

Islamic Higher Education Financing Management: An NVivo-Based Qualitative Study at Universiti Teknologi Malaysia

Sangkot Abdullah Efendi Harahap ^{1*}, Sulikah ², Yundri Akhyar ³, M Tholibin Azhari ⁴, Mukhtar Latif ⁵, M. Syahrani Jailani ⁶

¹ Sekolah Tinggi Ilmu Al-Quran (STIQ) Kepulauan Riau, Indonesia

² Sekolah Tinggi Ilmu Tarbiyah (STIT) Lingga, Indonesia

³ Universitas Islam Negeri Sultan Syarif Kasim, Indonesia

⁴ Institut Agama Islam Hidayatullah Batam, Indonesia

⁵ Universitas Islam Negeri Sulthan Thaha Saifuddin Jambi, Indonesia

⁶ Universitas Islam Negeri Sulthan Thaha Saifuddin Jambi, Indonesia

¹ abdullahefendi@stiq-kepri.ac.id; ² sulikahzo@gmail.com; ³ yundri.akhyar@uin-suska.ac.id; ⁴

mtholibinazhari2@gmail.com; ⁵ Proflatif261@gmail.com; ⁶ m.syahrani@gmail.com

*Correspondent Author

abdullahefendi@stiq-kepri.ac.id

Received: 13-04-2026

Revised: 26-05-2026

Accepted: 06-06-2026

KEYWORDS

Education Financing, Islamic Endowment, Universiti Teknologi Malaysia, NVivo.

ABSTRACT

This study examines the management of Islamic higher education financing at Universiti Teknologi Malaysia (UTM) using an NVivo-based qualitative approach. The data were analyzed through Word Cloud, Tree Map, Hierarchy, and Project Map techniques to identify patterns and structures within the funding system. The findings indicate that UTM's financing framework is shaped by a combination of government funding and Islamic endowment mechanisms, with instruments such as zakat, waqf, cash waqf, and donations serving as the dominant non-governmental sources. Scholarship schemes emerge as the primary distribution mechanism, covering merit-based aid, financial-need support, and funding for research and internationalization programs. Principles of social justice and maqasid al-shariah play a crucial role in guiding the allocation of resources, particularly for students from lower socioeconomic backgrounds. The study concludes that UTM's financing model is holistic and sustainability-oriented, and recommends strengthening the governance of Islamic endowments, diversifying scholarship schemes, and enhancing policy synergies between the government and Islamic philanthropic entities.

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Introduction

The financing of education is a fundamental element in the management of higher education institutions, particularly within Islamic higher education settings that integrate modern scientific visions with Shariah-based values. Across the literature on educational management, financing is consistently described as the heart of institutional sustainability, the driving force behind academic quality, and a key determinant of equitable access to education for all societal groups. In the global context, Islamic universities are required to develop financing models that are not only stable but also aligned with the principles of justice, sustainability, and the public good. These challenges have become more prominent in the era of global competition, where universities must possess strong financial capacity to maintain their relevance at the international level.

Table 1. University of Technology Malaysia Global Ranking 2025

Ranking Type	2023	2024	2025
<i>QS - World University Rankings</i>	203	188	181
<i>THE (Times Higher Education) University Rankings</i>	601-800	401-500	401-500
<i>US News & World Report - Global Universities</i>	NA	NA	376

In Southeast Asia, Universiti Teknologi Malaysia (UTM) stands out as a compelling institution to examine from the perspective of education financing. Although not an Islamic university in the formal sense—such as UIN or IIUM—UTM incorporates Islamic values into various aspects of its governance, including the management of financial resources. UTM demonstrates strong performance across multiple international ranking indicators. In the QS World University Rankings by Subject 2025, its Petroleum Engineering program ranks 46th globally, while the fields of Data Science & Artificial Intelligence, Architecture and Built Environment, and Mineral & Mining Engineering are positioned within the global top 100. These achievements highlight UTM's excellence in science and engineering disciplines, consistent with the university's emphasis on sustainable research and innovation. Overall, 27 UTM academic programs are recognized in the QS rankings, reflecting the institution's expanding reputation and growing global impact (yocket.com, 2025).

Tabel 2. UTM achieved its best-ever placement at 153rd globally in the QS World University Rankings 2026

Course	2023	2024	2025
Medicine	601-650	601-650	551-600
Arts and Humanities	394	306	316
Social Studies and Management	254	223	249
Accounting and Finance	201-250	201-250	201-250
Engineering and Technology	99	105	102
Education and Training	201-250	151-200	151-200

UTM receives its funding through a combination of major sources, including government allocations, endowment schemes (comprising waqf, zakat, and donations), scholarship programs for both local and international students, and educational financing policies designed to promote equitable access to learning opportunities (Munadi, 2017). This diverse and adaptive financing structure reflects how a technologically oriented university with an Islamic identity is able to strategically manage its financial resources to support operations, enhance service quality, and expand educational opportunities for various groups (Roslan et al., 2023). UTM's cash waqf and infaq (charitable giving) models are further facilitated through online infrastructure (e-philanthropy). This system enables a wider audience to contribute digitally to waqf initiatives, thereby enhancing the potential for fundraising from broader communities and various stakeholders (Yusof et al., 2014).

To date, research on Islamic higher education financing has extensively discussed the importance of government funding, the growth of endowment movements such as educational waqf, the role of scholarships as instruments of equitable access, and the contribution of

financing models to institutional quality. However, most existing studies tend to be quantitative or macro-descriptive in nature. That is, previous studies have primarily focused on financial magnitude, distribution mechanisms, and the numerical impact of funding on institutional performance. Few studies have explored in depth how such financing models are perceived and interpreted by key stakeholders, including lecturers, financial managers, faculty leaders, and students. Yet, the qualitative dimension of educational financing—how actors experience, understand, and evaluate funding sustainability—is a crucial aspect that must be considered to fully comprehend the effectiveness of financing practices.

Moreover, there exists a clear academic gap concerning the relationship between Islamic values and modern financing practices within technology-oriented universities such as UTM. Most research on Islamic higher education focuses on institutions that are structurally and formally Islamic. In contrast, UTM represents a unique configuration: a world-class technological institution that continues to adhere to Islamic values in its financing and governance practices. Additionally, studies employing in-depth qualitative approaches supported by modern analytical tools such as NVivo remain limited, despite NVivo's capability to map themes, relationships, and patterns in interview data in a richer and more interpretive manner (Allsop et al., 2022).

