AL QASIMIA UNIVERSITY JOURNAL OF SHARI'A SCIENCES & ISLAMIC STUDIES

Bi-annual Refereed Journal

Vol.3, No. 1
Dhu al Qadah 1444 A.H. / June 2023 A.D.

ISSN: 2788 -5526

AQU Journal of Shari'a Sciences and Islamic Studies, Vol. 3 No.01, pp.193- 222 (June 2023)
DOI:10.52747/aqujssis.3.1.193
E-ISSN 2788-5534 / ISSN 2788-5526

أثر علم الحاسب الآلي في تطوير مخرجات تعلم الحديث النبوي

THE IMPACT OF COMPUTING ON THE DEVELOPMENT OF LEARNING OUTCOMES OF THE PROPHET'S ḤADITH[1]

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(1) Article received: Janunary 2023; article accepted: March 2023.

الملخص

لقد أسهم الحاسب الآلي بأدوار متعددة في تحسين مخرجات دارسي الحديث النبوي، وذلك من خلال توسيع دائرة البحث، والحصول على المعلومات صعبة الوصول إليها بسرعة وكفاءة، كما أوجد أنماطًا من التعلم، وربط العالم الإلكتروني بالورقي، وأحدث تراكيب بحثية لم تكن معروفة، وفي الوقت ذاته فتح آفاقًا من استخراج الأبحاث العلمية؛ مَهَّدَ ذلك دراسة بعض المقررات التقنية في تخصصات الحديث النبوي كمُقرر "التَّقانَة في خدمة السُّنَّة"، والذي تبنته كلية الحديث الشريف بالجامعة الإسلامية، في مرحلة البكالوريوس. وسيبرز هذا البحث– بعون الله– طرفًا هذه الأمور التي حققت تجويد مخرجات التعلم، بما يفتح الآفاق أمام الدارسين لمشاريع تقنية حديثية، وذلك من خلال قياس أثر استخدام التقنية الحاسوبية على مخرجات العملية التعليمية من جهة، وإلى تسليط الضوء بشكل أكبر على استخدامات هذه التقنيات لخدمة البحث العلمي في مجال السنة النبوية المطهرة وأهمها طرق استنباط الأفكار البحثية بهذه الحوسبة. لتحقيق هذه التوجهات قمنا بمجموعة من الدراسات التجريبية والتجارب الاحصائية والتي أعطت نتائج ملحوظة في تطوير أفكار بحثية جديدة وتحسين مخرجات التعلم.

Abstract

Computer technology has helped in many ways to improve the learning process for students and researchers studying the Prophet Hadith. These include broadening the scope of their research, facilitating access to information, creating new patterns of learning, linking the scholarly cyber world with the traditional world, and obtaining previously unknown research composites. Computing has paved the way for the study of some technical aspects in the disciplines of Prophetic Hadith, such as "Technology in the Service of the Prophet's Sunnah", which has been adopted by the Faculty of Hadith Al-Sharif at the Islamic University of Madinah for the undergraduate programme. This research will highlight the impact of computer

technology on the outcomes of the educational process of such courses, while also highlighting the use of these techniques for scientific research in the field of the Prophet's Sunnah through the development and extraction of research ideas. In order to achieve these goals, we followed a set of explorative methods in order to achieve the goals, which gave remarkable results in generating new research ideas in the science of hadith, and then we measured the effect of using computing in improving learning outcomes, which indicated a significant improvement in that.

الكلمات الدالة: الحاسب، تقنية، مخرجات التعلم، نواتج، الحديث، السُّنَّة.

Keywords: Computing, Technology, Learning Outcomes, Outcomes, Science of Ḥadith, The Sunnah.

1. Introduction

Computing technologies have improved significantly over the course of history and spread to different sciences. Nowadays, you can hardly find anything that does not contribute to development, renewal, and improvement.

The second-most significant Islamic teaching source is the Sunnah of the Prophet. As a result, there have been numerous initiatives to make this science more accessible to individuals as well as to those studying the Hadith of the Prophet. With a growing interest in creating original software for computers, the study of computer science was eventually included in the Prophet's Sunnah.

In this context, and because of the importance of the subject, the Faculty of Hadith at the Islamic University has introduced some elements into the curricula that rely on computing and technology. Then, in the year 1439 AH, a new course entitled "Technology in the Service of the Prophet's Sunnah" was developed.

To get the scientific facts right, we designed a questionnaire that was distributed to the first group of students in this course. The results enabled the faculty to investigate the feasibility of introducing important technological elements into modern science.

2. Research Questions:

1 Highlighting the role of intercourses in improving learning outcomes.
2 Introducing the main software programmes used in modern computing.
3 Highlighting patterns in the use of technology to enhance educational competence.
4 Investigating the extent to which researchers benefit from computer science.
5 Investigating the impact of the "Technology in the Service of the Sunnah" to improve learning outcomes of Hadith Faculty students.

