

Post-Pandemic Digital Hadith Teaching in Malaysian Public Universities: Challenges and Needs

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ABSTRACT

The transition from traditional face-to-face instruction to online learning in Islamic higher education has introduced significant pedagogical and technical changes. In Hadith studies, where traditional learning heavily relies on face-to-face interaction (talaqqī) to ensure the authenticity and integrity of knowledge transmission, digital adoption presents unique challenges. This study analyzes the pedagogical approaches, technical challenges, and actual needs of Hadith lecturers in Malaysian Public Universities regarding online teaching. Adopting the qualitative phase of Design and Development Research (DDR), data were gathered through semi-structured interviews with eight experienced Hadith lecturers across four public universities: Universiti Sains Islam Malaysia (USIM), Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), and International Islamic University Malaysia (IIUM). The thematic framework was integrated with the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). Findings revealed three main themes: (1) technical obstacles such as unstable internet connectivity and low student engagement, (2) the necessity of filtering and verifying digital Hadith software, websites, and applications, and (3) a unanimous consensus among lecturers on the urgent need for a standardized online Hadith teaching framework. The study highlights the critical need for institutional support and structured guidelines to bridge traditional Hadith methodologies with modern instructional technology.

Keywords: Digital Hadith Teaching, Public Universities, Needs Analysis, Post-Pandemic Pedagogy, UTAUT2, Islamic Higher Education.

INTRODUCTION

The COVID-19 pandemic caused an unprecedented disruption to global educational systems, compelling higher education institutions worldwide to instantly pivot from traditional face-to-face instruction to online learning modalities (Abidah et al., 2020; Mohamad Zainuzi, 2024). In Malaysia, the enforcement of the Movement Control Order (MCO) under the Prevention and Control of Infectious Diseases Act 1988 mandated an immediate digital transition in teaching and learning (TnL) across all public universities (Mohamad Zainuzi, 2024). This sudden pedagogical shift created severe operational and instructional challenges, particularly for academic disciplines that historically rely on direct oral transmission, physical presence, and behavioral mentoring, such as Islamic studies (Abdul Aziz et al., 2020; Mohamad Zainuzi, 2024).

Within the landscape of Islamic higher education, Hadith studies serve as an indispensable pillar of knowledge. Positioned as the secondary primary source of Islamic jurisprudence, Hadith functions to elucidate, detail, and contextualize general Quranic principles (Daulay & Sulasmi, 2023; Mohamad Zainuzi, 2024). Historically, the transmission and instruction of Hadith have been deeply rooted in classical methods (*talaqqī* and *halaqah*), emphasizing face-to-face interaction between scholars and students to guarantee the authenticity (*aṣālah*), accurate memorization, and spiritual integrity of the transmitted narrations (Ismail et al., 2018; Zainal Abidin et al., 2020). While modern advancements in Information and Communication Technologies (ICT) and the Fourth Industrial Revolution (IR 4.0) have introduced digital databases, search perusal software, and mobile applications to facilitate Hadith research, a noticeable gap remains between technological capability and effective pedagogical execution among university educators (Ahmad et al., 2019; Zulkipli et al., 2021).

The shift toward fully virtual environments exposed significant infrastructural and pedagogical constraints. Academic staff encountered obstacles such as unstable internet connectivity in suburban and rural areas, limited access to high-performance peripherals, low student active engagement, and a distinct lack of standardized pedagogical guidelines specifically tailored to digital Hadith instruction (Abdullah & Mohamed Zin, 2022; Mohamad Zainuzi, 2024). Unlike practical or technical disciplines that adapted rapidly through virtual laboratory simulations, Hadith education faces the unique dilemma of incorporating modern e-learning tools without compromising its rigorous classical methodologies (*turuq taḥammul al-ḥadīth*) (Ismail et al., 2019; Mohamad Zainuzi, 2024). Consequently, there is an urgent need to systematically evaluate how Hadith educators adapt to virtual environments and determine the specific pedagogical framework required to maintain academic rigor (Mohamad Zainuzi, 2024).

To address these empirical and pedagogical gaps, this study investigates the perspectives of Hadith lecturers across Malaysian public universities. Guided by the qualitative phase of Design and Development Research (DDR) and framed through the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), this paper analyzes existing online teaching approaches, identifies technical and instructional challenges faced by academic staff, and evaluates the actual necessity for developing a dedicated online Hadith teaching framework (Richey & Klein, 2007; Venkatesh et al., 2012; Mohamad Zainuzi, 2024). By analyzing the real-world experiences of educators during the digital transition, this research provides foundational insights for bridging classical Hadith scholarship with modern instructional technology.

