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Integration And Interconnection Of Islamic Science And Digital Technology In Responding To Contemporary Social Problems

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Abstract

This research is based on the dichotomy between religious science and general science which often hinders the resolution of complex contemporary social problems. The main objective of this study is to explore the paradigm of integration and interconnection between multidisciplinary Islamic studies and digital technology in order to produce a more comprehensive, contextual, and relevant understanding of religion with the times. The research method used is a qualitative approach with a type of literature study, where secondary data is analyzed descriptively-analytically and through content analysis of related literature. The results of the study show that the "scientific spider web" model developed by Amin Abdullah becomes an effective methodological framework in bridging the Islamic scientific tradition (Hadharah al-Nash) with modern science and technology (Hadharah al-'Ilm) through philosophical-ethical dialogue (Hadharah al-Falsafah). The implementation of technology in Islamic Religious Education (PAI) has been proven to be able to significantly increase student involvement, interest, and understanding through the use of interactive media and online platforms. This study concludes that an integrative-interconnective approach is essential to face the challenges of the digital era, so that Islamic education is not only fixated on normative texts but also responsive to empirical realities and scientific advances.

Keywords: Integration, Interconnection, Islamic Studies, Digital Technology, Social Problems.

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INTRODUCTION

The approach of integration and interconnection in multidisciplinary Islamic studies methodology was born from the need to answer the complexity of the problems of the ummah that cannot be solved with only one discipline. Islamic studies, which have tended to be normative-theological, often face limitations when dealing with dynamic social, cultural, economic, and political realities. Therefore, an approach is needed that is able to combine Islamic sciences (such as tafsir, hadith, fiqh, and faith) with general sciences (such as sociology, anthropology, psychology, and education). This integration aims to produce a more comprehensive, contextual, and relevant understanding of Islam, without losing the basic values of Islamic teachings.

Islamic studies in the contemporary era faces increasingly complex challenges. On the one hand, Muslims are required to adhere to the fundamental principles of their religious teachings; on the other hand, the rapid development of science and socio-cultural changes require a renewal of the perspective in understanding and studying Islam. This tension between tradition and modernity gives birth to an urgent need for a methodological framework that is able to bridge the two worlds elegantly and productively.

Over the centuries, Islamic educational institutions, especially Islamic boarding schools and madrassas, have developed a rich scientific tradition by prioritizing religious sciences such as fiqh, tafsir, hadith, and kalam. However, with the advent of the modern educational model that brought with it secular sciences, there was an unhealthy dichotomy between the so-called "religious sciences" and the "general sciences." This dichotomy not only narrows the horizon of thinking, but also has the potential to give birth to a generation uprooted from its traditional roots or, conversely, a generation that stutters in the face of the challenges of the times. The idea of integration and interconnection is present as an answer to this dichotomous problem. Contemporary Muslim thinkers such as Ismail Raji al-Faruqi, Seyyed Hossein Nasr, Fazlur Rahman, and Amin Abdullah from Indonesia, have offered various models to unite or at least connect two scientific traditions that have been running separately. These intellectual offers are the focus of the study in this paper.

LITERATURE REVIEW

The approach of integration and interconnection in multidisciplinary Islamic studies methodology was born from the need to answer the complexity of the problems of the ummah that cannot be solved with only one discipline. Islamic studies, which have tended to be

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normative-theological, often face limitations when dealing with dynamic social, cultural, economic, and political realities. Etymologically, "integration" refers to the process of unification, unification, and merging of two or more objects to produce a whole unity. Meanwhile, "interconnection" describes intertwined relationships between various disciplines without having to fuse their respective identities. Thus, integration-interconnection is the process of merging and connecting various general sciences, especially natural and social sciences, with religious sciences such as the Qur'an and As-Sunnah. The philosophical foundation of this paradigm is firmly rooted in Islamic epistemology which is derived from the concept of *tawhid* (oneness of God), where all science essentially comes from Allah SWT, so that the dichotomous separation between religious science and general science is considered as a human construction that does not reflect a complete ontological reality.

