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Enhancing Zakat Payer Satisfaction through Zakat Literacy and Digital Literacy with QRIS as a Payment Enabler

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Abstract

Zakat is one of the five pillars of Islamic social finance and is a form of maliyah ijtima'iyah worship (worship related to property and social), which must be performed by Muslims if they meet certain conditions (property reaches the nisab and haul, among others). The level of zakat literacy among Muslims also remains varied. Many individuals still have a limited understanding of zakat obligations, calculation methods, distribution mechanisms, and the role of digital technology in facilitating zakat payments. This condition may affect zakat payers' satisfaction with digital payment platforms provided by zakat institutions. Consumer satisfaction in QRIS-based zakat payments is an important academic and practical issue because it determines the effectiveness, acceptance, and sustainability of digital zakat services, while also enriching the limited literature on the role of zakat literacy, digital literacy, and digital payment systems in Islamic social finance. This study aims to examine the effects of zakat literacy, digital literacy, perceived usefulness, and perceived ease of use on customer satisfaction toward QRIS-based zakat payments using an extended Technology Acceptance Model. This research was conducted with 190 zakat payers at LAZIS in Semarang City who have used QRIS for payment. The data analysis in this study was conducted using Structural Equation Modeling (SEM) in AMOS. The findings reveal that zakat literacy, digital literacy, perceived usefulness, and perceived ease of use positively affect customer satisfaction with QRIS-based zakat payments, indicating that higher levels of literacy and positive perceptions of technology enhance users' satisfaction with digital zakat payment services.

Keywords: *zakat literacy, digital literacy, technology acceptance model, customer satisfaction.*

Introduction

Islamic social finance is a financial system oriented toward social goals and people's welfare, grounded in Islamic values such as justice, solidarity, and sustainability.[1] Its main instruments include *zakat*, *infaq*, *sadaqah*, *waqf*, and *qard hasan* (interest-free financing), which function not only as mechanisms for wealth redistribution but also as tools for promoting social and economic development.[2] Islamic Social Finance aims to reduce poverty, unemployment, and social inequality by financing productive economic and social activities while strengthening financial inclusion for marginalized communities that often lack access to conventional financial services.[3] In addition, this system supports sustainable development through instruments such as productive *waqf* for education, healthcare, and infrastructure projects, as well as *qard hasan* for supporting small and medium-sized enterprises.[4] Unlike conventional financial systems that primarily emphasize material gains, Islamic

[1] Valentino Cattelan, Islamic Social Finance: Entrepreneurship, Cooperation and the Sharing Economy, *In Routledge*, (2019).

[2] A. Belabes, Valentino Cattelan, "Islamic Social Finance: Entrepreneurship, Cooperation and the Sharing Economy," *JKAU: Islamic Econ*, Vol. 32, No. 1, (2019), 181–189.

[3] Laura Kuanova, Rimma Sagiyeva, and Nasim Shah Shirazi, "Islamic Social Finance: A Literature Review and Future Research Directions," *Journal of Islamic Accounting and Business Research*, (2021).

[4] Tika Widiastuti, et. al., "Developing an Integrated model of Islamic Social Finance: toward an Effective Governance Framework," *Heliyon*, Vol. 8, No. 9, (2022), e10383.

Social Finance integrates spiritual and humanitarian values, making it an inclusive and sustainable solution to global economic and social challenges. Transparent and Sharia-principle-based management makes this instrument effective in helping vulnerable groups and strengthening socio-economic stability. By promoting the values of equity, justice, and social justice, Islamic Social Finance mechanisms such as *zakat, waqf, sadaqah*, and *qard-hasan* align with the Sustainable Development Goals (SDGs). These instruments can address key social and economic challenges like poverty, inequality, hunger, education, and health, directly supporting at least 11 of the 17 SDGs.[5] The estimated global potential of *zakat* and *waqf* funds alone (close to USD 1 trillion and USD 500 billion annually, respectively) could substantially fill the financing gap for SDGs, especially in developing countries.[6]

Zakat, a type of *maaliyah ijtima'iyah* devotion (worship about property and society), is one of the five pillars of Islam. Muslims are required to perform it if they meet specific requirements, such as when property reaches *nishab*. Haul *zakat* linguistically comes from the word *zakā* (زَكَى), which means clean, holy, growing, and developing. Meanwhile, in terms (sharia terminology), the definition of zakat is: "*A certain amount of property that Allah is obliged to issue by every eligible Muslim, and given to those who are entitled to receive it according to the provisions of sharia*".[7] Beyond its spiritual dimension, *zakat* also serves as a socio-economic instrument to reduce inequality, alleviate poverty, and promote social welfare within Muslim communities. Therefore, the effectiveness of *zakat* management and distribution has become increasingly important in responding to contemporary economic challenges.