LITERATURE REVIEW

Classical Hadith Pedagogy and Transmission Methods

Hadith studies in Islamic scholarship have maintained a structured transmission methodology since the era of the Prophet Muhammad SAW and the early generations (*salaf*). In classical madrasah and university systems, Hadith instruction relies on eight recognized methods of reception and delivery (*turuq taḥammul al-ḥadīth*), as codified by Ibn al-Salah (1986). To adapt these classical methodologies into modern virtual environments, educators must align traditional transmission rules with digital teaching platforms:

- **Al-Samā ‘ (Teacher Recitation):** The lecturer recites Hadith while students listen and take notes. In digital environments, this method manifests through synchronous lectures, live webinars, or audio podcasts delivered via platforms such as Google Meet and Zoom.
- **Al-Qirā’ah ‘alā al-Shaykh (Student Reading):** The student reads the text while the lecturer verifies its accuracy and pronunciation. Digitally, this is executed through active screen-sharing where students read online manuscripts or PDF copies while lecturers provide real-time corrections.
- **Al-Ijāzah (Permission to Transmit):** The teacher grants formal authorization to students to transmit specific Hadith collections. In modern e-learning, this translates to digital certification, verified digital badges, or formal course completions issued through institutional Learning Management Systems (LMS).

- **Al-Munāwalah (Handing Over Text):** The teacher physically hands over a written manuscript or text to the student. Virtual adaptation involves lecturers sharing authenticated digital text files, PDF e-books, or links to primary Hadith databases.
- **Al-Mukātabah (Written Correspondence):** Transmission through written communication. In virtual contexts, this corresponds to asynchronous interactions, email exchanges, LMS discussion forums, and lecture notes distributed digitally.
- **Al-I'lām (Informative Transmission):** Informing students that a specific narration or book was heard from a particular scholar. Digitally, lecturers provide curated lists of verified online Hadith repositories, digital manuscript links, and certified database references.
- **Al-Waṣiyyah (Entrusting Manuscripts):** Entrusting Hadith manuscripts or notes to a student prior to travel or death. Modern practice reflects this through cloud storage drive links, archived digital libraries, and persistent digital repositories shared with students.
- **Al-Wijādah (Self-Discovery of Text):** Discovering Hadith narrations in an author's authentic handwriting or reliable secondary records. Digitally, this aligns with student-led independent research using online Hadith search engines, digital cataloging tools, and web-based authentication databases.

While these classical techniques ensure the preservation of chain of transmission (*isnād*) and textual integrity (*matn*), modern higher education in Malaysia requires synthesizing these foundational concepts with contemporary virtual pedagogy (Ismail et al., 2018; Mohamad Zainuzi, 2024).

E-Learning, Mobile Learning, and Digital Hadith Tools

The integration of Information and Communication Technologies (ICT) in Islamic higher education has led to the adoption of specialized mobile learning (m-learning) applications, standalone perusal software, and web repositories (Doll Kawaid et al., 2018; Mohamad Zainuzi, 2024). In Malaysian public universities, Hadith instruction heavily utilizes digital tools for Hadith authentication (*takhrīj*) and Hadith evaluation (*'ulūm al-ḥadīth*). Commonly integrated digital tools include:

- **Web Repositories & Portals:** Al-Durar al-Saniyyah, Islamweb, Dorar.net, Semakhadis.com, and Sunnah.com (Syed Hassan et al., 2015; Mohamad Zainuzi, 2024).
- **Perusal Software & Databases:** Maktabah al-Shamila, Al-Maktabah al-Alfiyah, and Al-Bahit al-Hadisi (Ahmad et al., 2019; Mohamad Zainuzi, 2024).
- **Mobile Applications:** iHadis Pro, Maktabah al-Hadis al-Syarif, and Lidwa's Ensiklopedi Hadis (Mohamad Zainuzi, 2024).

Despite their research convenience, critical challenges persist regarding translation inaccuracies in non-Arabic software, technical incompatibility with modern computer operating systems, and unverified digital content (Fauzi, 2020; Zulkipli et al., 2021; Mohamad Zainuzi, 2024). Consequently, academic staff must guide students to critically verify digital search outputs against primary printed texts or original PDF manuscripts (*turāth*).

THEORETICAL FRAMEWORK: UTAUT2

To evaluate educators' acceptance, readiness, and actual utilization of educational technology during virtual instruction, this study adopts the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) developed by Venkatesh et al. (2012). UTAUT2 offers a comprehensive framework evaluating technological adoption across core constructs:

- **Performance Expectancy:** The degree to which lecturers believe online tools enhance Hadith teaching efficiency.
- **Effort Expectancy:** The perceived ease of operating digital Hadith databases and e-learning platforms.
- **Social Influence:** The degree to which institutional leadership and academic peers encourage digital adoption.
- **Facilitating Conditions:** The availability of university technological infrastructure, technical support, and specialized academic training centers (such as UM's ADEX or UKM's Folio Center).
- **Hedonic Motivation, Price Value, & Habit:** The intrinsic satisfaction, cost-efficiency, and established routine of integrating virtual tools into daily teaching.