In the context of Islamic studies in Indonesia, M. Amin Abdullah developed a comprehensive visualization of this paradigm through the "spider web of knowledge" model. This model describes the structure of science into three main layers that dialogue with each other. The first layer or core is Hadharah al-Nash (textual culture), which is the knowledge that is directly sourced from Islamic normative texts such as the Qur'an, Hadith, Sirah, and Fiqh. The second layer is Hadharah al-'Ilm (culture of knowledge) which includes empirical-historical sciences such as science, technology, social sciences, and humanities. The third layer is Hadharah al-Falsafah (the culture of philosophy and ethics) which functions as a critical bridge between the previous two layers. Through the interaction of these three layers, the significance of the scientific spider web paradigm lies in its ability to avoid two extremes, namely rigid scripturalism that ignores the empirical context and radical secularism that rejects the normative-ethical dimension of religion.

The academic discourse of multidisciplinary Islamic studies has also given birth to various models of methodological approaches offered by contemporary Muslim thinkers. One influential model is the idea of Islamization of Knowledge pioneered by Ismail Raji al-Faruqi, which seeks to integrate Islamic values into modern science in order to eliminate Western secular bias through twelve systematic steps. In contrast, the Islamic scientific model moves in the opposite direction, which is to study Islamic teachings using modern scientific methodologies to prove the relevance and validity of its practice empirically, such as medical research on fasting or the neuropsychological impact of prayer. In addition, there is a contextual and historical-critical hermeneutic approach developed by Fazlur Rahman through the "double movement method" to bridge the historical meaning of past texts with current contextual applications. In its

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application, it is also important to distinguish this level of cross-disciplinary integration: multidisciplinary uses several sciences side by side with their respective methods; interdisciplinary integrating cross-disciplinary methods to produce an integrated understanding; While transdisciplinary goes beyond rigid boundaries between disciplines to give birth to a completely new framework of knowledge.

At the practical and contemporary level, the implementation of this integration-interconnection paradigm is increasingly strengthened by the use of digital technology in the Islamic education system. Based on scientific analysis, Islamic Religious Education learning integrated with digital technology has been proven to be effective in significantly increasing student involvement, interest, and understanding. The integration of multimedia, animation, simulation, and online platforms is able to transform classrooms into a more interactive, fun, and flexible learning environment because the materials can be accessed anytime and anywhere. In addition to facilitating real-time collaboration and exchange of ideas between teachers and students, the use of digital technology also boosts students' learning motivation to explore religious values further. Therefore, the reconstruction of Islamic education in the modern era must no longer be limited to rigid theoretical-conceptual thinking, but must be adaptive to technological advances and responsive to the practical-social realities of the digital society.

METHOD

The focus of this research is the Integration and Interconnection of Islamic Studies and Technology in Indonesia in Facing Contemporary Social Problems. This study focuses on how the interconnection of Islamic studies affects the perspective of science and contemporary social problems. The phenomenon studied includes the separation between religious science and general science, Islamic studies in the contemporary era face increasingly complex challenges. On the one hand, Muslims are required to adhere to the fundamental principles of their religious teachings; on the other hand, the rapid development of science and socio-cultural changes require a renewal of the perspective in understanding and studying Islam. The research was carried out conceptually through the analysis of various national literature that discusses integration, Islamic education, and contemporary social problems to obtain a comprehensive picture of the direction of contemporary Islamic education reform.

This research uses a qualitative approach with the type of literature research. The research data is in the form of secondary data sourced from national journal articles, academic books, and scientific documents related to modern orientalism and Islamic education. The literature study

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approach was chosen because it is able to help researchers understand, review, and synthesize various relevant thoughts and research results in a systematic manner so as to produce a more comprehensive understanding of the integration and interconnection of Islamic studies and technology.

The sources of information in this study include the thoughts of Islamic education experts, social researchers, as well as various research results that discuss integration and interconnection in multidisciplinary Islamic studies. The literature analyzed includes a discussion of the concept of integration and interconnection methodology in multidisciplinary Islamic studies, the approaches and models used, as well as the implementation and problematics of the integration and interconnection paradigm in multidisciplinary Islamic studies.

The research process is carried out through several stages. The first stage is the identification and collection of relevant literature with keywords such as "integration and interconnection", "multidisciplinary Islamic studies". The second stage is the organization of data based on the main themes related to integration and interconnection, multidisciplinary Islamic studies. The third stage is carried out through a critical analysis of the relationship between concepts and previous research results. The last stage is the preparation of a synthesis to produce a conceptual picture of the integration and interconnection of Islamic studies and technology in responding to multidisciplinary social problems.