In recent years, the management and payment of *zakat* have undergone substantial transformation due to the rapid development of financial technology and digital payment systems. Digital *zakat* refers to paying *zakat* electronically via internet-based platforms, including QRIS, mobile banking applications, e-wallets, and the official websites of *zakat* institutions. The emergence of these platforms has improved accessibility, efficiency, and convenience for *muzakki*, enabling *zakat* transactions to be conducted quickly and without geographical limitations. Previous studies have highlighted that digital payment systems may enhance fundraising performance and broaden public participation in charitable activities. However, the successful implementation of digital *zakat* systems is determined not only by technological availability but also by users' readiness and ability to interact with digital financial services.

In this context, digital literacy becomes a crucial factor influencing the adoption of digital *zakat* services. Nevertheless, prior discussions of digital literacy often remain overly general and fail to specifically address competencies related to financial technology and digital payment usage. In the context of digital *zakat*, digital literacy encompasses not only the ability to access and understand digital information but also the capability to use digital financial platforms securely,

[5] Abdul Wadud Nafis, "Peran Keuangan Sosial Islam dalam Mendukung Sustainable Development Goals (SDGs) di Negara Berkembang,"*Journal of Islamic Economics*, Vol. No. 1, (2026), 511–522.

[6] H. Ahmed, *Potential Global Zakat Pool: Demystifying the Numbers*, (2022), https://nzfworldwide.com/potential-global-zakat-pool-demystifying-the-numbers/.

[7] Yusuf Al Qardawi, *Fiqh Al Zakah, a Comparative Study of Zakah, Regulations and Philosophy in the Light of Qur'an and Sunnah*, (King Abdulaziz University Jeddah: Scientific Publishing Centre, 2023).

effectively, and responsibly. This includes understanding QRIS transactions, mobile payment procedures, cybersecurity awareness, data privacy protection, and trust in online financial systems. The capacity to acquire, organize, evaluate, generate, and disseminate information using digital tools, platforms, and technological advancements is referred to as digital literacy.[8] It includes a variety of skills necessary for using the digital environment sensibly, safely, and effectively. Unlike traditional literacy, which focuses on reading and writing, digital literacy encompasses skills in information technology, media use, and digital communication. Its ability to understand and utilize information provided by computational systems in diverse formats and originating from multiple sources.[9]

Furthermore, the relationship between digital literacy and technology adoption can be explained theoretically by the Technology Acceptance Model (TAM). TAM proposes that an individual's intention to adopt technology is primarily influenced by perceived usefulness and perceived ease of use. In the context of digital *zakat*, individuals with higher levels of digital literacy are more likely to perceive digital payment platforms as easier to use and more beneficial for fulfilling their religious obligations. Several empirical studies have shown that digital literacy positively affects user confidence and technology acceptance in digital financial services. Therefore, digital literacy may strengthen public trust and encourage behavioral intention to use digital *zakat* platforms. However, despite the increasing availability of digital *zakat* services, public adoption remains relatively uneven, particularly among users with limited understanding of financial technology systems.

However, previous studies have generally examined *zakat* literacy only in relation to intention to pay *zakat*, religiosity, or compliance behavior, while limited attention has been given to its interaction with digital literacy and technology acceptance variables in digital payment contexts. Existing research on digital *zakat* adoption has also predominantly focused on behavioral intention rather than user satisfaction after utilizing digital payment systems. As a result, there remains limited empirical evidence explaining how *zakat* literacy and digital literacy jointly influence perceived ease of use, perceived usefulness, and satisfaction toward QRIS-based digital *zakat* services. Furthermore, prior studies have not comprehensively examined whether users with strong zakat knowledge and digital competencies experience higher satisfaction when using QRIS for zakat payments.