In this study, UTAUT2 provides a structured lens to analyze Hadith lecturers' readiness, university organizational support, and pedagogical strategies during the transition to online Hadith delivery (Mohamad Zainuzi, 2024).

Building upon the original UTAUT2 constructs, this study contextualizes the theory within the setting of digital Hadith teaching in Malaysian public universities. As illustrated in Figure 1, the UTAUT2 dimensions provide the theoretical lens through which lecturers' instructional practices, technological challenges, and the need for a standardized online Hadith teaching framework are interpreted.

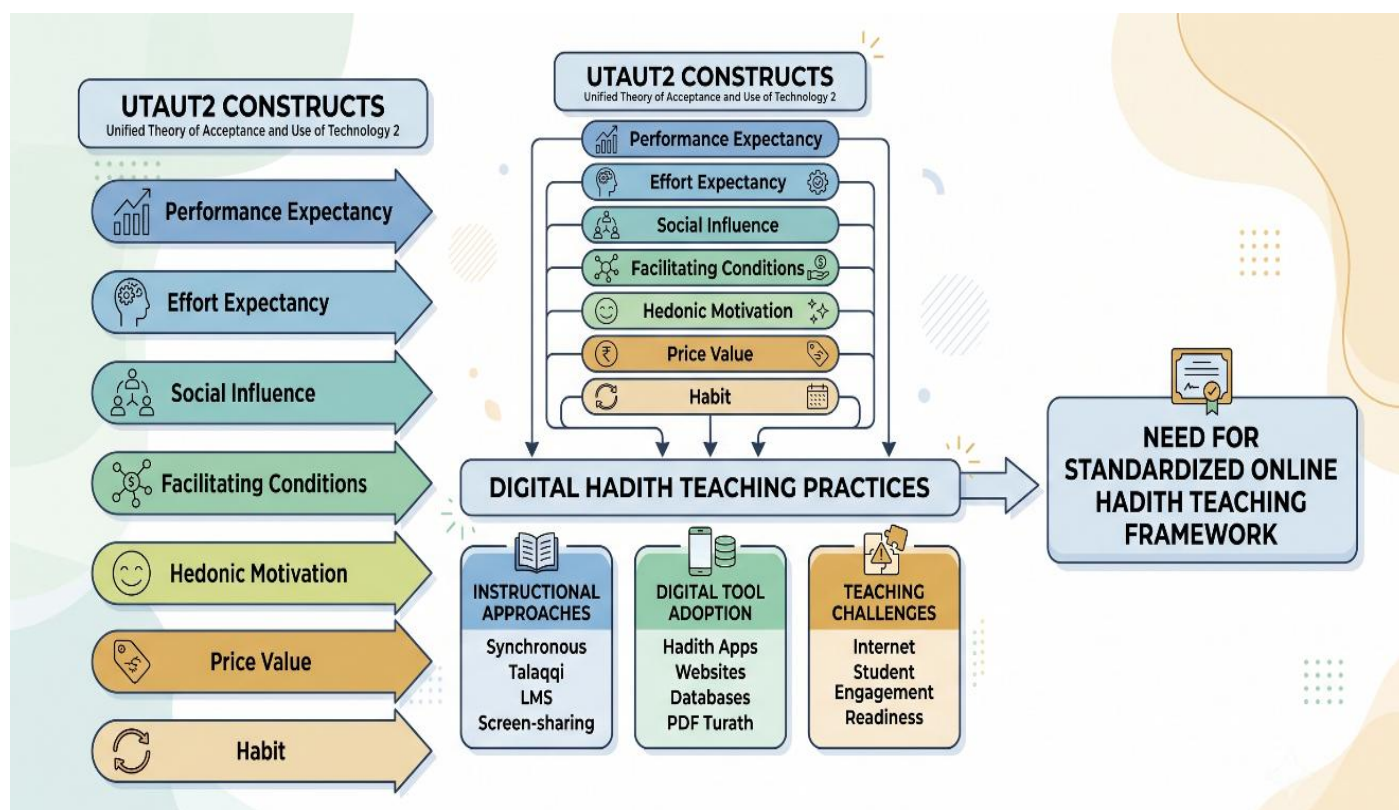


Figure 1: UTAUT2-Based Conceptual Framework for Digital Hadith Teaching

Figure 1 demonstrates how the UTAUT2 framework is operationalized in this study. Rather than examining technology acceptance in a general educational setting, the framework is adapted to explain the relationship between lecturers' acceptance of digital technologies, their instructional practices, the challenges encountered during online Hadith teaching, and the emerging need for a standardized online Hadith teaching framework. This conceptualization guided both the development of the interview protocol and the subsequent thematic analysis.