The data analysis techniques used are descriptive-analytical analysis and content analysis. Data is analyzed through the process of data reduction, categorization of themes, presentation of data in the form of narratives and tables, and systematic drawing of conclusions. The researcher conducted a critical reading of various literature sources to find similarities, differences, and connections between the ideas of modern orientalism and the reconstruction of Islamic education. The analysis is then used to formulate an Islamic education strategy that is more integrative, adaptive, and oriented towards strengthening spiritual values and scientific development.

RESULT AND DISCUSSION

The Concept of Integration and Interconnection of Multidisciplinary Islamic Studies Methodology

Etymologically, the word interconnection refers to the relationship between one another, while integration means renewal that results in a whole unity. Integration can be etymologically understood as the process of fusion, unification, and merger of two or more objects. Therefore,

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integration-interconnection is the process of merging and connecting various general sciences, especially natural sciences, with religious sciences such as the Qur'an and As-Sunnah. Integration-interconnection through scientific transformation can also be considered as an effort to find the role of religion in building a good social order. Integration-interconnection studies are studies that involve sciences in terms of objects and methodological orientation. This study examines a field of science by utilizing other fields of science, looking at the relationship between these various disciplines. If explored deeper, the idea of integration between religious science and general science is closely related to the efforts of Muslims in adapting to the ongoing modernization process around the world.

Approaches in the field of science can be divided into two types: monodisciplinary and cross-disciplinary. The monodisciplinary approach uses the point of view of only one science. The main feature of this approach is the use of a single knowledge or a single point of view. In contrast, an approach that involves multiple sciences is referred to as an interdisciplinary or multidisciplinary approach. In literature studies, problem solving cannot only use a monodisciplinary approach because the problem is not only related to one science, but requires an interdisciplinary or multidisciplinary approach because it involves various fields of science. A multidisciplinary approach is an approach that refers to various relevant scientific perspectives. Approach to the development of a discipline by utilizing help from other sciences, such as politics, economics, management, law, social, and so on. The main characteristic of this multidisciplinary approach is the large number of sciences in the same cluster of sciences. The use of knowledge in the flow of the learning process is based on knowledge that is interrelated with each other. Various disciplines can be used for problem solving. This is because the problem-solving process is very complex so it requires very diverse problem-solving perspectives.

This multidisciplinary approach results in collaboration in solving problems in research, or trials whose results can be integrated as a result of a large project. In other words, this approach builds cooperation between the sciences, each of which remains independent with its own method. The merger of disciplines is considered to be able to provide solutions to the problems that occur. Therefore, a multidisciplinary approach involves the use of scientific viewpoints from different disciplines, although they are not cognate or have a close relationship, with the aim of gathering different knowledge and perspectives on a topic without any in-depth effort to integrate them. It focuses on incorporating various concepts, theories, or methods from various disciplines without a strong integration effort. Researchers from different disciplines

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work separately or contribute from a disciplinary perspective individually. Etymologically, "integration" comes from the Latin word *integratio* which means renewal or unification of parts into one whole whole. In the scientific context, integration refers to the effort to unite or combine two or more disciplines so as to form an integrated knowledge system. Meanwhile, "interconnection" describes intertwined relationships between various disciplines without having to fuse their respective identities. If integration tends to be integrated, then interconnection is more dialogue and complementary.

The philosophical basis of this paradigm can be traced from Islamic epistemology which is sourced from the concept of tawhid of the oneness of God. In the framework of tawhid, all knowledge essentially comes from one Source Almighty, namely Allah SWT. The separation between religious science and general science is actually a human construct that does not reflect a complete ontological reality. Therefore, the effort of integration-interconnection is not just an academic strategy, but a deep theological awareness.

Amin Abdullah, the rector of UIN Sunan Kalijaga Yogyakarta who is the most influential in developing this paradigm in Indonesia, emphasized that the separation between Islamic studies and general science is an unproductive dichotomy legacy. Through the metaphor of the "*spider web*", he describes that each discipline is actually connected to each other in a complex network, with kalam/philosophy/mysticism in the middle, surrounded by various branches of Islamic science, and in the outer circle there are the humanities, social, natural, and arts-culture sciences.