3. Previous and Related Works

Numerous studies have been looked to the use of ICT in the field of education and the improvement of learning outcomes in general. Of these, the researchers carried out studies on six African countries (Agyei 2020) and measured the extent to which the use of information technology improved student outcomes and educational attainment. The researchers in (Gopal Naik 2020) also conducted a similar experiment in India to study the effects of technology on learning outcomes among students. Wallace research (Hannum 2007) focused on the benefits of using computers and the Internet in education with the aim of developing learning outcomes. In his research, he differentiated between improving educational processes using computers and improving learning outcomes through the use of the Internet in classrooms (Cuban 2006). This study concluded that the basis for improving learning outcomes depends not only on the use of computer techniques, but also on the way in which these techniques are used. From this we conclude that before technology is used, the purpose of its use and its impact on learning outcomes must be known It is possible to design tools and computer programmes that improve outputs (Kozma 1994).

Additionally, many studies have concluded that learning outcomes are improved by refining the methods of using the computer instead of simply relying on the fact that the computer has been introduced into the educational process (R. E. Clark 1994) (R. Clark 2003).

There has been a lot of research conducted on the subject of technology in the Sunnah and its sciences (A. Dumfu 2011), including a PhD thesis registered in the Department of Hadith Sciences at the Islamic University entitled: "Computer Service for the Prophet's Sunnah and Its Sciences, A Fundamental and Critical Study of Some of the Current Programs" (Al-Baradi 2022). However, our research focuses on the impact of computing on the development of the outcomes of learning the Prophet's Hadith, which is a highly specialised field, especially since it has an applied aspect of an existing course that is taught to undergraduate students at the Islamic University by the Faculty of Hadith in the "Computing in the Service of Sunnah" course.

This research was further divided into an introduction, four sub-topics, and a conclusion, which included the most significant findings and recommendations, as well as a list of sources and references. In the introduction, the main topic, objectives, and prior studies were presented. These are the four probes:

- Presenting the types of computing technologies used in Prophetic Hadith computer programs.
- Discussion the patterns of technology use in the developing the educational process.
- Diversifying Hadith research using technology.
- Impact of studying the "Technology in the Service of the Prophet's Sunnah" course on improving learning outcomes.

4. Software Techniques Used in Programs and Websites Related to the Hadith of the Prophet

As a result of the tremendous development in computing technologies, computer programs in the social sciences, including those used in the Prophet's Hadith sciences, can be divided into

traditional programs with rely on databases and advanced research methods, such as multi-criteria research. This second subgroup relies on artificial intelligence and related sciences.

I. The Traditional Websites of the Prophet's Hadith:

By analyzing websites related to the science of the Hadith and using tools such as (B. H. Maazouzi F 2012) we find that the techniques used are as shown in the following table. From this simplified study, we can note that most websites tend to use programming languages, such as languages, php or ASP, MySql databases, and ready-made data analysis tools from Google Analytics, Facebook, and Twitter. In addition, most websites support cloud-computing technologies and content management programs from Cloudflare or Twitter.

II. Using Artificial Intelligence and Machine Learning in Prophetic Hadith Software:

Other literary and social sciences are distinguished from the sciences of the Prophet's Hadith, which include the knowledge and research of the authenticity of the Hadiths, the science of Takhrjj (the science of Hadith extraction and authentication, as well as validating the chains of transmitters), the Prophet's Hadith, and numerous other sciences. In this context and in order to extract various information, data mining and text mining were used, through which knowledge was deepened. This led to new approaches to classification and linking. Natural language processing technology has also been used to summarize texts and analyze feelings in Prophetic Hadiths to study opinions and sentiments in evaluating Hadiths and translating texts into different languages. In addition, information retrieval techniques were used in search engines specialised in the Prophetic hadiths. On the other hand, augmented reality technology was used to develop e-learning for the Prophet's hadiths.

In the following table, we review some technical research work interested in using technology in Prophetic Hadith software.

Ref Number	Concept
(Kabi MNA 2005)	This study used the text classification method (TF/IDF) to classify Prophetic Hadiths
(Ghazizadeh M 2008)	This study used Fuzzy logic technology to validate conversations
(E.-Q. E. Harrag F 2009)	This study used artificial neural networks in chat classification
(B. H. Maazouzi F 2012)	This study used a multi-decision tree classifier to categorize chats
(M 2010)	This study used data mining algorithms to examine the Hadith
(E.-Q. E.-S. Harrag F 2011)	This study used SVM and artificial neural networks to classify Prophetic Hadiths
(Z. A. Aldhaln K 2012)	This study used classification in two different ways: resolution trees and naive bayes
(MM 2014)	This study used a new classification to distinguish between true and weak Prophetic Hadiths via classification and exploration techniques in the arm bonding rule
(Z. A. Aldhaln K 2010) (Ahsan M 2017) (Siddiqu M.i 2014)	This study used a method of prospecting texts to extract knowledge from the Prophet's Hadith
(Bilal K 2012)	This study used distributed and cloud-based smart systems technology to categorize and validate Prophetic Hadiths
(Haque F. 2020)	This study used sentiment analysis technology to discover the validity of the Prophet's Hadith