METHODOLOGY

Research Design

This paper focuses on the first phase (Needs Analysis Phase) of the Design and Development Research (DDR) approach formulated by Richey and Klein (2007). DDR provides a systematic, structured methodology for investigating instructional design needs, constructing educational models, and validating their implementation. The qualitative design of Phase 1 was specifically structured to explore the real-world experiences, instructional approaches, and pedagogical challenges faced by Hadith lecturers during virtual instruction.

Research Participants

Purposive sampling was used to select eight senior Hadith lecturers (R1 to R8) from four public universities in Malaysia: Universiti Sains Islam Malaysia (USIM), Universiti Kebangsaan Malaysia (UKM), Universiti Malaya (UM), and International Islamic University Malaysia (IIUM). Sample size determination followed recommendations by Delbecq et al. (1975), Adler and Ziglio (1996), and Clayton (1997) for qualitative expert panels. The selection criteria required participants to hold a Ph.D in Hadith studies or related Islamic fields and possess at least five years of academic teaching experience.

Table 1: Demographic Profile of Interview Respondents

Respondent Code	Public University	Faculty / Department	Field of Expertise	Teaching Experience
R1	USIM	Faculty of Quranic and Sunnah Studies	Ulum al-Hadith, Fiqh al-Sunnah, Ilm al-Rijal	> 5 Years
R2	USIM	Faculty of Quranic and Sunnah Studies	Hadith Studies, Takhrij Hadith, Hadith in ICT	> 5 Years
R3	IIUM	Kulliyyah of Islamic Revealed Knowledge	Quran & Sunnah Studies, Hadith Sciences	> 5 Years
R4	IIUM	Kulliyyah of Islamic Revealed Knowledge	Hadith Studies & Islamic Civilization	> 10 Years
R5	UKM	Faculty of Islamic Studies	Hadith Studies, Takhrij Hadith, Ulum Hadith	> 5 Years
R6	UKM	Faculty of Islamic Studies	Islamic Studies & Social Sciences	> 5 Years
R7	UM	Academy of Islamic Studies	Ulum Hadith, Ilm al-Rijal, Takhrij Hadith	> 5 Years
R8	UM	Academy of Islamic Studies	Hadith Studies, Fiqh Hadith, Textual Analysis	> 5 Years

(Source: Adopted from Mohamad Zainuzi, 2024)

In qualitative research and the Needs Analysis phase of DDR, sample size is guided by the principle of qualitative saturation and expert depth rather than statistical generalizability (Richey & Klein, 2007). The sample of eight senior Hadith scholars from four major public universities provided rich, dense data that reached thematic saturation, as no new codes or themes emerged during the final interviews. Moreover, this expert panel aligned with established qualitative guidelines for specialized expert inquiries (Delbecq et al., 1975; Adler & Ziglio, 1996).

Data Collection

Data were gathered through qualitative semi-structured interviews. The interview protocol comprised 18 questions divided into three distinct sections:

Section A (General Pedagogy & Readiness): Conceptual understanding of online teaching, university training received, technical problems encountered, and general teaching approaches.

Section B (Digital Hadith Tools Evaluation): Usage, effectiveness, and content evaluation of Hadith mobile apps, websites, and standalone software.

Section C (Verification & Framework Need): Source verification procedures, improvement recommendations, and the necessity of constructing an online Hadith teaching framework.

Prior to data collection, the interview instrument underwent content validation by three domain experts. Sitzings were conducted face-to-face as well as virtually via Zoom and Google Meet according to participant availability.

Data Analysis and Trustworthiness

Audio recordings were transcribed verbatim into written transcripts and returned to respondents for member-checking to ensure textual accuracy. Data analysis followed the six-phase thematic analysis framework established by Braun and Clarke (2006): (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes against transcripts, (5) defining and naming themes, and (6) producing the report.

To establish qualitative trustworthiness and credibility (Lincoln & Guba, 1985), peer debriefing and an audit trail were maintained throughout coding. Code development was cross-verified by two independent qualitative researchers to ensure inter-coder agreement. Furthermore, researcher reflexivity was strictly exercised; the authors maintained reflexive journals to monitor personal pedagogical biases regarding traditional face-to-face instruction vs. digital adoption, ensuring the emerging themes remained strictly rooted in the participants' authentic responses.

