mobile apps, or online platforms for Hadith study. Investigate the impact of digital tools on Hadith teaching and learning in educational institutions.

5. Text Datasets and Corpus Development: Curate comprehensive and diverse text datasets for training and evaluating machine learning models in Hadith studies. Develop specialized corpora that include various Hadith collections, translations, and commentaries in different languages.

6. Natural Language Processing (NLP) for Hadith Analysis: Apply NLP techniques to extract semantic information, sentiment analysis, and topic modelling from Hadith texts. Investigate the use of NLP tools for Hadith search, retrieval, and summarization.

In summary, further research in the digital era should focus on leveraging technology, addressing ethical challenges, and advancing the field of Hadith studies through innovative approaches and interdisciplinary collaborations.

Acknowledgment

Note: This paper uses funds under the Fundamental Research Grant Scheme (FRGS) (FRGS/1/2023/SSI13/UKM/02/2) from the Ministry of Higher Education (MOHE), Malaysia. The researchers expressed their appreciation and gratitude to all those who helped directly or indirectly to this research.

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