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Analytics and Tracking	Google	Google	Google	Flag Counter	Hotjar	Google Analytics	Google Analytics	Google Analytics
Widgets	Font Awesome Google Font API ThemePunch	Twitter Timeline	Google's primary tag for Google Measurement / Conversion Tracking, Adwords, and DoubleClick	AddThis	Font Awesome Google Tag Manager WhatsApp	Font Awesome	reCAPTCHA v2	LiveChat COVID-19 Apple Whitelist
Language	Arabic	Arabic	Arabic	Arabic	Arabic	Arabic	Arabic	Arabic
Frameworks	CodeIgniter Enginitron PHP	Microsoft Office SharePoint	PHP	PHP	Material Design for Bootstrap	PHP Laravel	ASP.NET 4.0	N/A
Mobile	Viewport Meta Apple Mobile Web Clips Icon iPhone / Mobile Compatible	N/A	Viewport Meta Apple Mobile Web Clips Icon iPhone / Mobile Compatible	Viewport Meta	Viewport Meta Apple Mobile Web Clips Icon iPhone / Mobile Compatible	Viewport Meta Apple Mobile Web Clips Icon iPhone / Mobile Compatible	N/A	N/A

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Content Delivery Network	Cloudflare BootstrapCDN	Twitter CDN	Cloudflare BootstrapCDN	N/A	Cloudflare jsDelivr	BootstrapCDN	GStatic Google Static Content	N/A
JavaScript Libraries and Functions	jQuery Bootbox.js	Angular JS	jQuery Modernizr	jQuery	jQuery Popper.js	N/A	jQuery 1.6.1	jQuery JavaScript Library
Web Hosting Providers	Cloudflare Hosting	Dedicated Hosting	Cloudflare Hosting	Cloudflare Hosting	Cloudflare Network Error Logging	Contabo	Level 3 Communications US hosting	GoDaddy
Name Server	Cloudflare DNS	N/A	Cloudflare DNS	Cloudflare DNS	Cloudflare DNS	GoDaddy DNS	N/A	GoDaddy DNS
Email Hosting Providers	SPF	SPF	SPF	Google Apps for Business	Google Apps for Business Business Email Hosting	SPF GoDaddy Email	N/A	GoDaddy Email
SSL Certificates	SSL by Default	Sectigo SSL	SSL by Default	Cloudflare SSL	Cloudflare SSL	CPanel SSL	LetsEncrypt	GoDaddy SSL
Web Servers	nginx	IIS	Apache	Apache	nginx	Apache	IIS 8	Apache
Operating Systems and Servers	IPv6	N/A	IPv6	Parallels Plesk Panel	IPv6	OpenSSL	N/A	N/A

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Web Master Registration	MSN / Bing Webmaster	N/A	N/A		Google Webmaster	N/A	N/A	Google Webmaster
Content Delivery Network	Content Delivery Network	Twitter CDN	Cloudflare	Cloudflare	Content Delivery Network	N/A	N/A	Content Delivery Network
Content Management System	N/A	iAPPS	phpBB	Plesk	Drupal Open Source	N/A	Google Static Content	GStatic Google Static Content
Audio / Video Media	N/A	YouTube	N/A	N/A	Flowplayer	N/A	N/A	Tube Mogul
Advertising	N/A	Twitter Ads	Google AdSense	Facebook Custom Audiences	DoubleClick.Net Google Remarketing	N/A	N/A	Google AdSense Amazon Associates
Verified CDN	N/A	N/A	Amazon S3 CDN	Patreon	N/A	N/A	N/A	Events Page