FINDINGS AND DISCUSSION

Existing Online Teaching Approaches in Public Universities

The findings reveal that all four public universities had introduced e-learning platforms prior to the pandemic on a periodic basis, but the enforcement of the MCO forced a full transition to virtual instruction. Lecturers employed a mix of synchronous video conferencing platforms (such as Google Meet, Zoom, and Microsoft Teams) and institutional Learning Management Systems (LMS). Specifically, Universiti Malaya utilized *Spectrum*, Universiti Kebangsaan Malaysia relied on *Folio*, and the International Islamic University Malaysia implemented *i-ta'leem*.

In terms of Hadith pedagogy, lecturers adapted traditional reading methods (*talaqqī*) to digital formats. Respondents R7 and R8 emphasized reading primary text PDFs (*turāth*) directly on screen during live sessions rather than relying solely on slide presentations. Other lecturers (R4) incorporated interactive gamification tools like Kahoot and Quizizz for formative assessment, or utilized *Gather Town* (R3) to recreate a 2D virtual classroom environment to foster active interaction.

Technical, Psychological, and Engagement Challenges

The findings highlight three primary categories of challenges faced by Hadith lecturers during online delivery:

Technical Limitations: Unstable internet connectivity, particularly for students in rural areas, severely disrupted live lectures and assessment submission (R1, R5, R6, R7). Weather factors such as heavy rain frequently cause power outages and loss of internet access (R1, R3).

Student Engagement and Commitment: Lecturers reported difficulty measuring student comprehension during virtual lectures. Passive attendance was prevalent as students frequently kept their cameras off (R7) or were distracted by home environments (R2, R3).

Psychological and Pedagogical Readiness: Senior lecturers accustomed to traditional face-to-face instruction faced psychological hurdles transitioning to virtual delivery (R3). From a religious perspective, some educators viewed virtual sessions as less conducive to spiritual and behavioral mentoring (*tazkiyah*) compared to direct physical presence.

4.3 Evaluation of Digital Hadith Software, Applications, and Websites

Lecturers acknowledged that digital Hadith tools play a transformative role in streamlining research, particularly for Hadith authentication (*takhrīj*). Table 2 summarizes the primary digital platforms utilized across the four public universities.

Table 2: Categorization of Digital Hadith Tools Utilized in Malaysian Public Universities

Category	Digital Tool / Platform	Key Features & Pedagogical Application
Mobile Applications	iHadis Pro, Maktabah al-Hadis al-Syarif, Ensiklopedi Hadis (Lidwa)	Quick retrieval of Kutub al-Sittah, search by keyword, Indonesian/Malay translations for beginner-level reference.
Web Repositories	Dorar.net, Islamweb, Semakhadis.com, Sunnah.com	Rapid Hadith authentication (<i>takhrīj</i>), verification of chain status (<i>isnād</i>), and status cross-checking.
Digital Databases & Software	Maktabah al-Shamila, Al-Maktabah al-Alfiyah, Al-Bahit al-Hadisi	Comprehensive primary source research (<i>turath</i>), PDF manuscript viewing, classical commentary (<i>shurūḥ</i>), and narrator biography (<i>rijāl</i>) analysis.

(Source: Adopted from Mohamad Zainuzi, 2024)

Despite their advantages, respondents raised concerns regarding translation inaccuracies in non-Arabic software (R3, R5) and technical compatibility issues with newer operating systems like Windows 11 or macOS (R3). Lecturers stressed that students must cross-reference digital findings with primary printed texts or original PDF manuscripts to ensure critical verification.

Lecturer Consensus on the Need for a Standardized Framework

All eight interview respondents (R1 to R8) unanimously supported the development of a structured online Hadith teaching framework. They noted that while technological tools are abundant, educators lack a systematic guideline that harmonizes classical Hadith transmission principles (*ṭuruq taḥammul al-ḥadīth*) with modern instructional design. Such a model is deemed essential for training new academic staff and standardizing virtual Hadith delivery across public universities.

Based on the collective perspectives of all respondents, the findings indicate that effective online Hadith teaching requires more than technological adoption alone. Instead, it necessitates an integrated ecosystem that harmonizes classical Hadith pedagogy, verified digital resources, institutional support, and learner engagement. Figure 2 illustrates the proposed Digital Hadith Teaching Ecosystem derived from the qualitative findings.