The "*spider web of knowledge*" model developed by M. Amin Abdullah is the most comprehensive visualization of the integration-interconnection paradigm in Indonesian Islamic studies. This model describes the structure of science as a web that has several layers: The first layer (core) is Hadharah al-Nash (textual culture), which is the sciences that are directly sourced from Islamic normative texts: the Qur'an, Hadith, Sirah, and Fiqh. The second layer is Hadharah al-'Ilm (culture of science), covering empirical-historical sciences such as science, technology, social sciences, and humanities. The third layer is Hadharah al-Falsafah (the culture of philosophy and ethics), which serves as a critical bridge between the two previous layers. The most important thing in this model is that the three layers dialogue and interact with each other, rather than running in parallel that are not touching. The significance of Amin Abdullah's paradigm lies in its ability to avoid two extremes: scripturalism that refers only to texts without context, and secularism that ignores the normative dimension of religion. Interconnection guarantees that the religious sciences are not sterile from empirical reality, while ensuring that

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the general sciences do not lose their ethical-theological dimension.

It is important to make a firm distinction between integration and interconnection, as these two concepts are often used interchangeably despite having different nuances. Integration entails the fusion or synthesis of two disciplines into one new entity that transcends both. A concrete example of this is when the science of interpretation was integrated with modern linguistics, resulting in a new discipline called linguistic-contemporary interpretation. Interconnection, on the other hand, only requires dialogue and interconnectedness without having to sacrifice the identity of each discipline. A jurist who utilizes sociological theory in establishing law is an example of interconnection: fiqh remains fiqh, sociology remains sociology, but the two enrich each other.

Methodological Approaches and Models in Multidisciplinary Islamic Studies

The approach in multidisciplinary Islamic studies is a perspective or angle of analysis used to understand Islamic teachings by involving various disciplines. This approach is not only limited to a normative-theological perspective (based on the Qur'an and Hadith), but also integrates the social sciences, humanities, and sciences to produce a more comprehensive, contextual, and relevant understanding of the times. In this context, Islam is understood not only as a belief system, but also as a social, cultural, historical, and even scientific phenomenon. Therefore, a multidisciplinary approach is important so that Islamic studies are not partial, but whole and integrative. Islamic studies that are carried out by the Western world are often referred to as Islamic Studies, which is a fundamental effort to know, discuss, understand, and understand the ins and outs and everything about Islam systematically. The scope of Islamic studies is the material of Islamic teachings globally, the history of Islam, and the practices of implementing religious worship or practices in daily life.

Meanwhile, approach is defined as a person's way of view, scientific attitude, or perception to obtain scientific truth. Approach is a paradigm used in understanding a science. Thus the approach to Islamic studies is a paradigm used to understand the religion of Islam. The fact is that this study model has not found a standard concept, there are still many figures who are trying to formulate a perfect integrative-interconnected study model. This approach involves various sciences in Islamic studies that will be formulated into a new understanding. The results of this new understanding are more comprehensive than the previous approach, which is purely normative. Amin Abdullah said that integrative refers to the word "melt". Meanwhile, interconnective is an effort to build a social order based on fiqh in order to come into contact or

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dialogue with new sciences in the 18th and 19th centuries, such as Philosophy, Anthropology, Sociology, and Psychology. The definition of the word "melt" is still a question, whether melting means completely eliminating the original elements of each science as a whole. Or does melting mean in a reconstructive form, that is, still presenting the original elements of each science, then blended into a new concept. Offers for the implementation of integration-interconnection have also emerged, one of which is in the field of social work (integration between social work and religion). This model can also be interpreted as two things, the first is to build religious-based social work, and the second is to integrate social work with religion.

The integration-interconnection approach is the fruit of Amin Abdullah's idea after seeing phenomena in the study of Islam such as the practice of understanding Islam rigidly and standardly and the need for a combination of two approaches, namely historical-empirical and normative-theological. However, a normative-theological approach alone will not solve the problems of humanity perfectly. The use of normative-theological and historical-empirical approaches together will prevent people from thinking constraints because they will consider external aspects such as social, political, economic, and sociological in the practice of theological teachings. For example, in the study of the integration of science and Islamic science, it can be a means of proving the power of Allah, better understanding religious science correctly, and increasing faith in Allah. Methodological approaches and models in the framework of multidisciplinary Islamic studies:

a) Islamization of Science

One of the most influential models in the effort to integrate Islamic science is the idea of Islamization of Knowledge pioneered by Ismail Raji al-Faruqi through the International Institute of Islamic Thought (IIIT) in 1981. Al-Faruqi departs from the premise that modern science dominated by Western paradigms contains secular biases that are contrary to the Islamic worldview. Therefore, he proposed that modern sciences be "Islamized" by integrating Islamic values and principles into various scientific fields.