5. The Use of Technology in Education Development

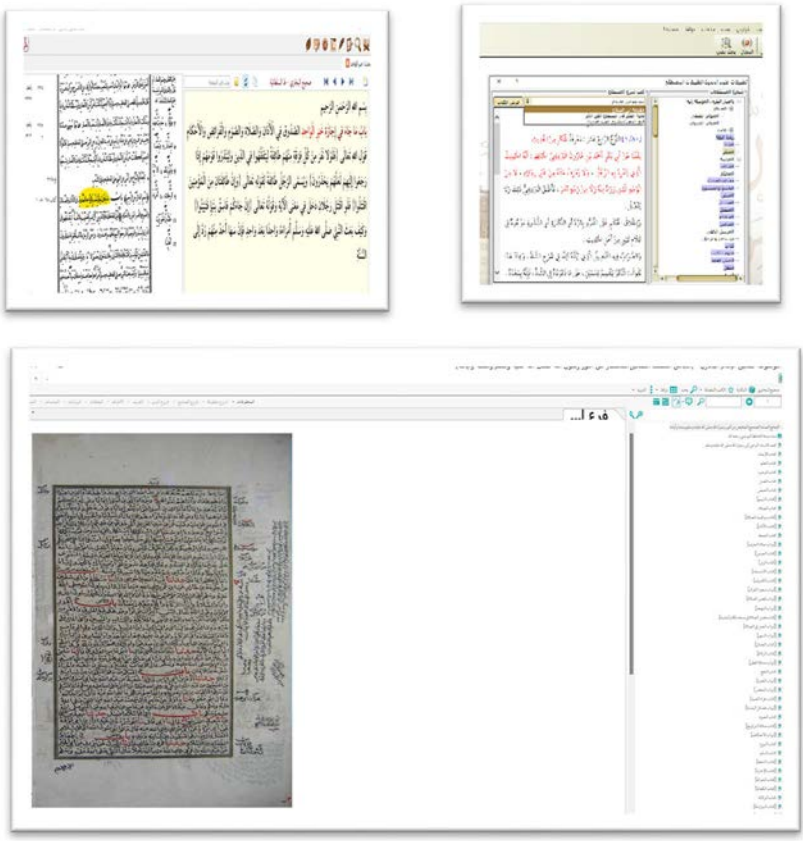
Diverse applications of technology were used to improve the educational efficiency of Hadith students. The most noteworthy results included:

1 Familiarising students with books of Hadith and their methods.

At first glance this may seem ordinary, but those who study the books of Hadith and its sciences find that it is very difficult to extend the reading without the use of technology (assuming there are books in libraries). This is illustrated in various ways, including:

A. Use PowerPoint presentations and hyperlinks to view these books and their methodologies.

B. Illustrating teaching examples through modern software programs, such as the Comprehensive Library (The comprehensive library 2022) and the Encyclopedia of Sahih Al-Bukhari (Sahih Al-Bukhari Encyclopedia 2022), which provides for the service of linking to book figures, or using the examples found in some programs, such as the Custodian of the Two Holy Mosques' software for the authentic Sunnah (The website of the Custodian of the Two Holy Mosques King Abdullah bin Abdulaziz Mosque for the Sunnah n.d.).

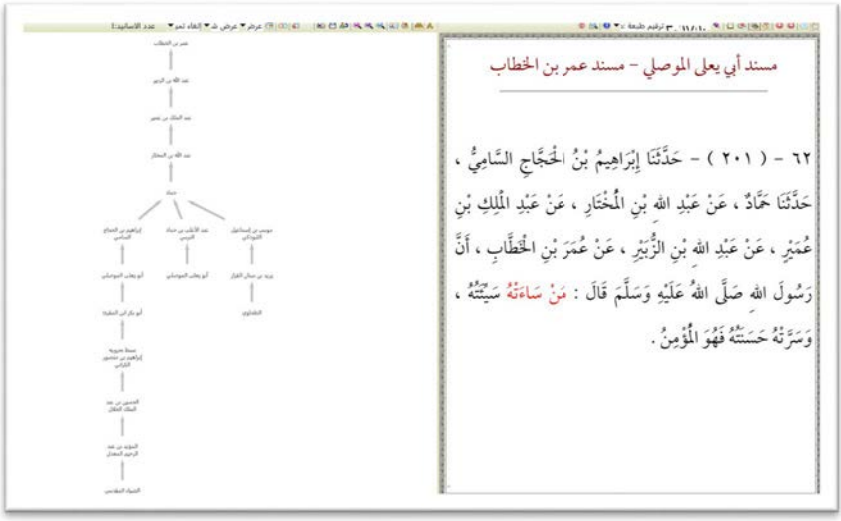


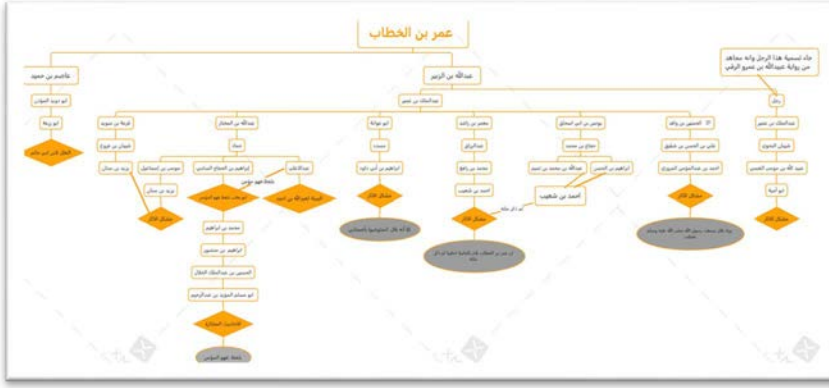
C. Availability of book illustrations for reading (either on specialised websites or in books) or various applications such as Telegram channels (Hadith Documents on Telegram 2022) dealing with books and research on the Hadith and its sciences (The Waqfeya Library website 2022).