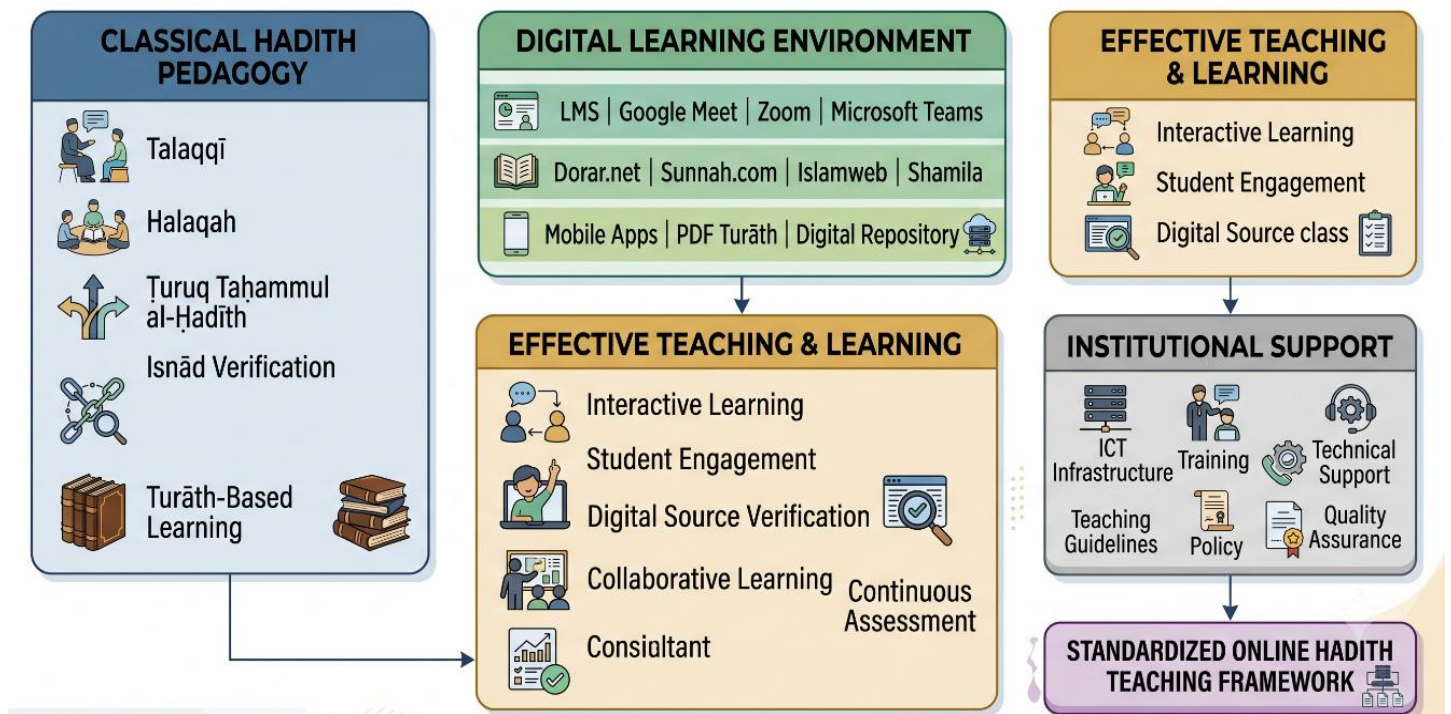


Figure 2. Digital Hadith Teaching Strategies Ecosystem

Figure 2 presents the proposed Digital Hadith Teaching Ecosystem synthesized from the interview findings. The ecosystem emphasizes that successful online Hadith instruction is achieved through the integration of four interrelated components: (i) classical Hadith pedagogical principles, (ii) contemporary digital learning technologies, (iii) effective teaching and learning practices, and (iv) institutional support mechanisms. The interaction among these components provides the foundation for developing a standardized Online Hadith Teaching Framework suitable for implementation in Malaysian public universities.

To synthesize the qualitative findings derived from the interviews, Table 3 presents a structured summary of the primary emergent themes, their corresponding sub-themes, and their conceptual alignment with the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) framework.

Table 3: Summary of Emergent Themes, Sub-Themes, and Alignment with UTAUT2 Constructs

Primary Theme	Sub-Themes Identified	Key Findings & Evidence	UTAUT2 Alignment
1. Instructional Delivery	Live streaming & PDF turath screen-reading	Heavy reliance on synchronous Google Meet/MS Teams; screen-sharing PDF books for talaqqī.	Performance Expectancy
2. Technical & Behavioral	Rural connectivity & passive attendance	Disruption due to bad weather; students keeping cameras off during live sessions.	Facilitating Conditions
3. Digital Verification	Non-Arabic software error & translation issues	Need for critical cross-referencing between digital tools (Dorar/Shamila) and physical texts.	Effort Expectancy
4. Pedagogical Need	Unanimous demand for a framework	Lack of standardized guidelines combining classical ṭuruq taḥammul with ICT tools.	Social Influence & Habit