The process of Islamization according to al-Faruqi includes twelve systematic steps, starting from the mastery of modern disciplines, then a survey of Islamic disciplines, followed by the identification of the relevance of Islam, the assessment of Islamic heritage, the assessment of modern human heritage, to finally the creative synthesis that produces Islamic science. This model has been applied in various fields, ranging from Islamic economics, Islamic psychology, to Islamic political science.

However, this model is not free from criticism. Ziauddin Sardar, for example,

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considers that the Islamization of al-Faruqi is too additive to add Islamic ornaments to Western science without really questioning more fundamental epistemological assumptions. However, al-Faruqi's contribution in raising awareness of the need for an Islamic perspective in modern science cannot be underestimated.

b) Islamic Scientology

Different from the Islamization of science that moves from the outside to the inside (from modern science to Islam), **the Islamic scientific** model moves from the inside out, namely studying the teachings of Islam using modern scientific methodologies to prove their relevance and validity. This approach is widely used by Muslim scholars who want to show that Islamic values do not contradict contemporary scientific findings.[14] Examples of the application of Islamic scientification can be found in studies on the health benefits of Ramadan fasting that have been studied medically, neuropsychological studies on the impact of prayer on mental health, or econometric analyses on the effectiveness of the zakat system in poverty alleviation. In this domain, science serves as a tool for verification as well as an enrichment of understanding of Islamic religious practices.

c) Contextual and Historical-Critical Hermeneutics

The contextual hermeneutic approach is a methodological model that is very relevant in the study of multidisciplinary Islam, especially in the study of religious texts. Fazlur Rahman, an influential Pakistani thinker of the 20th century, developed the "double *movement method*": first, moving from the present situation to the time when the Qur'an was revealed to understand its historical meaning; Second, to move back to the present to apply these principles in a contemporary context.

This model combines the historical-critical approach of the Western scientific tradition with the normative sensitivity of the Islamic scientific tradition. The result is an interpretation that is not trapped in textual literalism, while at the same time ignoring the transcendental dimension of revelation. This approach has inspired many contemporary Muslim scholars, including Mohammed Arkoun of Algeria and Nasr Hamid Abu Zayd of Egypt, both of whom bring perspectives of linguistic philosophy and structural linguistics to the study of Islamic texts.

d) Multidisciplinary, Interdisciplinary, and Transdisciplinary Approaches

In academic discourse, it is necessary to distinguish three levels of scientific integration that are often mistakenly equated. Multidisciplinary means using several

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disciplines side by side to study a single object, but each discipline still uses its own methodology. Interdisciplinary goes further by integrating methods and perspectives from different disciplines resulting in a more unified understanding. Transdisciplinary is the highest level where disciplinary boundaries are exceeded to produce a completely new framework of knowledge. In the context of Islamic studies, interdisciplinary models seem to be the most realistic to apply today. The study of Islamic radicalism, for example, requires a combination of interpretation, social psychology, sociology of conflict, and political science. No single discipline is able to provide a comprehensive explanation on its own. This interdisciplinary methodological interconnection is the strength of multidisciplinary Islamic studies.

Implementation of the Integration-Interconnection Paradigm in multidisciplinary Islamic studies

One example of the implementation of the integration-interconnection of religious science and general science is water-related materials. In religious science (fiqih), the division of water is grouped into three, namely absolute water, musta'mal water, and mutanajjis water. Absolute water is the water used for ablution. Further research related to water and ablution will come to the benefits of ablution for a person's psychiatry or health (related to psychology). Meanwhile, further studies of water can be related to hydrological or geological sciences. Machali in his article explains the results of Leopold Werner von Ehrenfels' research that reveals the secret of ablution. It was found that nerve centers that are highly sensitive to fresh water are located on the forehead, hands, and feet. By washing these nerve points regularly and periodically, the health and harmony of the central nervous system in a person can be maintained. Another research was also conducted by Oan hasanuddin who said that there are acupressure and acupuncture points on the limbs that are washed when, so that they can treat a person from various diseases.