This gap is particularly important because QRIS has become one of the most widely implemented digital payment technologies in Indonesia, including within Islamic philanthropic institutions. Despite growing adoption, practical issues such as limited user understanding, concerns about transaction security, lack of trust in digital platforms, and varying levels of digital capability continue to undermine the effectiveness of QRIS-based *zakat* payments. Consequently, this study seeks to address the existing research gap by examining the combined influence of *zakat* literacy and digital literacy on users' perceptions and satisfaction toward QRIS-based digital *zakat* payment systems within the framework of technology acceptance theory.

[8] Andrée-Anne Deschênes, "Digital Literacy, the Use of Collaborative Technologies, and Perceived Social Proximity in a Hybrid Work Environment: Technology as a Social Binder," *Computers in Human Behavior Reports*, Vol. 13, No. 4, (2024), 100351.

[9] Paul Gilster, *Digital Literacy*, New York: Chichester, John Wiley, 1997.

From the background discussed above, one of the key issues identified is that zakat literacy among some Muslim communities remains relatively limited, particularly in understanding digital zakat payment mechanisms and using QRIS-based platforms. Several previous studies indicate that differences in knowledge, understanding, and awareness regarding *zakat* obligations and digital financial services may influence individuals' acceptance and use of digital *zakat* payment systems. *Zakat* is still considered only as a ritual or a way of distributing *zakat* obligations to *mustahiq* in a traditional way, or directly given to *mustahiq*. High and low literacy levels regarding zakat greatly affect the quality of zakat management.[10] both on the collection and distribution sides. This research tries to connect digital literacy, literacy *zakat,* with the satisfaction of *muzakki* as consumers who pay *zakat* through ORIS within the framework of the technology acceptance model.

Literature Review

Technology as Competitive Advantage

According to the Resource-Based Theory (RBT), a company's distinct assets and capabilities are what determine whether it can gain and maintain a competitive edge. According to this hypothesis, resources are not all created equal; only those that are rare, precious, hard to copy, and non-replaceable may provide long-term competitive advantages. To improve these resources, technology must be incorporated into this framework. Key components of resource-based theory include valuable resources, as they enable firms to exploit opportunities or neutralize threats in the environment. For example, a company with cutting-edge technology can create value by streamlining processes, cutting expenses, or improving product quality.[11] The second is rarity, as resources that are scarce among competitors provide a competitive edge. For example, proprietary technology or unique software solutions can differentiate a firm in the marketplace.[12] The next key component of resource-based theory is imperfect imitability, as resources that cannot be easily replicated by competitors contribute to sustained advantage. This includes complex technologies that require significant investment and expertise to develop.[13] Non-substitutability is also the key component of resource-based theory, as resources must not have readily available substitutes that can fulfill the same function. Innovative technologies that create unique products or services fall into this category.

Technology serves as a pivotal resource within the RBT framework, enhancing capabilities: advanced technologies improve operational efficiencies and enable firms to innovate more effectively. Businesses that use advanced data analytics, for instance, can better analyze customer behavior and adjust their products accordingly. Technology also enables the creation of unique products, as firms

[10] Salsabila, S., and H. M. Fuad, "Indeks Literasi Zakat: Sebuah Metode dalam Pendekatan Pengukuran Zakat," *Jurnal Ekonomi Syariah Pelita Bangsa*, Vol. 8, No. 1, (2023), 1–9.

[11] Hesty Utami and Alamanos, *Resource-Based Theory: A Review,* (TheoryHub Book: 2023), https://open.ncl.ac.uk.

[12] David Holdford, "Resource-Based Theory of Competitive Advantage a Framework for Pharmacy Practice Innovation Research," *Pharmacy Practice*, Vol. 16, No. 3, (2018), 1351.