These research gaps indicate the need for a comprehensive study on how education financing is managed at UTM, how various funding sources contribute to financial stability, and how access to education is maintained in compliance with principles of justice. This research is critical because financing constitutes the foundation that determines an institution's vitality. Without strategic financial management, universities would struggle to maintain academic quality, expand educational access, or sustain their flagship programs. Through a qualitative approach, this study provides a holistic portrayal of the dynamics, meanings, and lived experiences of educational actors involved in managing financing within the UTM context.

Beyond its academic significance, this research also holds strong practical relevance. Indonesia, as the country with the largest Islamic higher education population in the world, can draw valuable lessons from UTM's financing practices. Using a qualitative perspective, this study highlights the voices and viewpoints of stakeholders, resulting in richer findings that closely align with real-world conditions. Consequently, the research outcomes may serve as a reference for developing Islamic higher education financing policies in both Malaysia and Indonesia.

The primary contribution of this study lies in its development of a conceptual model for Islamic higher education financing based on real practices observed at UTM. The model not only illustrates the flow of funding but also depicts the relationships between funding sources and educational access, as well as the meanings attributed by internal university actors to financing policies (Roslan et al., 2023). This study also offers theoretical contributions by integrating modern financial management concepts with Islamic economic values, and methodological contributions through the application of NVivo to map significant themes in the narratives of informants. Thus, the research enriches academic knowledge while providing practical guidance for educational institutions in managing financing more effectively, sustainably, and justly.

These contributions are closely aligned with the study's objectives, namely to gain an in-depth understanding of how education financing is managed at UTM, how various funding sources are utilized and optimized, and how access to education is kept inclusive for students from diverse backgrounds. In other words, the study not only describes financing models but also interprets the dynamics and meanings underlying these practices. The alignment between the study's contributions and its objectives reflects coherence between what the research aims to achieve and the benefits it offers to the development of knowledge and the practice of Islamic educational management. Therefore, this research holds strategic value in enriching the literature on Islamic higher education financing while providing an alternative model that can be replicated across other Islamic institutions.

Research Methods

This study is framed within a constructivist–interpretive paradigm, which positions social reality as something constructed through the experiences, interpretations, and interactions of the actors involved in managing educational financing. This paradigm is chosen because the issue of Islamic higher education financing at UTM cannot be understood objectively or independently of its context; rather, it must be explored through in-depth interpretation of the informants' experiences. Therefore, the study emphasizes meaning-making rather than measurement, in line with the characteristics of qualitative research.

The research adopts a qualitative case study design, as its focus is directed toward a single setting and a central phenomenon—namely, the management of Islamic higher education financing at Universiti Teknologi Malaysia. The case study approach allows the researcher to explore comprehensively the processes of planning, fundraising, and distributing sharia-based funds such as zakat, waqf, Islamic scholarships, and, where applicable, qardhul hasan assistance. This approach enables a holistic exploration of the experiences of both managers and beneficiaries.

The social situation within this study encompasses three main components: place, actors, and activities. The research site is located at UTM, specifically within units directly involved in managing student financing resources. These include the UTM Zakat and Waqf Centre, the Scholarship and Financial Assistance Unit, the Bursary Office, and academic units involved in verification processes or policy decision-making. The actors consist of financing administrators such as zakat/waqf officers and scholarship officers, university officials with policy authority, and students receiving sharia-based financial assistance. The observed activities include policy formulation processes, zakat or waqf fundraising, student needs assessment procedures, aid distribution mechanisms, and the interactions between administrators and students seeking financial support.

To obtain a comprehensive understanding, the study employs three primary data collection techniques. First, in-depth interviews are conducted with financing administrators and student beneficiaries. These semi-structured interviews provide guiding questions while allowing informants to elaborate freely and naturally on their experiences. Second, direct observations are carried out to examine how financing services are delivered, how administrative flows operate, and how interactions occur within financing units. Fieldnotes are documented to support data interpretation. Third, documentation is collected in the form of policies, annual reports, SOPs, zakat and waqf guidelines, and other relevant official university documents. Such documents are essential in providing formal insights into financing structures and regulations while serving as a reference point for triangulating interview data.

All collected data are analyzed using NVivo software, which facilitates the systematic organization of qualitative data. The first step involves importing all data—interview transcripts, observation notes, and supporting documents—into the NVivo workspace. The researcher then conducts coding, beginning with open coding to identify units of meaning that emerge directly from the data. These codes are subsequently grouped through axial coding to identify relationships between categories. At the selective coding stage, the researcher focuses on core themes that explain how Islamic higher education financing is managed at UTM.

NVivo is also used for query analysis, such as word frequency queries, text search queries, and matrix coding, which help examine data consistency and strengthen findings. Additionally, visualization features such as mind maps and concept maps are utilized to construct the conceptual model of sharia-based financing practices within the university.

To ensure data trustworthiness and validity, this study applies the four trustworthiness criteria proposed by Lincoln and Guba: credibility, transferability, dependability, and confirmability (Stahl & King, 2020). Credibility is maintained through source triangulation (administrators, leaders, students), methodological triangulation (interviews, observations, documentation), and member checking, wherein interpretations are verified by the informants (Nowell et al., 2017). Transferability is enhanced through detailed contextual descriptions (thick description), enabling readers to assess the applicability of findings in other contexts. Dependability is ensured through the preparation of a complete audit trail containing research

process notes, methodological decisions, and NVivo coding records and analytical memos. Confirmability is maintained through reflective journaling to ensure that conclusions genuinely emerge from the data rather than from researcher bias or preferences (Korstjens & Moser, 2018).

Through these systematic procedures, the study aims to produce a rigorous, in-depth, and accountable understanding of Islamic higher education financing management at Universiti Teknologi Malaysia and to provide an academic contribution to the development of sharia-based financing governance in higher education institutions.

Results and Discussion

Universiti Teknologi Malaysia (UTM) is one of the leading research universities rooted in the development of technical education in Malaysia since the early 20th century. Its origins can be traced back to the Treacher Technical School, established in 1904 in Kuala Lumpur, which later evolved into the Technical College in 1942 before receiving full university status in 1975 and relocating to its permanent campus in Skudai, Johor. Since its transformation into the nation's premier technological university, UTM has consistently strengthened its reputation as an institution of excellence in engineering, science, and innovation, while also positioning itself as a pioneer in higher education management that responds to national needs and global dynamics.