2 Use e-books, which facilitate access to course materials and serve as a means of providing distance education.

3 Use information bases like WELY, which is a specialized e-books store with more than three million e-books (King Abdulaziz University 2022) (King Khalid university 2022).

4 Facilitate the implementation of certain skills required of Hadith students, such as drawing the narrations tree (Dakhil 1442 AH), which is essential for scholars. There are also programmes that enable students to draw the tree more accurately. such as Xmaind (This application was built by the postgraduate student Abdul Rahman Al-Juhani, master's degree in the Department of Fiqh Al-Sunnah, College of Hadith Al-Sharif in 1443 AH.), Word Concise, and the Custodian of the Two Holy Mosques assembler software for the authentic Sunnah.





5 There are practical applications to the Prophet's hadiths in terms of formulating their excerpt, analysing them, discussing their transmitters, explaining them, etc., as presented in figure (1). These applications help students clarify what to do when studying the hadiths, such as what has been found in the software of the Custodian of the Two Holy Mosques for the purified Sunnah.


موطأ الإمام مالك - كتاب وقوت الصلاة - الطهور للوضوء

الطَّهُورُ لِلْوُضُوءِ

٦٠ / ٢١ - مَالِكٌ ، عَنْ صَفْوَانَ بْنِ سُلَيْمٍ ، عَنْ سَعِيدِ بْنِ سَلَمَةَ مِنْ آلِ بَنِي الْأَزْرَقِ عَنِ الْمُغِيرَةِ بْنِ أَبِي بُرْدَةَ وَهُوَ مِنْ بَنِي عَبْدِ الدَّارِ ، أَنَّهُ أَخْبَرَهُ أَنَّهُ سَمِعَ أَبَا هُرَيْرَةَ يَقُولُ : جَاءَ رَجُلٌ إِلَى رَسُولِ اللهِ صَلَّى اللهُ عَلَيْهِ وَسَلَّمَ فَقَالَ : يَا رَسُولَ اللهِ إِنَّا نَرْكَبُ الْبَحْرَ وَنَحْمِلُ مَعَنَا الْقَلِيلَ مِنَ الْمَاءِ ، فَإِنْ تَوَضَّأْنَا بِهِ عَطِشْنَا ، أَفَنَتَوَضَّأُ مِنْ مَاءِ الْبَحْرِ ؟ [١/٣٠] فَقَالَ رَسُولُ اللهِ صَلَّى اللهُ عَلَيْهِ وَسَلَّمَ : هُوَ الطَّهُورُ مَاؤُهُ الْحِلُّ مَيْتَتُهُ .

6. Diversifying Scientific Research in the Prophet's Hadith Using Technology

Scientific research on the Prophet's Hadith is based on three pillars:

1) Memorization.

2) The ability to see sources and references.

3) Specialization proficiency.

Because of advances in computing, experts in the science of Hadith now have easier access to a wide variety of sources and references from which to draw. It would also be possible to periodically update these sources. By facilitating novel methods of investigation, technology has also facilitated the discovery of previously inaccessible sources..

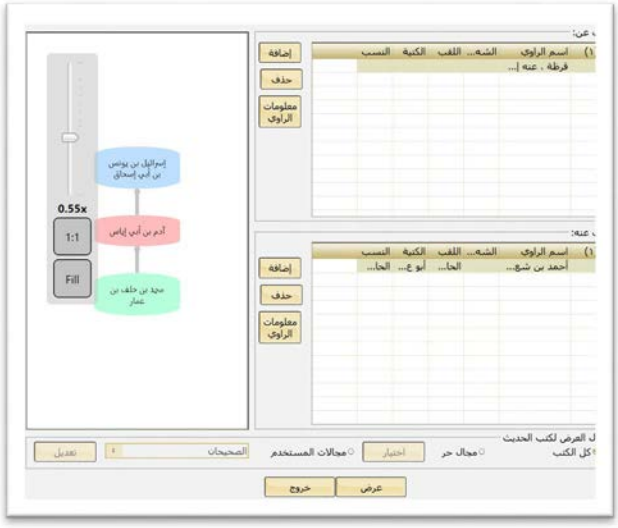
One of the most prominent examples in the diversification of scientific research is the following:

1 Disclosure of the topics and research covered in the study. This is a major concern for researchers who often learn more about a particular topic only after writing about them, which leads to failure. Through various public search engines, books and the electronic catalogues of international libraries and universities, researchers can be largely assured that there is information on their topic. This is a collection of prominent disclosures required of researchers of the Prophet's Sunnah..