[13] Nurul Lubis, "Resource Based View (RBV) in Improving Company Strategic Capacity," *Research Horizon*, Vol. 2, No. 6, (2022), 587–596.

leveraging proprietary technology can develop products that are distinct from competitors'. This differentiation is critical in markets where consumers seek unique value propositions.[14] Technology can facilitate lower production costs through automation and optimized supply chains. Companies like Amazon exemplify this by using technology to streamline logistics and reduce operational costs, allowing them to offer competitive pricing.[15] Businesses that adopt cutting-edge technologies are better positioned to respond rapidly to market fluctuations and client needs. In today's fast-paced corporate world, where customer preferences can change drastically, this agility is crucial.

To gain a competitive edge, the resource-based theory emphasizes the need to leverage distinctive internal resources, such as technology. Businesses can put themselves in a competitive position by focusing on resources that are rare, valuable, inimitable, and non-replaceable. As technology evolves, its role in shaping competitive strategies will likely become even more evident, making it critical for enterprises to invest in technological capabilities as part of their strategic planning.

Technology Acceptance Model

The Technology Acceptance Model (TAM) is a framework for understanding how individuals accept and use technology. It emphasizes how prospective users view the technology's utility and usability, as these factors are crucial in determining whether or not they will embrace it.[16]

Perceived Usefulness (PU), the first of the four main components of TAM, is the degree to which a user thinks that utilizing a particular technology would improve their performance or enable them to accomplish their objectives.[17] The likelihood of a user adopting a technology increases with its perceived utility. Perceived Ease of Use (PEOU) refers to how easy a consumer believes it will be to use a technology. A technology is more likely to be adopted if it is perceived as user-friendly. Perceived utility and perceived ease of use both influence the behavioral intention (BI), or the user's intention to engage with the technology.[18] The chance of actual usage increases with the strength of the intention. The last one, Actual System Use, indicates whether users use the technology after forming their intentions based on PU and PEOU.

TAM has been widely used to predict people's responses to new technology in a number of fields, including education, healthcare, and business. However, because TAM is predicated on rational conduct, it has several limitations, despite offering valuable insights into technological acceptance. TAM assumes that users

[14] Helal Mouneer Alalie, Yoshifumi Harada, and Idris Mdnoor, "A Resource-Based View: How Information Technology Creates Sustainable Competitive Advantage to Improve Organizations," *Journal of Advance Management Research*, Vol. 6, No. 12, (2018), 1–5.

[15] Jay B. Barney and William S. Hesterly, *Strategic Management and Competitive Advantage: Global Edition*, (Pearson/Prentice Hall, 2012).

[16] Fred D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly: Management Information Systems,* Vol. 13, No. 3, (1989), 319–339.

[17] Somang Min, Kevin Kam Fung So, and Miyoung Jeong, "Consumer Adoption of the Uber Mobile Application: Insights from Diffusion of Innovation Theory and Technology Acceptance Model," *Journal of Travel & Tourism Marketing*, Vol. 36, No. 7, (2019), 770–783.

[18] A. Pranaditya, Ismail H.A., and M. Iqbal Ramdhani, "Measuring the Attitude to Shift and The Intention to Use Solar Panel as Renewable Energy Driven by Environmental Awareness and Relative Advantages," *IOP Conference Series: Earth and Environmental Science,* No. 1524, (2025), 012014.

evaluate technologies rationally based on perceived ease and usefulness, which may not always reflect real-world decision-making processes. The TAM lacks design guidance, as the model does not provide specific recommendations for designing technologies perceived as useful or easy to use. TAM may overlook external contextual factors, such as organizational culture or social influences, that can affect technology acceptance.[19] The Technology Adoption Model provides a theoretical framework for understanding user adoption of technology, highlighting the importance of perceived utility and usability in shaping behavioral intentions and actual usage.

Zakat Literacy and QRIS Perceived Usefulness

Understanding and favorable attitudes on digital *zakat* payments are shaped in part by *zakat* literacy. However, other research indicates that interest in using digital systems, such as QRIS, to pay *zakat* is generally not significantly affected by *zakat* literacy.[20] This can happen because, even though a person understands zakat, the perceived usefulness of payment technology remains the main factor determining their decision to use QRIS. The perceived usefulness of QRIS significantly affects Muzakki's interest in paying *zakat* digitally.[21] If users believe that QRIS facilitates and enhances the effectiveness of zakat payments, they are more likely to use this method. This perception of usability includes the convenience, speed, and security of transactions perceived by users.

