INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES
Vol 16, Issue 9, (2026) E-ISSN: 2222-6990

A Modified UTAUT Model of *e-Zakat* Adoption among Muslim Private-Sector Employees in Kedah

Azwan Huzaimi Mazlan*, Yusuf Haji Othman, Wan Mahani Abdullah
Kulliyyah Islamic finance, Science Management and Hospitality, Sultan Abdul Halim Mua'adzam Shah International Islamic University (UniSHAMS)
*Corresponding Author Email: azwanhuzaimi@unikl.edu.my

DOI Link: http://dx.doi.org/10.6007/IJARBSS/v16-i9/29074
Published Date: 22 September 2026

Abstract
Although *zakat* institutions in Malaysia have introduced digital payment platforms, the utilisation of *e-Zakat* services among eligible Muslim private-sector employees remains inconsistent, indicating that technological availability alone does not guarantee adoption. This study investigates factors influencing the adoption of the e-Zakat system provided by Lembaga Zakat Negeri Kedah (LZNK), using a modified Unified Theory of Acceptance and Use of Technology (UTAUT) framework. The model incorporates performance expectancy, facilitating conditions, perceived trust, and religiosity as antecedents of behavioural intention, with adoption of the *e-Zakat* system as the behavioural outcome and behavioural intention as a mediating construct. A quantitative cross-sectional design was employed, and data were collected via structured online questionnaires from 377 Muslim private-sector employees in Kedah, selected through convenience sampling. Partial Least Squares Structural Equation Modelling (PLS-SEM) was used to assess measurement and structural models. The findings show that performance expectancy and religiosity have significant positive effects on behavioural intention and indirectly influence adoption through intention, while facilitating conditions and perceived trust do not exhibit statistically significant effects in the proposed model. Behavioural intention emerges as the strongest predictor of adoption, and the model demonstrates satisfactory explanatory power and predictive relevance. The study extends UTAUT to an Islamic digital zakat context by integrating religiosity and trust and offers practical insights for *zakat* institutions to enhance *e-Zakat* adoption by improving perceived usefulness and aligning digital services with users' religious motivations.
Keywords: E-Zakat, Unified Theory of Acceptance and use of Technology (Utaut), Behavioural Intention, Performance Expectancy, Religiosity, Perceived Trust, Islamic Social Finance

Introduction

Digital transformation has reshaped *zakat* administration in Malaysia, with state *zakat* institutions increasingly adopting online portals, mobile applications, and integrated payment systems to improve accessibility, efficiency, and transparency (Mansor et al., 2019; Kamaruddin et al., 2023). In Kedah, Lembaga Zakat Negeri Kedah (LZNK) has implemented various digital initiatives, yet adoption of *e-Zakat* among Muslim private-sector employees remains uneven despite the availability of these platforms (Lembaga Zakat Negeri Kedah, 2023; Mohd Nor et al., 2024). Private-sector employees constitute a critical contributor segment for employment-income *zakat* and are generally digitally literate, but institutional reports and prior studies suggest that many eligible payers have not fully integrated formal digital channels into their *zakat* behaviour. This gap between system availability and actual utilisation supports the need for a behavioural analysis that moves beyond purely technical considerations and incorporates religious and institutional dimensions of *e-Zakat* adoption (Kamil, 2009; Zakat Kedah International Research Centre, 2024; Ghofar et al., 2024). Technology acceptance theories, particularly the Technology Acceptance Model (TAM) (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), provide a robust foundation for explaining user adoption of digital public services.

However, in Islamic social finance contexts, *zakat* payment is both a religious obligation and a formal institutional process, implying that constructs such as religiosity and perceived trust in institutions may be critical in addition to conventional technology determinants (Kasri & Sosianti, 2023; Muflih, 2023; Hasyim et al., 2023). This study therefore adopts and modifies UTAUT to examine how performance expectancy, facilitating conditions, perceived trust, and religiosity influence behavioural intention and adoption of *e-Zakat* among Muslim private-sector employees in Kedah. Behavioural intention is conceptualised as a mediating construct that transmits the effects of these determinants to actual usage behaviour. The central contribution lies in situating *e-Zakat* adoption within a socio-religious and institutional framework rather than viewing it as a purely technical uptake of digital services.