2 The Hadith is searched for in three main ways: morphological, objective, and narrative. Although these three approaches were in circulation in the past, they were limited in use:

- The morphological research (al-Tahhan 1978) (Dr. Abdul-Samad bin Bakr Abed 1431 A.H) focused on old classifications on the first side of the Hadith, such as the books of Al-Jami' Al-Kabeer and Al-Sagheer Al-Suyuti pages72-75 (al-Tahhan 1978). In the modern era, research shifted to any word, as in the book Al-Mufsir Al-Mufassir of the Words of the Prophet's Hadith by Finsk, but was limited to the nine books. With the expansion of technology, research accommodated nearly all the publications of the noble Hadith, including the comprehensive library (al-Maktaba al-Shamela), which is updated periodically (Rayes 1427 AH). In addition to the tributaries of online search engines and the view they include of dedicated Hadith sites, specialists in the Prophet's Hadith answer certain rulings and problems.
- Objective Research: Hadith scholars wrote individual books on this topic, such as al-Jami' and al-Sunnah. Furthermore, many books included some information on this topic, such as Ibn al-Atheer's "Jami' al-Usul". In the modern era, The Key to Treasures of the Sunnah, which contains fourteen books, was written by Finsk. When technology appeared, it began with the nine books and expanded into two programs: Jami' al-Kalam and the Custodian of the Two Holy Mosques Jami' for the authentic Sunnah. Out of these two programs, the first is broader (Al-Durar Al-Sunniah. 2022).
- The search for narrators has previously been described in various biographies of eminent men as well as in the book Al-Arafat Kthuhfat Al-Ashraf by Al-Mazzi, which is limited to the six books of the Sunnah. From the beginning, it was a requirement to know the name of the companion or supreme narrator. When the indexing of books began,

this practise benefited researchers as it allowed them to identify the hadith of any narrator, but the sources remained limited until the advent of modern computer programmes that made it possible to search for the narrator in various ways in a wide range of sources and list all the narrations included in the programme. Until it came to building a chain of transmission from a group of transmitters to reach all the hadiths in that chain of transmission. This was not possible in the past except in the minds of those who memorised the Sunnah. Two special programmes emerged: "Jami' al-Kalam" and "the Custodian of the Two Holy Mosques for the Purified Sunnah".

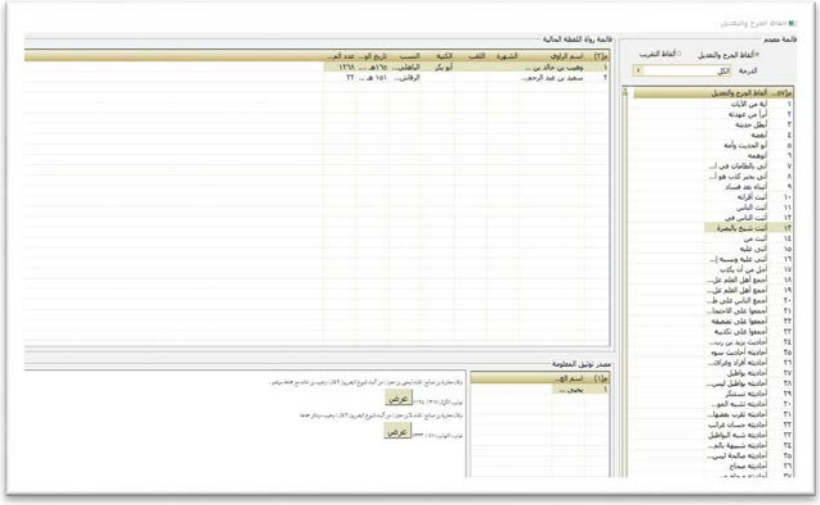


3 Combining the aforementioned three techniques (morphological, objective, and narrative) to search for Hadiths: This was not the norm for conventional book searches. The researcher is able to search for a Hadith using one or more keywords, link that to the names of numerous narrators, and specify a topic. In this instance, the best software is the Custodian of the Two Holy Mosques for the genuine Sunnah.