Figure 1. Historical Development of UTM's Campus



Source: Mini Research Activities of UIN Jambi Students at UTM

As a Research University (RU), UTM faces increasingly complex funding demands, particularly to support world-class research, the development of advanced laboratories, and the global competition to attract high-achieving students. Although public universities in Malaysia generally receive relatively stable financial support from the government—including funding for academic staff salaries, operational costs, and basic research grants—the investment needs for high-impact research often exceed the limits of government funding. For example, the procurement of specialized laboratory equipment worth millions of ringgit is not easily approved, prompting the university to seek more flexible and sustainable alternative funding strategies.

This context led UTM to develop an endowment fund as an independent, long-term source of financial sustainability. The initial inspiration for the endowment originated from the Islamic economic tradition of waqf. However, as explained by one of the informants, the term waqf was perceived as less inclusive because it was often associated exclusively with Muslim donors. To broaden participation among Malaysians regardless of religious background, the concept was reframed as an "endowment fund," even though its essence and objectives remain aligned with Islamic philanthropic values. This terminological shift was intended to encourage

contributions from non-Muslim donors and position UTM's endowment as a more universal and inclusive funding mechanism.

This initiative became increasingly strategic when Malaysia's national policy—outlined in the Executive Summary of the Malaysia Education Blueprint 2015–2025 (Higher Education)—encouraged higher education institutions to diversify their funding sources. The Blueprint emphasized the need for universities to develop alternative revenue streams, including endowments and waqf, and introduced various incentives for their expansion, such as tax exemptions and matching grants. Thus, UTM's initiative is not only an internal institutional effort but also aligned with the national direction for higher education funding reform.

A significant milestone in the development of UTM's endowment fund occurred on 17 August 2010, when the university launched the "Every Student to Contribute RM1.00" movement through the "Pengorbanan Merdeka" program. The launch coincided with Malaysia's 53rd Independence Day celebration at the Sultan Ibrahim Chancellery Building. The movement was not merely a fundraising campaign but also an effort to cultivate values of sacrifice and respect among the younger generation for the struggles of past leaders. As described by one informant, the RM1 contribution symbolized students' appreciation for the sacrifices made by earlier generations in securing independence, while fostering a sense of collective responsibility for the university's sustainability.

This RM1 movement also reflects UTM's aspiration to reduce dependence on government funding and emulate global universities such as Harvard University, which is able to provide scholarships to approximately 70% of its students through professionally managed endowment funds. UTM has further expanded its donation mechanisms through digital platforms such as giving.utm.my, as well as recurring campaigns like the Ramadan and Syawal Packages, targeting staff, students, alumni, corporations, and the general public. Donors receive various forms of recognition based on their contribution categories, helping to build an inclusive and sustainable culture of educational philanthropy.

Figure 2. Interview with UTM Faculty Representative



Source: Mini Research Activities of UIN Jambi Students at UTM

Thus, UTM's history is not only marked by academic and institutional transformation but also by innovation in higher education financial management. The development of the

endowment fund—rooted in waqf values, adapted for inclusivity, and strengthened through national policy—stands as a significant milestone in ensuring UTM's financial sustainability. This initiative demonstrates how UTM has strategically adapted to address the challenges of modern higher education financing while maintaining its position as a globally competitive research university.

As part of its efforts to strengthen the university's financial sustainability and cultivate a culture of educational philanthropy, Universiti Teknologi Malaysia (UTM) not only developed mechanisms for collecting endowment funds but also established a structured reward system for its donors. This incentive system functions both as a form of appreciation and as motivation for more individuals, alumni, staff, and corporate entities to participate in supporting the continuity of the university's social and academic initiatives.

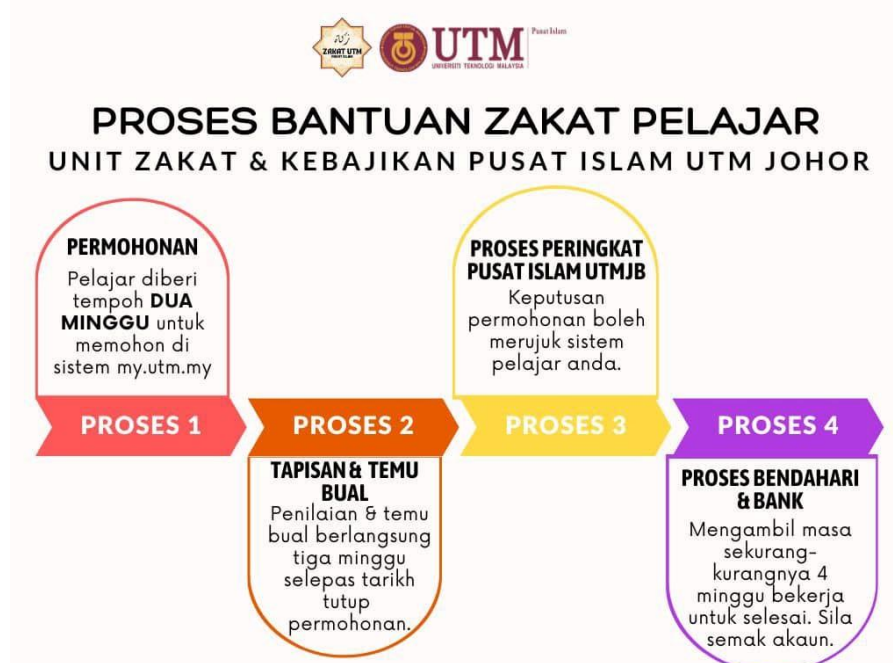
Based on modifications of the UTM News report (2015), donors to the endowment fund receive recognition according to their contribution category. Donors who contribute more than RM10,000 are honored with the opportunity to attend an exclusive iftar ceremony with the Chancellor, Pro-Chancellor, or an equivalent high-level gathering organized by the university. Those who donate between RM5,001 and RM10,000 are invited as VIP guests to three official UTM events. Donors contributing between RM1,001 and RM5,000 are presented with an official university souvenir at a formal event, while contributors of less than RM1,000 receive an appreciation token as recognition of their participation. These incentives demonstrate that UTM is not merely fundraising but is also fostering emotional and symbolic ties between the university and its supporters.