In realizing the study of integration-interconnection, Muslims must always be open to the development of science, expand information, and increase literature studies. Here are the details in Islamic studies:

a) Implementation in Higher Islamic Education Institutions

The transformation of the State Islamic Institute (IAIN) into a State Islamic University (UIN) in Indonesia is the most obvious example of the implementation of the integration-interconnection paradigm at the institutional level. This change in status is not just an administrative issue, but contains a profound epistemological vision: that

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Islamic universities should be able to integrate religious sciences with general sciences under one integrated scientific roof.

UIN Sunan Kalijaga Yogyakarta became a pioneer by developing an integration-interconnection curriculum that places religion courses as the *core* surrounded by various modern disciplines. Students of the Physics study program, for example, not only learn pure physics, but are also invited to understand the relationship between the findings of physics and the perspective of Islamic theology. On the contrary, Sharia students are encouraged to understand the socio-economic context in establishing legal fatwas.

This model then inspired the establishment of UIN in various cities in Indonesia: UIN Syarif Hidayatullah Jakarta, UIN Maulana Malik Ibrahim Malang, UIN Ar-Raniry Banda Aceh, and many more. Each develops its own interpretation and model of the integration-interconnection paradigm according to the local context and academic excellence.

b) Implementation in Research

In the field of research, the implementation of integration-interconnection requires researchers to go beyond the boundaries of disciplines that have separated them. A researcher of Islamic studies who studies the phenomenon of religious radicalism, for example, needs to master not only the methodology of hadith and interpretation, but also ethnography, critical discourse analysis, social conflict theory, and even religious neuroscience. Some of the integrative-interconnective research models that have been successfully developed include: (1) Islamic Social Science, which is social science based on Islamic values; (2) Islamic Psychology, which integrates Western psychology with the tradition of Sufism and Islamic psychology; (3) Islamic Economics, which combines modern economic theory with the principles of muamalah in fiqh; and (4) Islamic Bioethics, which confronts contemporary medicine with the tradition of classical medical jurisprudence.

c) Implementation in Curriculum Development

One of the biggest challenges in implementing the integration-interconnection paradigm is the development of a curriculum that truly reflects the values of integration, not just additive addition of courses. A good curriculum must be able to design a productive encounter between religious sciences and modern sciences in every course, not just in certain courses labeled "integrative".

Islamic perspective with social science and science theories; student assignment

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to analyze contemporary issues from multiple disciplinary perspectives at once; the formation of a cross-disciplinary *teaching team* that actively collaborates; and the development of a digital library that integrates a collection of classical Islamic texts with a database of modern scientific journals.

d) Challenges and opportunities

The implementation of the integration-interconnection paradigm certainly does not run without obstacles. Some of the most significant challenges include: first, the limitation of human resources, namely the lack of scholars who truly master two scientific traditions at once (religious science and general science) in depth. Second, there is cultural resistance, both from traditionalists who are worried that this paradigm will dilute the purity of religious science, and from secular modernists who view the involvement of religion in science as a threat to scientific objectivity. Third, the epistemological challenge is the fundamental question of how to integrate two traditions that have different epistemological assumptions: religious science based on revelation and Islamic intellectual tradition versus modern science based on empirical observation and critical rationalism. Fourth, institutional challenges, in the form of academic evaluation and accreditation systems that have not fully accommodated an integrative-interdisciplinary approach.

On the other hand, the opportunities that open up are very promising. The development of digital humanities and computational social science has opened up new possibilities for analyzing Islamic classical texts with advanced computational methods. Advances in neuroscience offer a new perspective for understanding spiritual experiences and religious rituals. Meanwhile, global crises ranging from pandemics, climate change, to economic inequality demand responses that cannot come from one discipline alone, so that an integrative approach is not only relevant but inevitable.

Implementation of the Use of Technology in Islam

Based on quantitative and qualitative data analysis, it was found that the use of technology in Islamic religious learning has a positive impact on student engagement and their understanding of religious teachings. Here are the main findings of the study Islamic Religious Education learning that is integrated with technology can increase students' involvement and their understanding of religious teachings so as to create the following learning spaces:

1) There was a significant increase in the level of student involvement during Islamic

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Religious Education learning sessions using technology.