Literature Review

Zakat, e-Zakat, and Islamic Social Finance

Zakat is a mandatory pillar of Islam that combines spiritual, economic, and social dimensions by redistributing wealth and strengthening social welfare among Muslim communities (Kahf, 1999; Chapra, 1992). In contemporary practice, zakat on employment income has become increasingly important, as salaries and professional earnings represent the dominant source of income for many Muslims. Malaysian state fatwas and zakat policies have institutionalised employment-income *zakat*, contributing to sustained growth in *zakat* collections and reinforcing the role of salaried employees as a key payer segment (Wahid et al., 2009; Lembaga Zakat Negeri Kedah, 2023). Within the broader transformation of Islamic social finance, digital *zakat* platforms are increasingly recognised as strategic instruments rather than merely alternative payment channels (Kamaruddin et al., 2023; Kasri & Sosianti, 2023). *E-Zakat* systems enable users to calculate *zakat* obligations, make online payments, obtain electronic receipts, and monitor transaction histories, thereby enhancing convenience, accessibility, transparency, and administrative efficiency (Mansor et al., 2019; Nik Azman et al., 2020). However, empirical evidence indicates that the adoption of *e-Zakat* depends not only on the availability of digital infrastructure but also on users' perceptions of usefulness,

Vol. 16, No. 9, 2026, E-ISSN: 2222-6990 © 2026

institutional trust, system security, transparency, and compatibility with religious values (Muflih, 2023; Hasyim et al., 2023; Ghofar et al., 2024; Ishak et al., 2025).

Technology Adoption Models and UTAUT

TAM and UTAUT have been widely applied to explain the adoption of digital financial and public services, with core determinants such as perceived usefulness, performance expectancy, and facilitating conditions consistently associated with behavioural intention (Venkatesh et al., 2003; Alalwan et al., 2017). UTAUT posits that performance expectancy, effort expectancy, social influence, and facilitating conditions predict behavioural intention and actual usage, while demographic characteristics such as age, gender, experience, and voluntariness of use moderate these relationships (Venkatesh et al., 2003). In digital *zakat* contexts, previous studies have extended UTAUT by incorporating additional constructs such as *zakat* literacy, perceived risk, trust, and religiosity to reflect the unique intersection of technology acceptance and religious compliance (Kasri & Sosianti, 2023; Muflih, 2023). The present study follows this direction by retaining performance expectancy and facilitating conditions from UTAUT while incorporating perceived trust and religiosity as context-specific determinants relevant to *e-Zakat* adoption.

Performance Expectancy

Performance Expectancy refers to the degree to which users believe that using the *e-Zakat* system will improve payment efficiency, accuracy, convenience, and record-keeping. In this context, it captures beliefs that online platforms simplify zakat calculation, reduce the need to visit physical counters, provide official receipts, and allow easy retrieval of payment history. Digital *zakat* studies have consistently found that perceived usefulness and performance-related benefits are important predictors of users' intention to adopt online zakat platforms (Venkatesh et al., 2003; Muflih, 2023).

Facilitating Conditions

Facilitating Conditions encompass users’ perceptions of available resources, infrastructure, and support that enable system usage, including internet access, device compatibility, banking facilities, guidance, and institutional assistance. In e-government and mobile banking research, facilitating conditions reduce practical barriers and uncertainty, particularly among less experienced users. In the *e-Zakat* context, facilitating conditions are expected to support intention when users feel they possess sufficient access and support to transact digitally (Venkatesh et al., 2003; Alalwan et al., 2017).

Perceived Trust

Perceived Trust in *e-Zakat* operates at both technological and institutional levels. Users must trust that the digital platform is secure, protects personal data, and processes transactions reliably, while also trusting that the *zakat* institution manages and distributes *zakat* funds transparently and responsibly. Previous studies on digital *zakat* and Islamic financial services have consistently identified institutional trust and transparency as essential determinants of users' willingness to adopt formal digital payment channels (Gefen et al., 2003; Kasri & Sosianti, 2023).

Religiosity

Religiosity reflects the extent to which religious beliefs, practices, and values shape individual behaviour and decision-making. In *zakat* studies, higher religiosity is frequently associated with stronger awareness and compliance with *zakat* obligations. In digital *zakat* contexts, religiosity may influence whether users perceive online payment through official channels as a valid and responsible means of fulfilling religious duties. Empirical evidence from Islamic FinTech and digital donation studies suggests that religiosity can strengthen intention to use religiously framed digital platforms (Worthington et al., 2003; Hasyim et al., 2023).

Research Framework and Hypotheses

The research framework adapts UTAUT by modelling performance expectancy, facilitating conditions, perceived trust, and religiosity as independent variables influencing behavioural intention, which in turn affects adoption of the *e-Zakat* system. Behavioural intention is also modelled as a mediator in the relationships between each determinant and adoption. Based on the literature, the study hypothesises that performance expectancy, facilitating conditions, perceived trust, and religiosity have positive effects on behavioural intention, and that behavioural intention positively predicts adoption of *e-Zakat*, mediating the antecedent outcome relationships.