Interestingly, UTM's endowment fund extends beyond fundraising mechanisms and is further manifested through social support programs, especially for students experiencing financial hardship. This is evident in various zakat distribution initiatives managed by the UTM Islamic Centre in Kuala Lumpur and Johor Bahru. One of the major allocations of the university's social funds is dedicated to assisting students through two primary categories: Zakat Assistance for Tuition Fees and Zakat Assistance for Living Expenses.

The Zakat Assistance for Tuition Fees is provided to students facing difficulties in settling their academic fees, requiring applicants to submit account statements or proof of outstanding payments. Meanwhile, the Zakat Assistance for Living Expenses is intended for students in need of financial support to cover daily costs during their studies. This program is consistently offered every semester for Diploma, Foundation, and Bachelor's degree students, with the main eligibility criteria including: being Muslim, a Malaysian citizen, a full-time student, not receiving any other financial assistance, and belonging to the fakir or miskin category based on household income. Applications are submitted online through an official form, ensuring transparency and accessibility for all students in need.

The availability of zakat-based assistance indicates that UTM prioritizes not only academic and infrastructural development but also the holistic welfare of its students. The connection between the endowment fund and zakat programs is evident: the philanthropic spirit cultivated through endowment fundraising ultimately translates into support for financially disadvantaged students. Thus, the endowment becomes a strategic instrument in promoting educational inclusion, particularly for vulnerable groups who may face financial barriers in pursuing higher education.

Figure 3. Zakat Assistance, UTM Islamic Centre Kuala Lumpur



Source : <https://space.utm.my/students-affairs/bantuan-kewangan-pelajar/>

The entire set of initiatives—from donor recognition programs to the distribution of zakat for students—reflects UTM’s strong commitment to developing a sustainable, inclusive, and accountable higher education funding model. These efforts reinforce the function of the endowment fund as the backbone of the university’s social financing, while also symbolizing a shared commitment to ensuring equitable access to education for all students.

Findings from the NVivo Word Query analysis indicate that the main themes emerging from the data are closely related to the diversification of funding sources and the university’s orientation toward expanding equitable access to education. The term scholarship appears as the most dominant word, occurring 11 times (3.38%), suggesting that scholarship schemes serve as a key instrument in widening access to higher education and supporting students’ academic continuity.

The words education and zakat each appear 10 times (3.08%). The prominence of the term education underscores that all funding mechanisms are ultimately directed toward strengthening the quality of academic services. Meanwhile, the equal frequency of the term zakat highlights the significant role of Islamic social finance instruments in supporting financially disadvantaged students, further affirming the integration of Shariah values within the university’s governance framework. As stated by one of the faculty representatives during our interview session:

“The most common assistance for international students, especially those from Indonesia, is zakat managed by the Islamic Centre. Bachelor of Education students typically receive scholarships from the Malaysian Ministry of Education, and upon graduation, they proceed to serve within the ministry. There is also the UTM Young Scholarship Grant available for international students, particularly at the Master’s and PhD levels. Endowment scholarships are highly sought after because their requirements tend to be relatively flexible.” (Interview, UTM Lecturer, Malaysia, 2025)

Figure 4. Most Frequently Appearing Words from Triangulated Data Analysis



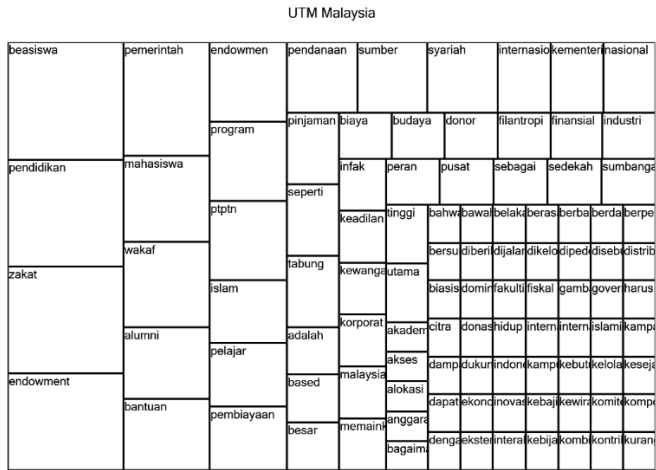
Source : Work Frequency Query Nvivo 15

The term endowment appears 9 times (2.77%) and endowmen appears 5 times (1.54%), bringing the total contribution related to endowment funds to 4.31%. This finding indicates that endowments serve as a strategic pillar in building the university’s financial sustainability. Sources of endowment, including alumni contributions—which appear 5 times (1.54%)—reflect a high level of public trust and the institution’s success in cultivating a strong philanthropic network.

The word government appears 8 times (2.46%), reaffirming the state’s role as a provider of core funding and regulatory support that strengthens the financing ecosystem. Meanwhile, the words students and waqf, each appearing 6 times (1.85%), highlight a financing policy orientation that prioritizes student welfare and reinforces the role of waqf as an alternative funding source aligned with Islamic financial principles.

Additionally, the appearance of terms such as program, assistance, and PTPTN, each occurring 5 times (1.54%), demonstrates the diversity of financing instruments ranging from social aid and academic support programs to Malaysia’s national student loan schemes. This variety of keywords reflects a multilayered financing model that does not rely on a single source.

Figure 5. Most Frequently Appearing Words from Triangulated Data Analysis



Source: Tree Map NVivo 15

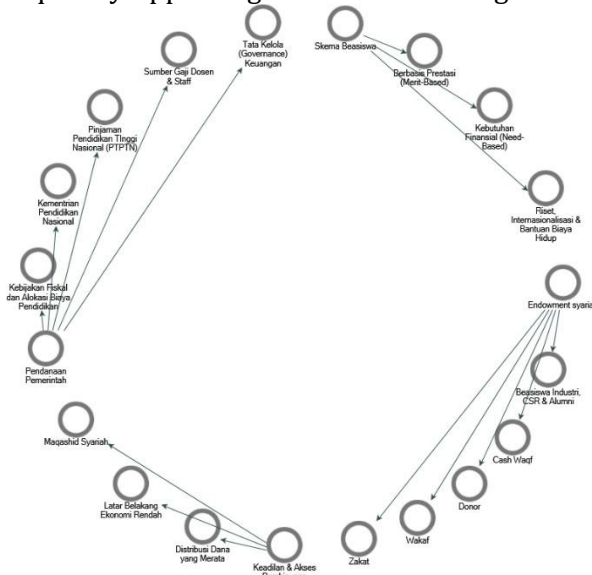
The Treemap Analysis shows that Shariah-Compliant Endowment is the most dominant component in UTM's financing structure. Subthemes such as industry/CSR/alumni scholarships, waqf, cash waqf, and donor contributions reinforce the notion that the Islamic philanthropic ecosystem plays a central role in the university's sustainability. The dominance of this cluster confirms that UTM's financing model is strongly anchored in Islamic Social Finance as a long-term sustainability strategy.