Although *zakat* literacy itself does not always directly affect interest in paying digital *zakat*, high literacy, when combined with the perceived high usefulness of QRIS, can increase users' comfort and confidence in using QRIS for *zakat* payments. In other words, *zakat* literacy provides a basis for understanding, while the perceived usefulness of QRIS provides practical motivation to use the technology.[22]

Zakat literacy and the perceived usefulness of QRIS are complementary. *Zakat* literacy provides a basic understanding of *zakat*, while the perceived usefulness of QRIS is the main factor that influences users' interest and decision to pay *zakat* digitally through QRIS. Therefore, increasing *zakat* literacy must be accompanied by improvements in the quality and usability of QRIS services to optimize digital zakat payments. Based on the above, we propose a hypothesis as follows:

H_1: The perceived usefulness of QRIS is positively affected by zakat literacy.

Zakat Literacy and QRIS Perceived Ease of Use

In the context of digital *zakat* payments, there is a strong, reciprocal relationship between zakat literacy and perceived ease of use of QRIS. A person's knowledge

[19] Anton Manfreda and Tea Mijač, "Highlighting Gaps in Technology Acceptance Research: A Call for Integrating Happiness and Well-Being into Smart City Development," *Journal of Innovation and Knowledge*, Vol. 9, No. 4, (2024).

[20] Umi Habibah and Fira Nurafini, "Pengaruh Persepsi Kegunaan, Kemudahan dan Risiko terhadap Minat Membayar Zakat, Infaq dan Shodaqoh Menggunakan Fitur Berbagi-ZISWAF BSI," *Jurnal Ekonomika dan Bisnis*, Vol. 7, No. 1, (2024), 97–111.

[21] Agus Hidayatul Rohman and Abdul Ghoni, "Analisis Penggunaan QRIS terhadap Potensi Implementasi Rupiah Digital dalam Transaksi Zakat di Lembaga Amil Zakat," *Jurnal Ekonomi, Manajemen, Akuntansi*, Vol. 4, No. 4, (2025), 6096–6109.

[22] Makhrus, Ibnu Hasan, and Selamet Eko Budi Santoso, "Islamic Philanthropy and Social Services in Improving Community Welfare in Indonesia, *Islamic Economics Journal*, Vol. 10, No. 02, (2024), 150-162.

and comprehension of *zakat*, including its rules, regulations, and advantages, is known as *zakat* literacy. According to research, people's interest in utilizing QRIS to pay zakat is positively and significantly impacted by *zakat* literacy.[23] With a good understanding of zakat, *muzakki* are more motivated and confident to use digital payment methods such as QRIS.

The user's perception that a technology or system is simple to use and requires little effort is known as perceived ease of use. This usability is crucial for QRIS to promote the adoption of digital *zakat* payments by the general public, particularly millennials and new users. Easy-to-use QRIS increases the convenience and speed of *zakat* transactions. High *zakat* literacy helps users better understand the benefits and process of digital zakat payments, so they can use QRIS faster. The ease of use of QRIS enables users with zakat literacy to make transactions smoothly, without technical barriers. On the other hand, if *zakat* literacy is low, even though QRIS is easy to use, users may be hesitant or less interested in paying *zakat* digitally because they do not understand zakat's importance or procedures.

Zakat literacy and perceived ease of use QRIS complement each other in encouraging the adoption of digital *zakat* payments. *Zakat* literacy provides a basis for understanding and motivation, while QRIS ease of use ensures that the zakat payment process can be carried out in practice and without technical barriers. Therefore, increasing *zakat* literacy and developing a user-friendly QRIS system are crucial to optimizing digital *zakat* payments in Indonesia. Based on the above, we propose a hypothesis as follows:

H_2: The QRIS perceived ease of use is positively impacted by zakat literacy.

Digital Literacy and QRIS Usefulness

One important element affecting judgments about technology adoption is perceived usefulness. It remains a fundamental component of technological acceptance prediction models, as consistently confirmed in contemporary TAM variants and other acceptance frameworks. Organizations can create more efficient systems that satisfy user needs and encourage broad adoption by comprehending and improving PU.[24] The degree to which an individual thinks that using a specific system or technology would enhance their general productivity or job performance is known as perceived usefulness. "*The degree to which an individual believes that using a particular system would enhance his or her job performance"* is the definition of PU.