4 Finding new research topics and enriching knowledge:

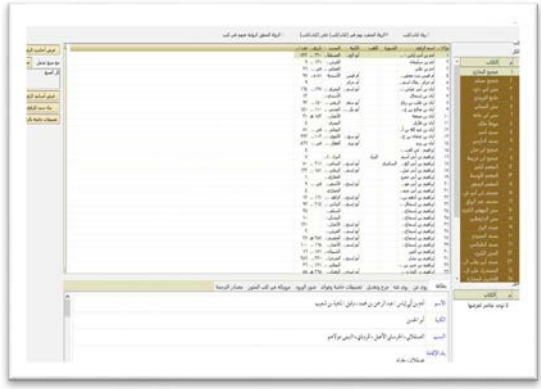
The purpose of this section is not to discuss studies of these programmes and their utility, but rather to create research topics using technology to provide the Prophet's hadith library with knowledge and supplements based on broad technical encyclopaedias. We give examples that are not restricted to:

- Tracing and studying the works of a specific narrator in an accurate, scientific manner. This requires a lot of time and effort that would be challenging to investigate manually. However, through what was provided by the computer, a graduate student could quickly present a project idea and the approximate number of narrators he/she would like to study.
- Studying important topics through the Sunnah of the Prophet, using objective research, and looking at what scholars have said about those Hadiths.
- Studying the words of the Invalidation and Rectification by getting an idea of those words via a software program, such as "the Custodian of the Two Holy Mosques for the authentic Sunnah".



- Studying a large number of Hadiths in books and determining where some books agree is a challenging task that requires memorization. Technology made this process accessible to a wider audience and enabled researchers to test and validate results. This is available through the Custodian of the Two Holy Mosques' programme for the Authentic Sunnah.

- Studying the additions of the narrators in some books over others is possible in programs such as the Custodian of the Two Holy Mosques for the Authentic sunnah.



- Using the narrator to study problematic Asanid, which academics have frequently discussed and mentioned..
- Ensure the continuity of the chain of narrators by demonstrating or refuting the hearing of each narrator from the narrator that follows it, in accordance with the ecords of the early scholars.
- Stylistic study of some Hadiths by collecting the methods of the Prophet's Hadith. Moreover, the program of the Custodian of the Two Holy Mosques for the Authentic sunnah collects the lexemes of the same Hadith in a unified context with the distinction of each lexeme and its edition in the characteristic: "the compiled text".

7. The Impact of implementing of the "Technology in the Service of the Prophet's Sunnah" Course on Improving Learning Outcomes

To investigate the impact of the "Technology in the Service of the Prophet's Sunnah" course on enhancing learning outcomes, the researchers created their own questionnaire. Twenty statements based on a five-point rating scale for responses were divided across two sections of the questionnaire.

The first set of statements was used to assess the direct impact of technology in the service of the Sunnah on improving the learning outcomes in the study of the Hadith of the Prophet. This collection contained nine statements.

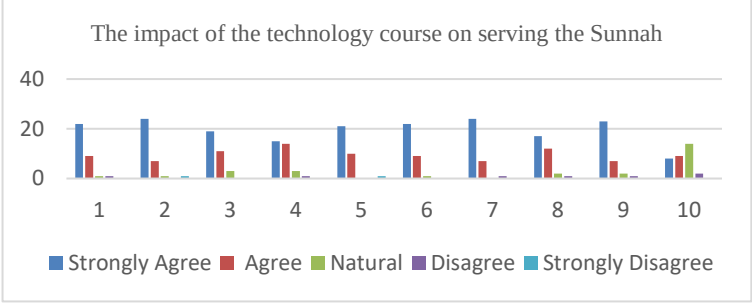
The second set of assertions focused on the role of computing technology in general and its impacts on the achievement of learning outcomes. This set included eleven statements.

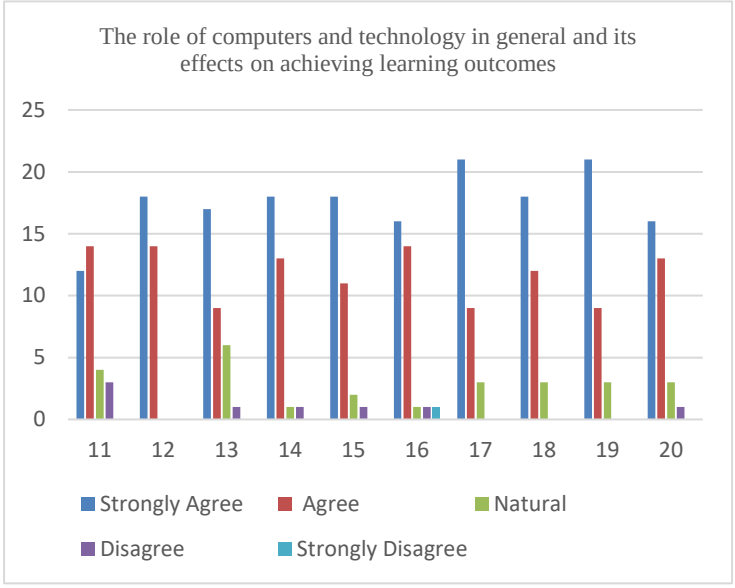
Notably, the questionnaire contained numerous negative statements. Numerous experts arbitrated the survey and modifications were made based on their input. The questionnaire's hypothetical arithmetic mean was 3 out of 5.