The Scholarship Scheme cluster also emerges as a strategic component, particularly merit-based scholarships, financial-need scholarships, and funding for research and internationalization. This indicates that scholarships are not merely instruments of educational access but also strategic tools for enhancing global competitiveness.

Meanwhile, Government Funding appears relatively stable, covering PTPTN, national ministries, and educational budget allocations. The treemap structure shows that state funding remains a fundamental foundation, although its proportion is not as large as endowment funding.

Overall, the treemap illustrates that UTM implements a hybrid financing model: a combination of government funding, Shariah-compliant endowments, and multichannel scholarship schemes that collectively support operational sustainability and expand access to education.

Figure 6. Most Frequently Appearing Words from Triangulated Data Analysis



Source: Project Map NVivo 15

Through the Project Map, the interrelations among themes become visible, illustrating the financing management ecosystem at UTM. The Government Funding block is closely connected to elements such as PTPTN, the Ministry of Education, and fiscal policies. These relationships indicate that the government functions both as a regulator and as a provider of financial support for students and the institution.

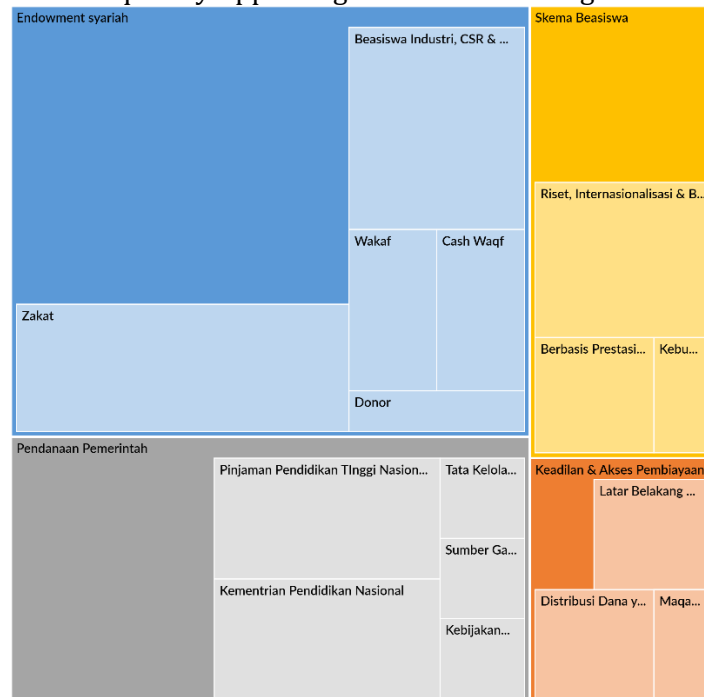
On the other hand, the Scholarship Scheme theme is directly correlated with merit-based, need-based, living-cost assistance, and research funding components. This emphasizes that scholarship policies are designed to uphold both equity and excellence.

The Shariah-Compliant Endowment cluster is strongly linked to sources such as waqf, cash waqf, donors, as well as industry and CSR contributions. This pattern demonstrates that universal philanthropy—both Islamic and corporate—serves as a driving force for UTM's strategic programs.

The relationships among Justice and Financing Access, low-income backgrounds, and equitable distribution of funds reflect UTM's orientation toward inclusive financing. The connection between these themes and Maqāṣid Shariah shows that the university places

Islamic ethical principles as a guiding framework in financial distribution and educational access. Overall, the project map indicates that UTM's funding model is integrated, connecting the state, philanthropy, governance, and social justice within a mutually reinforcing system.

Figure 7. Most Frequently Appearing Words from Triangulated Data Analysis



Source: Hierarki Chart NVivo 15

The findings of this study show that the management of Islamic higher education financing at UTM is built through a multi-source, multilayered funding structure, with a strong dominance of Shariah-based endowment instruments. The results of the Word Query and Treemap analyses confirm that terms such as scholarship (3.38%), education (3.08%), zakat (3.08%), and endowment (2.77%) are among the most frequently appearing keywords, indicating that student financing and Islamic philanthropic mechanisms serve as the core themes of the discourse.

The Hierarchy Chart further clarifies this pattern by positioning Shariah-Compliant Endowment as the largest cluster, encompassing zakat, waqf, cash waqf, individual donations, and scholarships funded by industry and alumni. The dominance of this cluster indicates that UTM has successfully developed an Islamic Social Finance ecosystem that functions as the university's financial sustainability pillar. Government Funding emerges as the second-largest cluster, showing that despite its strong endowment foundation, the university still depends on state support through PTPTN, ministry policies, and national financing regulations.

Furthermore, the Scholarship Scheme cluster occupies a strategic role in strengthening academic accessibility and mobility. The availability of merit-based scholarships, financial-need support, and research and internationalization grants demonstrates that UTM implements a financing strategy that is both meritocratic and inclusive. Meanwhile, the cluster on Justice and Financing Access reinforces UTM's ethical orientation through fund distribution guided by Maqāṣid Shariah and equitable access for students from diverse economic backgrounds.

Overall, the findings reveal that UTM's financing model is not only financially stable but also value-driven, responsive to student needs, and aligned with Shariah-based governance principles. This hybrid funding structure—combining Islamic philanthropy, state support, and scholarship programs—enables UTM to expand educational access, maintain academic quality, and strengthen competitiveness at regional and global levels.

These findings are supported by official university publications, endowment reports, UTM news articles, student theses available on UTM ePrints, and other relevant references. These financing sources can be classified into several major categories, such as internal UTM funding, university financial assistance, national education loans, government scholarships, and external sponsorships.