Determinants of Perceived Usefulness are system quality and features such as a user-friendly interface and functional design that can enhance perceptions of usefulness, then relevance to tasks that the technology has to be aligned well with the user's job requirements, and finally, social influence and training, as peer opinions and comprehensive training can improve users' perceptions of usefulness.[25]

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[23] Nurul Zaeni, Moh. Mukhsin, dan Muhammad Abduh, "Pengaruh Literasi Zakat dan Kepercayaan terhadap Minat Masyarakat Membayar Zakat Menggunakan Platform Digital pada BAZNAS di Provinsi Banten," *Jurnal Masharif Al-Syariah*, Vol. 9, No. 2, (2024), 1349–1360.

[24] Fred D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly: Management Information Systems,* Vol. 13, No. 3, (1989), 319–339.

[25] Viswanath Venkatesh and Fred D. Davis, "Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies," *Management Science*, Vol. 46, No. 2, (2000), 186–204.

The perception of QRIS's utility, its speed in completing payment transactions, its capacity to boost our sales performance and productivity, and its provision of alternative payment options are the four indicators of QRIS's usefulness.[26]

Digital literacy refers to the ability to use digital tools, platforms, and technologies to access, manage, assess, produce, and share information.[27] It includes a variety of skills necessary for using the digital environment sensibly, safely, and effectively. Unlike traditional literacy, which focuses on reading and writing, digital literacy encompasses skills in information technology, media use, and digital communication. Its ability to understand and use data from a range of sources and in several formats provided by computers.

To assess a level of digital literacy with QRIS, several indicators can be considered, such as understanding how to use QRIS to resolve technical issues. Then the ability to learn new technologies like QRIS easily. The third indicator of digital literacy is always keeping up with important new technologies like QRIS. Then the knowledge about a lot of different technologies like QRIS.[28]

Research on the connection between digital literacy and the perceived utility of technology is crucial, particularly as digital technologies are incorporated more and more into professional and educational settings. Many studies focus on specific populations or contexts, such as students in developed countries. There is a need for research examining how perceived usefulness and digital literacy interact across diverse socio-economic settings, especially in emerging economies where access to technology and educational resources may vary widely.[29] The relationship between the two factors, digital literacy and perceived usefulness, is positive, meaning that the larger the digital literacy, the higher the perceived usefulness.[30] Based on the above, we propose a hypothesis as follows:

H_3: The QRIS's usefulness is positively impacted by digital literacy.

Digital Literacy and QRIS Ease of Use

Perceived ease of use (PEOU) refers to how easily a person believes they can use technology.[31] If technology is simple to use, people are more likely to regard it as advantageous, which increases their intention to use it. The ease of use of QRIS can vary based on individual traits, prior experience with technology, and the specific contexts in which the technology is applied. Understanding these factors can help

[26] Risma Nurhapsari and Erlinda Sholihah, "Analysis of the Factors of Intention to Use QRIS for MSMES in Semarang City's Traditional Market. *Jurnal Ekonomi Modernisasi*, Vol. 18, No. 2, (2022), 199-211.

[27] Andrée-Anne Deschênes, "Digital Literacy, the Use of Collaborative Technologies, and Perceived Social Proximity in a Hybrid Work Environment: Technology as a Social Binder," Computers in Human Behavior Reports, Vol. 13, No. 4, (2024), 100351.

[28] Ayman Nazzal, et. al., "The Influence of Digital Literacy and Demographic Characteristics on Online Shopping Intention: An Empirical Study in Palestine," *Journal of Asian Finance, Economics and Business*, Vol. 8, No. 8, (2021), 205–0215.

[29] Achmad Tavip Junaedi, et. al., "Advancing Digital and Technology Literacy through Qualitative Studies to Bridging the Skills Gap in the Digital Age," *Journal of Applied Business and Technology*, Vol. 5, No. 2, 123–133.

[30] Muhammad Faheem Akram, Muhammad Ramzan Ali, and Zulayho Kadirova, "Role of Consumer Digital Literacy in Consumer Behavioral Intentions: Mediating Effect of Perceived Ease of Use, Usefulness and Customer Engagement," *Multidisciplinary Journal of Educational Research*, No. 13 (May), 2023).