I. Study Procedures

A batch of those who previously studied the "Technology in the Service of the Prophet's Sunnah" course were selected and divided into three study divisions for the "Hadith Sciences Research Hall" course, taught by three different professors. To make the study more objective, 33 participants partook in the questionnaire.

II. Results:





III. Analysis of the Results:

In order to understand the trends, the average and standard deviation of the questionnaire results were calculated according to equations 1 and 2, respectively:

$$\bar{x} = \frac{\sum x}{n} \qquad (1)$$

$$\sigma = \sqrt[2]{\frac{\sum(x - \overline{x})^2}{n - 1}} \qquad (2)$$

From the previous table, we can deduce that the opinions of the participants in the sample were positive. The arithmetic mean of their opinion scores was 4.46, which is greater than the hypothetical arithmetic mean of the questionnaire, which is equal to 3. This indicates the significant positive impact of using technology as well as the benefit that students reaped from the "Technology in the Service of the Prophet's Sunnah" course in terms of improving learning

outcomes. As for the standard deviation, it indicates that the results of the questionnaire are very close to the arithmetic mean, which indicates the positive trends of the opinions of the statistical sample.

#	Statement	Number of Participants	Average	Standard Deviation	Directions
1	They tend to use the computer to study the Hadith.	33	4.575758	0.708445	Positive
2	The "Technology in the Service of the Sunnah" course provides a lot of the knowledge and skills required by a student of the Hadith.	33	4.71875	0.522671	Positive
3	One of the benefits of using technology in teaching the Hadith is the ability to consolidate information.	33	4.484848	0.66714	Positive
4	Knowing the computer programs in the Hadith enabled me to conduct better scientific research.	33	4.30303	0.769937	Positive
5	I learned about books on the Hadith and its sciences through computer programs that I was unfamiliar with before.	33	4.5625	0.800705	Positive
6	The use of technology helped me to derive Sharia	33	4.65625	0.545325	Positive

	rulings from the prophetic texts.				
7	Technology helped me learn about the methodologies of the Hadiths in reporting men and narrations.	33	4.6875	0.644455	Positive
8	The use of the computer helped me to facilitate the analysis of different sayings in the issues of specialization.	33	4.40625	0.756024	Positive
9	I can apply what I study theoretically through computer programs.	33	4.625	0.707107	Positive
10	Through this course, I learned about search engines and how to benefit from them.	33	4.210526	0.787327	Positive
11	The use of the computer helped me to easily write reports and complete the work I was assigned to do.	33	4.060606	0.933387	Positive
12	The computer improved my written communication skills.	33	4.5625	0.504016	Positive
13	The course contributed to my knowledge of drawing the AL Asaneed tree electronically	33	4.290323	0.86385	Positive

	through some programs.				
14	The course facilitated access to various sources of information.	33	4.46875	0.717719	Positive
15	Computer use increased my motivation to learn.	33	4.4375	0.75935	Positive
16	The use of technology helped in the development of self-learning.	33	4.30303	0.918043	Positive
17	Technology has helped me learn about contemporary research topics.	33	4.545455	0.665719	Positive
18	The course helped me identify and judge the validity of eLearning resources in the field of the Hadith.	33	4.454545	0.665719	Positive
19	My positive criticism ability increased after using the technique.	33	4.545455	0.665719	Positive
20	I was able to distinguish specific advantages of diverse computer programs used to study the noble Hadith.	33	4.333333	0.777282	Positive

8. Conclusions:

The main findings of this research are:

1) The importance of interdisciplinary courses in enriching knowledge and improving skill.
2) Hadith science was one of the first Islamic sciences to benefit from computing technology.
3) The techniques used to support the Hadith science can be divided into two parts: traditional methods, such as the use of languages to design website, office programs, and databases, and artificial intelligence techniques and natural languages in search and classification processes, that give modern programs and websites accuracy and diversity in terms of the information extracted.
4) The computer has contributed to the development of the educational process in the teaching of the noble Hadith and its sciences through: presentations, the provision of books in their various forms, and the application of practical examples in programs.
5) Computers enriches the research aspect of Hadith and its sciences by, for instance, uncovering research and discovering research methods, such as combining the three research methods (morphological, objective, and narrative).
6) Some Hadith-studying computer programmes have produced services that enable the generation of topics in the field of Sunnah and its sciences.
7) The course "Technology in the Service of the Prophet's Sunnah" at the Faculty of Hadith at the Islamic University had a profound effect on the students of scientific research, particularly in terms of the fourth topic's specific aspects. (A. Dumfu 2011)

9. Recommendations:

1) Finding technologically-enhanced Sunnah specialization courses in academic programmes.
2) Including computer labs in programmes of the Sunnah to make it simpler for students and instructors to benefit from technology.
3) Teach a general university course on computers and cutting-edge technologies that is open to all students.

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