Table 3. UTM Educational Financing Sources Based on Public Findings

Category of Funding Sources	Example Programs / Sources	Public Evidence
Internal UTM Funding	UTM Endowment, Zakat, Waqf, Student Welfare Fund	UTM Endowment Publications
UTM Financial Assistance	Financial aid and welfare assistance (RM40,438,476 in 2019–2020)	UTM News
Education Loans	PTPTN	Thesis on PTPTN Perceptions (Faculty of Education)
Government Scholarships	JPA, MARA, Ministry of Higher Education (KPT)	Student Financing Theses at UTM
External Scholarships & Sponsorships	Industry, CSR, Alumni	UTM Endowment Report

Funding for education at UTM is also largely supported by the UTM Endowment Fund, Zakat, Waqf, and the Student Welfare Fund. Official publications such as the UTM Endowment Fund Bulletin note that these funds are utilized to provide endowment scholarships, financial assistance, support for students from the B40 income group, and welfare-related aid. This internal financial structure reinforces the university's role in supporting students through university-based scholarship schemes and student welfare mechanisms. One of these internal funding programs is the zakat assistance initiative, designed to support UTM students and staff experiencing financial hardship, particularly in light of current economic challenges (Newshub, 2025a).

Additional funding is obtained through UTM's Student Financial Assistance and Welfare programs. According to official UTM reports, the university allocated RM40,438,476.00 for student financial support and welfare between 2019 and 2020. This amount includes assistance sourced from endowment funds, zakat, waqf, and alumni contributions, which are subsequently redistributed to students in need (Newshub, 2020).

For most UTM students, PTPTN (National Higher Education Fund Corporation) serves as the primary source of financial support. This is substantiated by several UTM postgraduate theses that examine perceptions of and reliance on PTPTN as a major funding mechanism. One study from the Faculty of Education demonstrates that PTPTN represents the largest component of student financing based on the distribution of respondents supported by the loan program (Rosman, A S B, 2017).

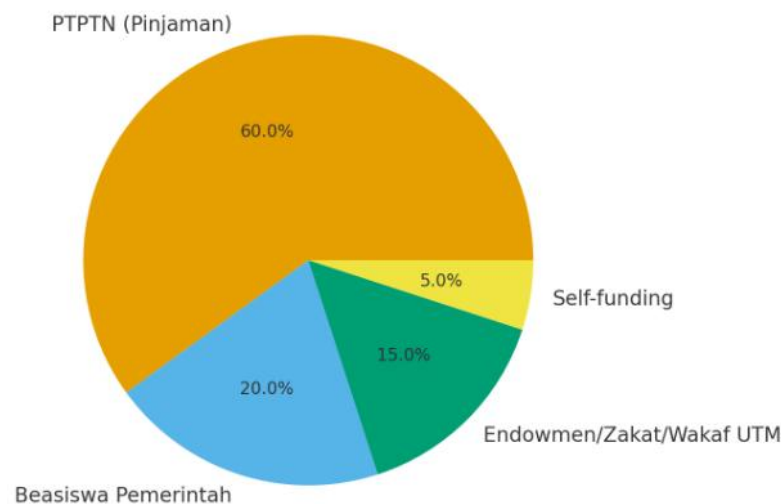
In addition to loans, some UTM students are funded through government scholarships such as JPA, MARA, and programs under the Ministry of Higher Education (KPT). This pattern appears in multiple UTM postgraduate studies that categorize student funding sources into PTPTN, JPA, MARA, and self-funding. A thesis by (NORHANI BAKRI et al., 2005) found that UTM

students often combine government scholarships, loans, and self-financing depending on their socioeconomic background.

Furthermore, UTM receives financial support from alumni networks, corporate entities, and industrial CSR initiatives. These funds contribute to student sponsorship through the Endowment Fund, direct donations, and the development of specialized scholarship schemes. For example, a 2025 UTM news report highlights that many endowment-based scholarships are funded by alumni and industry partners (Newshub, 2025b).

Guided by the prophetic principle, “The upper hand is better than the lower hand,” narrated in Hadith Bukhari and Muslim, the university’s alumni contribution campaigns emphasize the value of giving. This initiative primarily aims to mobilize alumni support to help finance students’ education and enhance student welfare through scholarship programs and academic development activities.

Figure 9. Proportion of Student Funding Sources at UTM



Source: Based on various qualitative findings from multiple references

The integration of Islamic values in UTM’s endowment management is reflected through the application of Shariah principles—such as waqf and zakat—supported by a Shariah advisory council, need-based allocation mechanisms, and religious narratives that strengthen donor engagement. While rooted in Islamic ethics, the management system simultaneously adopts professional modern investment practices, allowing donors from diverse backgrounds—not only Muslims—to contribute.

Qualitative findings indicate that academic staff appreciate the professionalism of UTM’s governance structure and the financial certainty it provides for research and teaching activities. Meanwhile, students view the accessibility of financial aid and scholarships as essential for ensuring the continuity of their studies. Transparency and impact communication emerge as key factors in building trust among stakeholders.

Several of these educational funding models offer potential recommendations for Indonesia, including adopting a hybrid framework that combines: (a) strengthening professionally managed Shariah-compliant endowment systems, (b) implementing digital transparency and centralized donor portals, (c) diversifying equity-focused scholarship schemes, (d) fostering synergy between public policy and philanthropic initiatives, and (e) cultivating an informed culture of campus philanthropy. All these components can be integrated into a sustainable financing blueprint similar to that implemented by UTM.

Conclusion

The funding system at Universiti Teknologi Malaysia (UTM) represents a synergistic combination of government financing and Shariah-based endowments. Instruments such as zakat, waqf, cash waqf, and charitable donations have emerged as key components of

alternative funding, complementing governmental budget allocations for higher education.

Scholarship schemes serve as the primary channel for fund distribution, implemented through both merit-based and need-based mechanisms. Findings show that scholarships not only function as academic incentives but also address economic disparities and enhance access for students from low-income backgrounds.

The principles of social justice and *maqasid al-shariah* form the foundational values of this funding architecture, particularly in ensuring equitable distribution of resources and prioritizing economically vulnerable groups. This is clearly reflected in the interconnected themes of the Project Map, which directs all funding streams towards the broader aim of educational justice. Financial governance and government policies play a structural role by ensuring the integration of Shariah-compliant funding sources with national education regulations. Hierarchical analysis indicates that governance is a prerequisite for the overall success of the system.