Methodology

Research Design and Context

A quantitative cross-sectional survey design was used, capturing perceptions, behavioural intention, and adoption behaviour at a single point in time among Muslim private-sector employees in Kedah. The state-level focus reflects the decentralised nature of *zakat* administration in Malaysia, allowing for context-specific analysis within LZNK's operational environment. The study population comprises Muslim private-sector employees considered potential or existing users of *e-Zakat* services, excluding public-sector employees, self-employed individuals, retirees, students, and non-Muslims to reduce heterogeneity and align with employment-income *zakat* dynamics.

Sampling and Data Collection

Data were collected via a structured online questionnaire disseminated over approximately eight weeks. Convenience sampling was employed, with screening questions ensuring that respondents were Muslims, worked in the private sector, and were relevant to the Kedah context. Of 500 distributed questionnaires, 420 responses were received; after screening and multivariate outlier removal, 377 valid responses remained for analysis. Sample size adequacy was assessed against Krejcie and Morgan's (1970) guideline (approx. 384 for large populations) and the PLS-SEM "ten-times rule," with 377 respondents far exceeding the minimum requirement of 40.

Measures

Performance expectancy, facilitating conditions, perceived trust, religiosity, behavioural intention, and adoption were measured using multi-item Likert scales adapted from established technology adoption and *zakat* literature. Instrument development included refinement through a pilot study with 30 respondents and reliability assessment, with Cronbach's alpha values exceeding recommended thresholds.

Data Analysis

PLS-SEM was conducted using SmartPLS 4, following a two-stage approach: measurement model assessment and structural model assessment. Measurement model evaluation encompassed indicator loadings, composite reliability, average variance extracted (AVE), and discriminant validity, with problematic items (FC4, ADP4) removed due to negative loadings to improve model quality. Structural model assessment examined path coefficients, R^2, effect sizes (f^2), mediation effects, and predictive relevance (Q^2). Behavioural intention and adoption were treated as endogenous constructs, with R^2 values calculated to indicate explained variance.

Results

Measurement Model

After indicator refinement, all constructs achieved satisfactory outer loadings, composite reliability, and AVE values, with composite reliability exceeding 0.78 and AVE above 0.50. Discriminant validity was confirmed via Fornell–Larcker and HTMT criteria, indicating adequate separation among constructs.

Structural Model and Hypotheses Testing

Performance expectancy and religiosity exhibited significant positive effects on behavioural intention, whereas facilitating conditions and perceived trust did not show statistically significant relationships within the final model. Behavioural intention had a strong positive effect on adoption of the *e-Zakat* system, emerging as the dominant predictor of actual usage. The R^2 values indicated that the antecedent constructs collectively explained a substantial proportion of variance in behavioural intention and that behavioural intention, in turn, explained a meaningful share of variance in adoption. Effect size analysis showed moderate effects for key relationships, and Q^2 statistics confirmed predictive relevance of the structural model. Mediation analysis revealed that behavioural intention mediates the relationships between performance expectancy and adoption and between religiosity and adoption, while mediation effects for facilitating conditions and perceived trust were weak or non-significant.

Discussion

Theoretical Implications

The results affirm that performance expectancy is a central determinant of *e-Zakat* adoption, reinforcing UTAUT's emphasis on performance-related beliefs in technology acceptance. The significant influence of religiosity on behavioural intention underscores the importance of integrating religious motivation into technology adoption models when analysing digital religious services. The non-significant effects of facilitating conditions and perceived trust in this context suggest that, for digitally literate private-sector employees, perceived usefulness and religious motivation may overshadow support conditions and trust considerations, or that these constructs may operate through other pathways not captured in the current model. This nuance extends UTAUT by illustrating that different determinants may dominate in religious financial technology settings.

Practical Implications

For LZNK and other zakat institutions, the dominance of performance expectancy implies that *e-Zakat* platforms must clearly deliver and communicate functional value such as time savings, simplified calculation, reliable records, and seamless integration with banking channels to strengthen intention and usage. The significant role of religiosity suggests that digital *zakat* initiatives should be framed in ways that emphasise religious legitimacy, spiritual rewards, and alignment with *Shariah* principles. Communication strategies that combine technical demonstrations of system benefits with religious messaging may be more effective than purely technical campaigns. In addition, interface design and user journeys should reduce friction and highlight how *e-Zakat* supports accurate, timely, and accountable fulfilment of *zakat* obligations.

Limitations and Future Research

The study's cross-sectional design limits insights into longitudinal changes in perceptions and behaviour, and its focus on Muslim private-sector employees in Kedah restricts generalisability to other regions and occupational groups. The model also excludes other potentially relevant constructs such as effort expectancy, social influence, *zakat* literacy, and perceived risk. Future research could adopt longitudinal or mixed-method designs, expand the population to include public-sector employees and other states, and test extended models incorporating additional behavioural determinants. Comparative studies across states and between different *zakat* institutions could further elucidate how institutional variations and policy frameworks shape *e-Zakat* adoption.