2) Students show greater interest and enthusiasm in participating in learning supported by technological elements such as interactive applications, simulations, and online platforms.
3) Learning methods that are integrated with technology create a more interactive and enjoyable learning experience for students.
4) The use of media, animations, and educational games supports the understanding of Islamic religious concepts in a more interesting way.
5) Accessibility of Materials Students feel an increase in accessibility to Islamic Religious Education materials through online platforms. They can access materials, discussions, and study materials anytime and anywhere, increasing learning flexibility. Students' level of understanding of Islamic religious teachings increases significantly after following learning methods that are integrated with technology.
6) Students report a better understanding of Islamic values, history, and practices through an engaging learning approach.
7) The online platform facilitates collaboration between students and teachers through discussion forums and group-based activities.
8) There is a more intensive exchange of ideas and understanding, strengthening the bond between students and improving teacher-student interaction. Real-time Feedback The technology allows for real-time feedback, allowing teachers to tailor learning approaches to students' needs more effectively.
9) Learning Motivation Students report increased motivation to study Islamic Religious Education due to the use of technology, feeling more connected to the learning material and feeling more motivated to explore further.
10) Positive Reception from Teachers reports that learning methods integrated with technology facilitate the teaching process, helping them create a dynamic and responsive learning environment. Islamic Religious Education learning methods that are integrated with technology effectively increase students' engagement and their understanding of religious teachings. The application of technology in the context of Islamic religious education is able to create an interesting, interactive, and in-depth learning environment, bringing a positive impact in preparing the younger generation to better understand and appreciate religious values in the digital era.

Based on the above implementation, the integration of Religious Science and Science

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into Islamic Education in the modern era must look at the relationship between existing Islamic education from the perspective of discussion or even integration. Therefore, according to M. Amin Abdullah, Islamic education must be associated with the practical-social dimension because it always has a social impact and is required to be responsive to social realities. According to him, Islamic education should not be limited to theoretical-conceptual thinking as understood so far. In addition, education should be used to introduce students to traditions, cultures, social, and cultural conditions. At the same time, advances in technology, science, and industrialization have reduced this condition. In terms of religious social education, the integrative paradigm will teach students to think as a whole and not limited when studying their beliefs and religiosity. For example, visiting places of worship of different religions on a regular basis and gaining an understanding of the moral principles held by all religions.

CONCLUSION

Based on the above explanation, it can be concluded that the paradigm of integration and interconnection is present as an elegant methodological answer to the challenge of the complexity of the problems of the ummah and the scientific dichotomy between "religious science" and "general science". Through philosophical models such as the "spider web of knowledge" initiated by M. Amin Abdullah, contemporary Islamic studies have succeeded in positioning itself no longer as a sterile normative-theological study, but as an open discipline that dialogues with social sciences, humanities, and empirical sciences. The presence of various approaches such as the Islamization of science, Islamic scientification, and contextual hermeneutics further enriches the methodological treasures in producing a comprehensive, adaptive, and relevant understanding of Islam with the times. Furthermore, the practical implementation of this paradigm combined with the use of digital technology in the learning process has been proven to significantly increase student involvement, motivation, and deep understanding of religious values. Thus, the reconstruction of Islamic education in the modern era undoubtedly requires institutional openness, integrative curriculum development, and a responsive orientation to the practical-social realities of society in the digital era.

Furthermore, the methodological richness of multidisciplinary Islamic studies is shown by the existence of a variety of approach models that have developed in the contemporary era. These models include the Islamization of Science that moves from the outside to the inside to integrate Islamic values into modern science, Islamic scientification that moves from the inside

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out by utilizing scientific methodologies to verify religious practices, and contextual hermeneutics through the "double movement method" to bridge the historical meaning of the text with the demands of the times. At the institutional and practical level, the implementation of this paradigm has manifested itself in the institutional transformation of IAIN into UIN in Indonesia, the reconstruction of cross-disciplinary research (such as Islamic psychology and Islamic economics), and the development of an adaptive curriculum. Finally, the integration of digital technology in Islamic Religious Education learning has proven to have a significant positive impact in creating interactive, fun, and flexible learning spaces. The use of digital media has succeeded in increasing students' involvement, motivation, and deep understanding of religious values, while emphasizing that modern Islamic education must always be responsive to the practical-social realities of the digital society.