Overall, this research concludes that UTM's funding model is ecosystemic, integrated, and value-driven, where collaboration among the government, Islamic philanthropic entities, and the university becomes the key to achieving sustainable and inclusive higher education. The researchers offer several recommendations to strengthen the sustainability of higher education financing in Indonesia, drawing on best practices implemented at UTM. Effective, transparent, and long-term-oriented financial management is considered essential for developing a professional higher education institution. From a Management Education perspective, several strategic aspects should be prioritized:

Establishing a University Endowment Management Body (UEMB): An independent entity with qualified board members, Shariah-compliant investment SOPs, and mandatory quarterly reporting. (Initial implementation: 6–12 months), supported by professional leadership and strong human resource quality management.

1. Developing an Integrated Donation Platform: Featuring payment integration, project reporting, and impact-based KPIs, supported by secure protocols and regular audits.
2. Implementing Capacity-Building Programs: Training in fundraising, waqf management, Shariah auditing, and technology utilization for university staff and zakat/waqf administrators.
3. Launching a Pilot Cash-Waqf Product: In collaboration with Shariah-compliant financial institutions, aimed at productive waqf for scholarships, faculty development, and staff welfare.
4. Expanding Government Incentive Policies: Including regulatory support for institutional waqf management and matching-grant schemes for scholarship collaboration programs.
5. Strengthening Monitoring & Evaluation (M&E): Using indicators such as active donor numbers, endowment growth ratio, number of beneficiaries, and transparency index (disclosure scorecard).

With the implementation of these strategies, Indonesian universities and the government are expected to build a more sustainable, transparent, and inclusive higher education funding ecosystem. This framework will serve as a strong foundation for achieving financial independence among universities and expanding educational access for all segments of society.

References

- Abdullah, A., & Razali, R. (2024). Exploring Cash Waqf Models for Financial Modernisation in Dayah-Based Islamic Higher Education Institutions in Aceh: A Sociology of Islam Perspective. *JURNAL INDO-ISLAMIKA*, 14(1), 62–78. <https://doi.org/10.15408/jii.v14i1.40676>
- Allsop, D. B., Chelladurai, J. M., Kimball, E. R., Marks, L. D., & Hendricks, J. J. (2022). Qualitative methods with Nvivo software: A practical guide for analyzing qualitative data. *Psych*, 4(2), 142–159. <https://doi.org/10.3390/psych4020013>

- Arifin, M. (2025). OPTIMALISASI MANAJEMEN PEMBIAYAAN UNTUK KEBERLANJUTAN PERGURUAN TINGGI ISLAM. *Al Hikmah: Jurnal Kependidikan*, 13(1), 1–10.
- Ash-Shiddiqy, M., Makhrus, M., & Wibowo, M. G. (2024). Cash Waqf Management for Education: Challenges, Solutions and Strategies. *Shirkah: Journal of Economics and Business*, 9(2), 275–289. <https://doi.org/10.22515/shirkah.v9i2.723>
- Damopolii, M. (2008). PERSPEKTIF TEORETIS PENDIDIKAN ISLAM: Studi Komparatif terhadap Terma Tarbiyyah, Ta'dib, dan Ta'lim. *Lentera Pendidikan: Jurnal Ilmu Tarbiyah Dan Keguruan*, 11(1), 19–31. <https://doi.org/10.24252/lp.2008v11n1a2>
- Darajat, U. A. (2025). Wealth Distribution Inequality and Social Justice in Islamic Economics: An Evaluation of the Role of Zakat, Waqf, and Islamic Philanthropic Instruments in the Digital Economy Era in Indonesia. *Journal of Social Science and Economics*, 4(2), 152–165. <https://doi.org/10.37812/josse.v4i2.2037>
- David B. Allsop, Joe M. Chelladurai, Elisabeth R. Kimball, Loren D. Marks, & Justin J. Hendricks. (2022). *Qualitative Methods with Nvivo Software: A Practical Guide for Analyzing Qualitative Data*. <https://doi.org/10.3390/psych4020013>
- Furqon, A., Budiman, A. A., Septiana, Y. D., Hassane, N., & Fuadi, N. F. Z. (2022). Empowering Higher Education Funding through Cash Waqf: A Case Study of IPB University. *Economica: Jurnal Ekonomi Islam*, 13(1), 139–162. <https://doi.org/10.21580/economica.2022.13.1.20779>
- Indrawan, I., & Refika, R. (2025). Dynamics of Islamic Education Management and Its Impact on Academic Service Effectiveness in Islamic Higher Education. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 9(3), 918–931. <https://doi.org/10.33650/al-tanzim.v9i3.11829>
- Iqbal, Z., & Shafiq, B. (2015). Islamic finance and the role of Qard-al-Hassan (Benevolent Loans) in enhancing inclusion: A case study of AKHUWAT. *ACRN Oxford Journal of Finance and Risk Perspectives*, 4(4), 23–40.
- Jaya, F. (2020). Konsep Dasar dan Tujuan Pendidikan dalam islam: Ta'lim, tarbiyah dan ta'dib. *Tazkiya: Jurnal Pendidikan Islam*, 9(1). <http://dx.doi.org/10.30829/taz.v9i1.750>
- Junita, S., Dasuki, M., & Al-Haj, Z. (2023). Strategic Utilization of Islamic Philanthropy in Education Financing: An Investigation into Orphan Empowerment. *MANAGERIA: Jurnal Manajemen Pendidikan Islam*, 8(1), 39–58. <https://doi.org/10.14421/manageria.81-03>
- Kamarzaman, N., Ahmad, A. A., & Muda, M. Z. (2025). Utilizing Waqf in Enhancing Islamic Finance Contributions for Overcoming Research and Innovation Funding Challenges in TVET Education Sector. *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam*, 9(1), 178–203.
- Khasanah, N. (2024). Optimalisasi Wakaf Uang sebagai Solusi Pemberdayaan Pendidikan Islam di Indonesia. *At-Tajir: Jurnal Manajemen Bisnis Syariah*, 2(1), 10–25.
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124.
- Muayyad, D. M., & Jatmiko, D. (2021). Higher Education Financing Model Through Cash Waqf: An Exploratory Study. *Journal of Islamic Economics Lariba*, 7(2), 113–124. <https://doi.org/10.20885/jiellariba.vol7.iss2.art3>
- Mukhlisin, M., Mujahidin, E., & Indupurnahayu, I. (2020). Filantropi Islam sebagai Strategi Manajemen Keuangan Lembaga Pendidikan. *Idarah Tarbawiyah: Journal of Management in Islamic Education*, 1(1), 27–36.
- Munadi, M. (2017). Pengelolaan endowment fund di perguruan tinggi Malaysia: Studi kasus di Universitas Teknologi Malaysia. *Al-Ulum*, 17(2), 306–331. <https://doi.org/10.30603/au.v17i2.199>
- Newshub, U. (2020). UTM belanja RM40,438,476.00 bagi bantuan kewangan dan kebajikan pelajar bagi 2019-2020. *News.Utm.My*. https://news.utm.my/2020/08/utm-belanja-rm40438476-00-bagi-bantuan-kewangan-dan-kebajikan-pelajar-bagi-2019-2020/?utm_source=chatgpt.com
- Newshub, U. (2025a). Enam program bantuan kemanusiaan dilaksana Unit Zakat UTM sepanjang enam bulan pertama 2025. *News.Utm.My*. <https://news.utm.my/2025/08/enam-program-bantuan-kemanusiaan-dilaksana-unit-zakat-utm-sepanjang-enam-bulan-pertama-2025/>