[31] Achmad Tavip Junaedi, et. al., "Advancing Digital and Technology Literacy through Qualitative Studies to Bridging the Skills Gap in the Digital Age," *Journal of Applied Business and Technology*, Vol. 5, No. 2, 123–133.

organizations design systems that enhance user experience and adoption rates.[32] Although perceived usefulness and perceived ease of use are separate ideas, they are connected. According to research, PEOU can function as a predictor of perceived utility, and if a system is simple to use, people are more likely to view it as helpful for their activities or performance.

Various indicators can be used to measure PEOU and evaluate its impact on user acceptance, such as ease of learning, which assesses how quickly users can understand and start using the technology. An intuitive, straightforward system will have a higher perceived ease of use. The technology must be simple to use; this gauges how well consumers believe they can operate and navigate the system. If users find it easy to manipulate the technology, their perception of ease will increase. It also has to be clear and understandable, as a clear design reduces confusion and enhances user confidence in using the technology. Easy to Apply is the final indicator, as it assesses how straightforward it is for users to implement the technology in their daily tasks. If applying the technology requires little effort or training, it enhances the perceived ease of use.[33]

Higher levels of digital literacy have been shown to directly improve perceived usability. Those with strong digital literacy skills can use technology more easily, which reduces the cognitive burden of learning new systems. This familiarity can increase the likelihood of adoption by creating a more favorable impression of the ease of use of a technology.[34] Digital literacy not only influences PEOU but also mediates the relationship between certain characteristics and technology use. For example, research indicates that consumers' attitudes regarding technology are positively impacted by digital literacy, and this, in turn, influences their inclination to utilize it. This suggests that improving digital literacy can enhance users' overall engagement with technology by making it seem easier to use.[35]

Digital literacy and perceived ease of use are positively correlated; that is, the more digitally literate one is, the more user-friendly one is regarded to be. Based on this relationship, we propose a hypothesis as follows:

H_4: The level of digital literacy has a beneficial impact on QRIS usability.

QRIS Ease of Use and QRIS Usefulness

A key component of understanding technology adoption, especially through the Technology Acceptance Model (TAM), is the relationship between perceived usefulness and perceived ease of use. The degree to which someone thinks a certain technology will be easy to use is known as perceived ease of use. This viewpoint

[32] Afrizal Tahar, et. al., "Perceived Ease of Use, Perceived Usefulness, Perceived Security and Intention to Use E-Filing: The Role of Technology Readiness," *Journal of Asian Finance, Economics and Business*, Vol. 7, No. 9, (2020), 537–547.

[33] Michelle Olivia and Nony Kezia Marchyta, "The Influence of Perceived Ease of Use and Perceived Usefulness on E-Wallet Continuance Intention," *Jurnal Teknik Industri*, Vol. 24, No. 1, (2022), 13–22.

[34] Shahrokh Nikou, Mark De Reuver, and Matin Mahboob Kanafi, "Workplace Literacy Skills How Information and Digital Literacy Affect Adoption of Digital Technology," *Journal of Documentation*, Vol. 78, No. 7, (2022), 371–391.

[35] Shaowei Xiong and Tong Zhang, "Enhancing Tourist Loyalty through Locationbased Service Apps: Exploring The Roles of Digital Literacy, Perceived Ease of Use, Perceived Autonomy, Virtual-Content Congruency, and Tourist Engagement," *PLoS ONE*, Vol. 19, No. 1, January (2024), 1–18.

increases users' confidence and self-efficacy in adopting technology, even though perceived usefulness is the extent to which an individual believes that using a particular system will enhance their effectiveness at work. It is closely linked to users' beliefs about the technology's ability to fulfill their needs effectively.