(Source: Adopted from Mohamad Zainuzi, 2024)

The alignment between the emergent qualitative themes and the UTAUT2 framework is both structural and interpretive. For instance, **Performance Expectancy** directly maps to Theme 1 (Instructional Delivery), as lecturers measured digital tools based on how effectively they preserved *talaqqī* and text reading compared to traditional setups. **Facilitating Conditions** aligns with Theme 2 (Technical Challenges), reflecting how

institutional infrastructure, rural connectivity, and technical support directly constrained or enabled teaching continuity. **Effort Expectancy** corresponds to Theme 3 (Digital Verification), where the complexity and usability of digital tools (e.g., software errors in non-Arabic systems) determined the effort required to verify Hadith authenticity. Finally, **Social Influence** and **Habit** mapped to Theme 4, as the collective consensus among academic peers and institutional expectations drove the demand for a standardized, routinized framework.

Limitations Of The Study

This study is limited to the qualitative Needs Analysis phase (Phase 1) involving eight Hadith lecturers across four public universities in Malaysia (USIM, UM, UKM, IIUM). Consequently, the findings represent the instructional perspectives of educators in selected public institutions and may not fully reflect the experiences of private universities, traditional pondok systems, or students as end-users. Future research should incorporate Phase 2 (Design and Development) and Phase 3 (Evaluation) to validate the effectiveness of the proposed model across broader educational contexts.

While the sample size of eight lecturers from four public universities is appropriate for the exploratory qualitative phase of Design and Development Research (DDR), it inherently limits the empirical generalizability of the findings to private higher education institutions or traditional *pondok* settings. Nevertheless, the primary purpose of this Needs Analysis phase was to establish a grounded, domain-specific foundation for framework design rather than to generalize across all Islamic educational sectors. Future studies will involve a broader sample, including students and private sector educators, to empirically validate the framework.

CONCLUSION AND IMPLICATIONS

While digital technology provides flexible access to Hadith literature, preserving the academic rigor, chain of transmission (*isnād*), and traditional transmission methodology of Hadith studies remains paramount (Mohamad Zainuzi, 2024). The findings demonstrate that online Hadith instruction in public universities cannot rely on ad-hoc methods or unverified digital shortcuts. Instead, it requires a balanced synthesis of classical pedagogy (*turuq taḥammul al-ḥadīth*) and modern instructional technology (Ismail et al., 2019; Mohamad Zainuzi, 2024).

The thematic analysis revealed four main domains interacting with each other, as displayed in Figure 3 below.

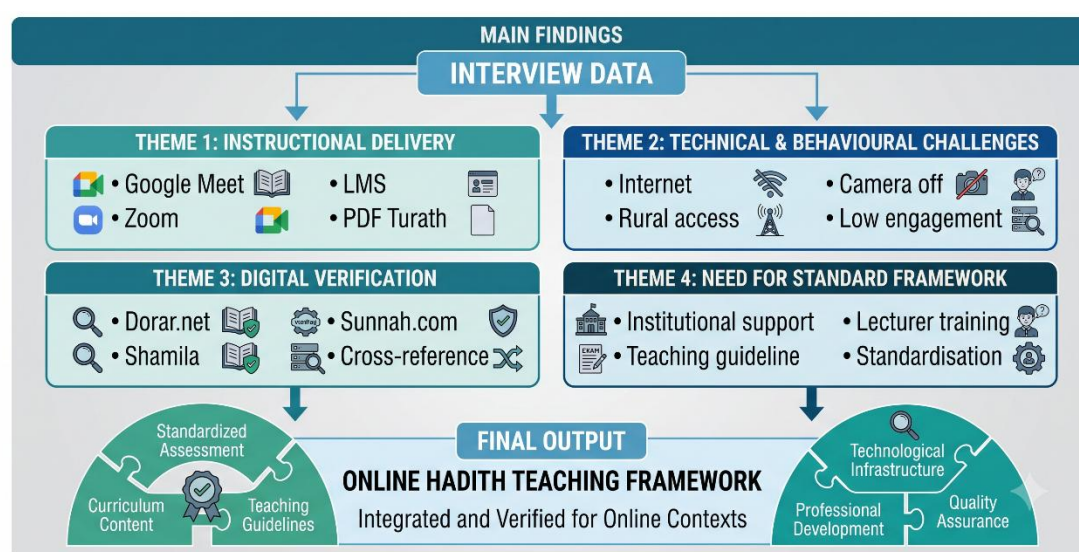


Figure 3: Main Findings from Interviews

Drawing upon the qualitative findings and the proposed ecosystem presented earlier, this study proposes a conceptual pathway for developing a standardized Online Hadith Teaching Framework. Figure 4 summarizes how the identified challenges, institutional responses, and pedagogical improvements can be translated into a sustainable digital teaching model for Hadith education.