Conclusion

This study examined the factors influencing the adoption of the e-Zakat system among Muslim private-sector employees in Kedah by extending the Unified Theory of Acceptance and Use of Technology (UTAUT) with the inclusion of perceived trust and religiosity. The findings indicate that performance expectancy and religiosity significantly influence behavioural intention, while behavioural intention is the strongest predictor of actual e-Zakat adoption. In contrast, facilitating conditions and perceived trust do not have significant direct effects on behavioural intention. The study contributes to the literature by demonstrating that technology adoption in Islamic social finance is influenced not only by technological factors but also by religious values. The findings highlight the importance of integrating religiosity into technology acceptance models to better explain users' adoption behaviour in faith-based digital services. From a practical perspective, the results suggest that zakat institutions, particularly Lembaga Zakat Negeri Kedah (LZNK), should enhance the functional benefits and usability of e-Zakat platforms while promoting their religious significance and Shariah compliance. Such initiatives may strengthen users' behavioural intention and encourage wider adoption of digital zakat services. This study is limited by its cross-sectional design and focus on private-sector employees in Kedah. Future research should examine other populations, geographical settings, and additional determinants such as social influence, digital literacy, and perceived risk to provide a more comprehensive understanding of e-Zakat adoption. Overall, the study offers valuable theoretical and practical insights into promoting sustainable digital zakat services within the Islamic social finance ecosystem.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Williams, M. D. (2017). Examining factors affecting customer intention and adoption of internet banking in Jordan. *Information Systems Management, 34*(3), 206–222.

Chapra, M. U. (1992). *Islam and the economic challenge*. The Islamic Foundation.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly, 27*(1), 51–90.

Ghofar, A., Abdullah, M., & Rahman, N. A. (2024). Digital transformation and e-zakat adoption: A systematic review. *Journal of Islamic Accounting and Business Research.*

Hasyim, M., Abdullah, N., & Ahmad, M. (2023). Religiosity and technology adoption in Islamic financial services. *Journal of Islamic Marketing.*

Ishak, M. S., Abdullah, N., & Yusof, R. (2025). Digital literacy and e-zakat adoption in Malaysia. *Journal of Islamic Social Finance.*

Kahf, M. (1999). *The performance of the institution of zakah in theory and practice*. International Conference on Islamic Economics.

Kamaruddin, M. I. H., Rahman, R. A., & Abdullah, M. (2023). Digitalisation of zakat institutions in Malaysia: Opportunities and challenges. *Journal of Islamic Social Finance.*

Kamil, M. I. (2009). *Gelagat kepatuhan zakat pendapatan di kalangan kakitangan awam Persekutuan Negeri Kedah* (Doctoral dissertation). Universiti Utara Malaysia.

Kasri, R. A., & Sosianti, A. (2023). Determinants of digital zakat adoption: An extension of technology acceptance theory. *Journal of Islamic Marketing.*

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610.

Lembaga Zakat Negeri Kedah. (2023). *Annual report 2023*. Lembaga Zakat Negeri Kedah.

Mansor, N., Ahmad, N., & Ismail, S. (2019). Digital transformation in zakat institutions: Enhancing efficiency through online payment systems. *International Journal of Zakat.*

Mohd Nor, M. N., Ahmad, N., & Abdullah, M. (2024). Adoption of e-zakat among Malaysian employees. *Journal of Islamic Finance Research.*

Muflih, M. (2023). Understanding Muslim consumers' intention to adopt digital Islamic financial services: Evidence from technology acceptance models. *Journal of Islamic Marketing.*

Nik Azman, N. H., Abdullah, N., & Ahmad, M. (2020). Online zakat payment systems in Malaysia: Challenges and prospects. *International Journal of Islamic Economics.*

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478.

Wahid, H., Ahmad, S., & Kader, R. A. (2009). Pengagihan zakat oleh institusi zakat kepada lapan asnaf: Kajian di Malaysia. *Jurnal Pengurusan JAWHAR.*

Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., Schmitt, M. M., Berry, J. T., Bursley, K. H., & O'Connor, L. (2003). The Religious Commitment Inventory–10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology, 50*(1), 84– 96.

Zakat Kedah International Research Centre. (2024). *Research report on digital zakat adoption in Kedah*. Zakat Kedah International Research Centre.

Yusuff, M. S. (2020). Bacaan Intertekstual Terhadap Tafsir Nur al-Ihsan: Kajian Menurut Kaedah Ekspansi, Jurnal Dunia Pengurusan, Vol. 2, No. 2, 1-11, 2020.