FUTURE DIRECTION

Based on the results of the study on the integration-interconnection of Islamic studies and technology, several strategic suggestions were formulated for the advancement of contemporary Islamic education. First, Islamic higher education institutions (such as UIN, IAIN, and STAIN) need to continue to strengthen the capacity of human resources (HR) through cross-disciplinary training programs (team teaching) to minimize the limitations of scholars who master religious sciences as well as general sciences in depth. Second, curriculum policymakers at the institutional level must design a curriculum blueprint that is truly integrative and not just additive, where the encounter between Islamic perspectives and modern science theories occurs productively in each course. Third, lecturers and practitioners of Islamic religious education are advised to optimize the use of digital technology such as interactive applications, simulations, multimedia, and online platforms more massively in the classroom to maintain and increase student involvement, motivation, and adaptive understanding in the digital era. Finally, multidisciplinary Islamic studies researchers are expected to expand the scope of collaborative research that utilizes advances in computational social science and neuroscience, so as to be able to respond to various contemporary social problems and global crises in a more comprehensive and contextual manner.

REFERENCES

Abdullah, M. Amin. *Islamic Studies in Higher Education: An Integrative-Interconnected Approach.* Yogyakarta: Pustaka Siswa, 2012. https://digilib.uin-suka.ac.id/id/eprint/14101/

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Abdullah, M. Amin. *Multidisciplinary, Interdisciplinary, and Transdisciplinary: Methods of Religious Studies and Islamic Studies in the Contemporary Era.* Living Islam: Journal of Islamic Discourses, Vol. 3 No. 2, 2020. https://ejournal.uin-suka.ac.id/ushuluddin/Living/article/view/1386

Al-Faruqi, Ismail Raji. *Islamization of Knowledge: General Principles and Work Plan.* Herndon, VA: International Institute of Islamic Thought, 1982. https://iiit.org/store/islamization-of-knowledge-prinsip-umum-dan-rencana-kerja/

Rahman, Fazlur. *Islam and Modernity: The Transformation of Intellectual Traditions.* Chicago: Universitas from Chicago Tekan, 1982. https://press.uchicago.edu/ucp/books/book/chicago/I/bo3624564. html

Nasr, Seyyed Hossein. *Pengetahuan dan Yang Sakral..* Albany: Universitas Negeri New York Press, 1989. https://www.sunypress.edu/p-2290-knowledge-and-the-sacred.aspx

Sardar, Ziauddin. *Exploration in Islamic Sciences.* London: Mansell Publishing, 1989. https://ziauddinsardar.com/2011/02/explorations-in-islamic-sains/

Abu Zayd, Nasr Hamid. *The Reform of Islamic Thought: A Critical Historical Analysis.* Amsterdam: Amsterdam University Press, 2006. https://www.wrr.nl/binaries/wrr/documenten/rapporten/2006/12/0 1/reforming-islam-wrr-report-nr-73/r073-reforming-islam.pdf

Arkoun, Muhammad. *Rethinking Islam: Common Questions, Unusual Answers* Stone, CO: The Western View Tekan, 1994. https://www.routledge.com/Rethinking-Islam-Common-Questions-Uncommon-Answers/Arkoun/p/book/9780367721916 Mulyadi, Seto. *Islamic Psychology: The Integration of Psychology and Islamic Values.* Jakarta: Eagle Press, 2015. https://repository.uinjkt.ac.id/dspace/handle/123456789/28523

Suprayogo, Imam. *Paradigm of Islamic Scientific Development Perspective of UIN Malang..* New York: UIN-Maliki Press, 2006. https://repository.uin-malang.ac.id/id/eprint/1002

Kuntowijoyo. *Islam as a Science: Epistemology, Methodology, and Ethics.* Yogyakarta: Tiara Discourse, 2006. https://www.goodreads.com/book/show/6508126-islam-sebagai-ilmu

Anwar, Syamsul. *The Interconnection of Hadith and Astronomy Studies.* Al-Mawarid Journal, Vol.

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XV No. 1, 2005. https://ejournal.uin-suka.ac.id/syariah/almawarid/article/view/428

Purwanto, Agus. *The Reason of the Verses of the Universe: Making the Qur'an the Basis for the Construction of Science.* Bandung: Mizan, 2012. https://mizanstore.com/nalar-ayat-ayat-semesta_43823

Hidayat, Komaruddin. *Understanding the Language of Religion: A Hermeneutic Study.* Jakarta: Paramadina, 1996. https://www.goodreads.com/book/show/7891842-memahami-language-religion

Azyumardi Azra. *Islamic Education: Tradition and Modernization in the Midst of the Challenges of the Third Millennium.* Jakarta: Kencana Prenada Media Group, 2012. https://repository.uinjkt.ac.id/dspace/handle/123456789/25102

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