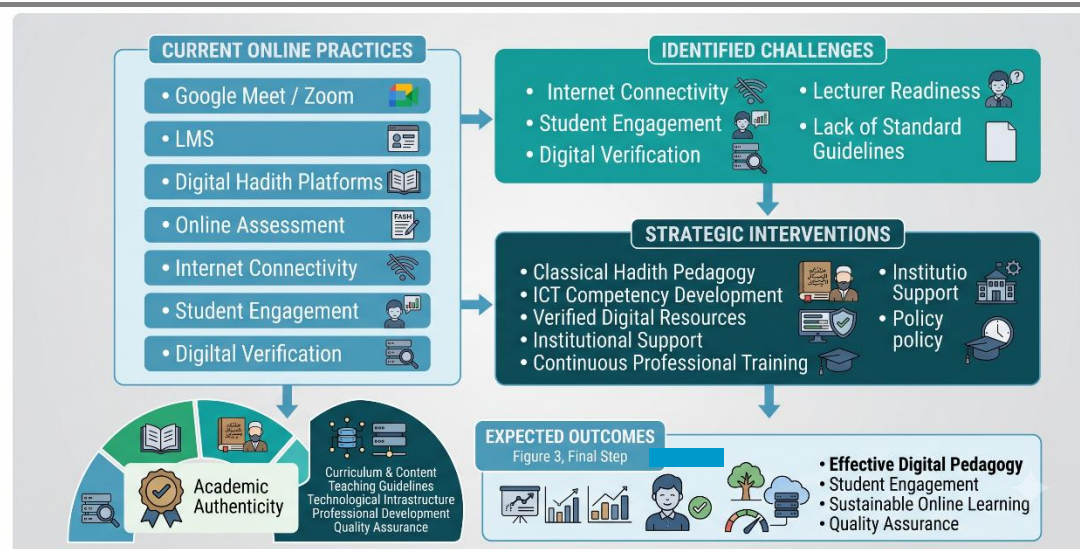


Figure 4: A Conceptual Model Derived from the Needs Analysis Phase

Figure 4 illustrates the conceptual pathway derived from the needs analysis. The framework demonstrates that the transition towards effective online Hadith teaching should begin with understanding existing instructional practices and addressing the challenges experienced by lecturers. These challenges require strategic interventions grounded in classical Hadith pedagogy, digital competence, verified learning resources, and institutional commitment. Collectively, these elements provide the foundation for establishing a standardized Online Hadith Teaching Framework capable of preserving the authenticity of Hadith transmission while embracing contemporary digital learning environments.

This study carries important practical, pedagogical, and institutional implications:

- **Pedagogical Implication:** Hadith educators must adopt a structured approach when guiding students through online Hadith retrieval. Lecturers need to emphasize critical evaluation of digital sources alongside traditional text analysis, ensuring students do not rely solely on digital search engines without cross-referencing primary printed manuscripts (*turath*) (Fauzi, 2020; Mohamad Zainuzi, 2024).
- **Institutional Implication:** University administrators and Ministry of Higher Education stakeholders must provide continuous technical infrastructure upgrades and specialized academic training centers (such as UM's ADEX or UKM's Folio Center) to enhance educators' ICT competencies and online assessment strategies (Mohamad Zainuzi, 2024).
- **Policy Implication:** Higher education institutions should establish standardized guidelines for virtual Islamic studies courses to ensure that digital transitions preserve traditional scholarship values (*aşālah*) while leveraging 21st-century digital tools (Zulkipli et al., 2021; Mohamad Zainuzi, 2024).

Future research should build upon these needs analysis findings by proceeding to the design and validation phases using the Nominal Group Technique (NGT) to establish a fully validated, expert-agreed Online Hadith Teaching Model (Mohamad Zainuzi, 2024). It is important to emphasize that the Online Hadith Teaching Framework proposed in this paper represents a conceptual output derived directly from the qualitative Needs Analysis phase (Phase 1) of DDR. As a conceptual model, it serves as the essential blueprint for subsequent development rather than a fully validated empirical tool.

To transition this conceptual framework into an empirically validated model, future research will execute Phase 2 (Design and Development) and Phase 3 (Evaluation) of the DDR cycle. Specifically, future phases will utilize the Nominal Group Technique (NGT) or Delphi method with an expanded expert panel. Furthermore, subsequent testing will incorporate student perspectives as end-users, evaluate implementation across private universities and traditional *pondok* institutions, and empirically test the framework's efficacy on student learning outcomes.

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Conflict Of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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