- Newshub, U. (2025b). UTM komited biaya pendidikan pelajar menerusi Biasiswa Endowmen. *News.Utm.My*. <https://news.utm.my/2025/09/utm-komited-biaya-pendidikan-pelajar-menerusi-biasiswa-endowmen/>
- NORHANI BAKRI, NOOR ZAINAB ABD. RAZAK, HAMIDAH AB. RAHMAN, & AMINAH HJ AHMAD KHALID. (2005). Punca prestasi pembelajaran yang lemah di kalangan pelajar fakulti pengurusan dan pembangunan sumber manusia, Universiti Teknologi Malaysia, Skudai. *Johor. Sains Humanika*, 43(1). <https://doi.org/10.11113/sh.v43n1.342>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847.
- Rodin, R., Hidayah, J., & Harmi, H. (2025a). Manajemen Sistem Pendidikan Perguruan Tinggi Islam Di Indonesia. *Dirasah: Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam*, 8(1), 35–52. <https://doi.org/10.58401/dirasah.v8i1.1644>
- Rodin, R., Hidayah, J., & Harmi, H. (2025b). Manajemen Sistem Pendidikan Perguruan Tinggi Islam Di Indonesia. *Dirasah: Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam*, 8(1), 35–52. <https://doi.org/10.58401/dirasah.v8i1.1644>
- Roslan, N. R. I. M., Muhamad, N. H. N., & Yaacob, A. C. (2023). Development of Wakf Fund in Public Higher Education Institutions. *Environment-Behaviour Proceedings Journal*, 8(SI14), 39–43. <https://doi.org/10.21834/e-bpj.v8iSI14.5062>
- Rosman, A S B. (2017). *Persepsi Pelajar Tahun 4 Fakulti Pendidikan Utm Terhadap Pembayaran Caj Perkhidmatan Dalam Pinjaman Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)*. <https://eprints.utm.my/10264/?v>
- Sakinah, N., & Thamrin, H. (2021). Pengelolaan Dana Zakat Untuk Pembiayaan Pendidikan Anak Dhuafa (Studi Kasus Pada BAZNAS Kabupaten Kepulauan Meranti). *Jurnal Tabarru': Islamic Banking and Finance*, 4(1), 13–25. [https://doi.org/10.25299/jtb.2021.vol4\(1\).6030](https://doi.org/10.25299/jtb.2021.vol4(1).6030)
- Samrin, S. (2015). Pendidikan agama islam dalam sistem pendidikan nasional di Indonesia. *Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan*, 8(1), 101–116. <https://doi.org/10.31332/atdb.v8i1.395>
- Shaturaev, J. (2021). Financing and management of Islamic (Madrasah) education in Indonesia. *Zeszyty Naukowe Politechniki Czestochowskiej. Zarzadzanie*, 42, 57–65. <https://doi.org/10.17512/znpcz.2021.2.05>
- Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, 44(1), 26–28.
- Syafri, U. A., Mujahidin, E., Tamam, A. M., Dewi, R., Kusnadi, A., Umam, K., & Evie, S. (2022). Konsep manajemen keuangan untuk pendidikan Islam berbasis prinsip ZISWAF. *Tawazun: Jurnal Pendidikan Islam*, 15(3), 357–368. <https://doi.org/10.32832/tawazun.v15i3.8393>
- Syaifulloh, M. R. (2024). PEMIKIRAN PENDIDIKAN ISLAM HOLISTIK: SINTESIS ANTARA ILMU NAQLIYAH DAN AQLIYAH. *Jurnal Pendidikan Islam*, 1(1).
- Yanna, S., & Syukur, M. (2024). Fiqih dan Keadilan Sosial: Perspektif Pendidikan Agama Islam. *Al-Faiza: Journal of Islamic Education Studies*, 2(3), 259–267.
- yocket.com. (2025). University of Technology Malaysia Ranking 2026: QS & World Rankings. [yocket.com](https://yocket.com/universities/university-of-technology-malaysia-5396/rankings). <https://yocket.com/universities/university-of-technology-malaysia-5396/rankings>
- Yusof, M. F. M., Yusof, M. F. M., Hasarudin, M. H., & Romli, N. (2014). Cash waqf and infaq: A proposed e-philanthropy in Malaysia. *Jurnal Kemanusiaan*, 12(1).
- Zaenurrosyid, A. Z. A., Liaqat, A. L. A., & Sholihah, H. S. H. (2025). Halal governance system based on Islamic Philanthropy in universities, pesantren, and hospitals in Central Java. *Halal Studies and Society*, 2(1), 29–32. <https://doi.org/10.29244/hass.2.1.29-32>
- Zulfahji, Z. (2024). Manajemen Pendidikan Islam: Landasan Filosofis Dan Praktis. *Al-Ikhtibar: Jurnal Ilmu Pendidikan*, 11(2). <https://doi.org/10.32505/ikhtibar.v11i2.9690>