There is a reciprocal reinforcing link between perceived utility and perceived ease of use. Perceived usefulness is favorably influenced by perceived ease of use, according to previous research. People are more inclined to see technology as helpful when it is easy to use.[36] Conversely, when users believe a technology is useful, they may be more inclined to engage with it, thus improving their sense of its usability through experience and familiarity.[37] A higher ease of use leads to greater satisfaction, which in turn can reinforce the perception of usefulness.[38]

The relationship is also explained through efficacy appraisal theories. Self-efficacy is influenced by perceived ease of use, but response efficacy is improved by perceived usefulness. People are more likely to recognize the value of technology if they believe they can utilize it effectively (self-efficacy). There is a positive correlation between QRIS usefulness and QRIS ease of use, indicating that the more helpful a QRIS is, the easier it is to use.[39] Based on the relationship as mentioned above, we propose a hypothesis as follows:

H_5: *The usefulness of QRIS is positively impacted by its usability.*

QRIS Usefulness and Customer Satisfaction

Perceived utility (PU) and marketing performance are significantly correlated because PU directly affects customer behavior, satisfaction, and ultimately the effectiveness of marketing strategies. Customers' willingness to buy is strongly influenced by perceived utility. Research suggests that consumers are driven to return to brands they find helpful because higher perceived usefulness positively corresponds with increased online repurchase intentions.[40]

Customer happiness, a crucial aspect of marketing performance, is strongly impacted by perceived utility. Consumers who are pleased with a brand are more likely to buy from it again and refer others to it. Research shows that when consumers perceive a product or service as useful, their satisfaction levels increase, leading to a higher likelihood of repurchase and brand loyalty.[41]

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[36] Nur Saskia Aulia and Endy Gunanto Marsasi, "The Role of Perceived Usefulness, Perceived Ease of Use, and Task Technology Fit to Increase Perceived Impact on Learning. *Sentralisasi*, Vol. 13, No. 1, (2024).

[37] Jaysone Christopher Mercado Bancoro, "Exploring the Influence of Perceived Usefulness and Perceived Ease of Use on Technology Engagement of Business Administration Instructors," *International Journal of Asian Business and Management*, Vol. 3, No. 2, (2024), 149–167.

[38] Andini Ghanifia Rizqi Amalia and Agung Nugroho Luthfi Imam Fahrudi, "The Relationship Between Perceived Ease of Use, Perceived Usefulness and Perceived Loss of Control with User Satisfaction in Mandatory Setting," *Proceedings of the 3rd Annual International Conference on Public and Business Administration (AICoBPA 2020),* No. 191, (2021), 171–173.

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[41] Keni, "How Perceived Usefulness and Perceived Ease of Use Affecting Intent to Repurchase?," *Jurnal Manajemen*, Vol. 24, No. 3, (2020), 481.

The relationship between perceived usefulness and marketing performance is multifaceted, influencing purchase intentions, customer satisfaction, trust, and loyalty. By enhancing perceived usefulness through targeted marketing strategies, businesses can improve their overall marketing performance and foster stronger connections with their customers. The relationship between the two factors, QRIS usefulness, and sales product marketing performance is positive, meaning that the higher the QRIS usefulness, the higher the sales product marketing performance.[42] Based on the relationship as mentioned above, we propose a hypothesis as follows:

H_6: Customer satisfaction is positively impacted by QRIS usefulness.

QRIS Ease of Use and Customer Satisfaction

Because perceived ease of use (PEOU) influences how customers engage with goods and services, which in turn affects their satisfaction and purchase behaviour, there is a strong correlation between PEOU and marketing performance. Research indicates a strong positive correlation between perceived ease of use and user satisfaction. Users are far more satisfied with a system or product when they find it easy to use. Because pleased consumers are more likely to make repeat purchases and refer the product to others, this increased satisfaction can lead to better marketing performance. The ease of use directly affects consumers' purchase intentions. People are more inclined to purchase if they find a product or service straightforward to use and comprehend. High perceived ease of use encourages confidence when making purchase decisions, which can lead to better marketing performance and more sales.

By recognizing the significance of perceived ease of use, marketers may create more effective user experiences and communication plans. Highlighting the simplicity and accessibility of products can enhance customer engagement and improve marketing performance.[43] Understanding how marketing performance and perceived ease of use relate to one another is essential for comprehending consumer behavior in the modern digital marketplace. Businesses can increase consumer satisfaction, lower perceived risks, boost buy intentions, and ultimately improve marketing success by improving perceived ease of use through efficient design and communication techniques.

Sales product marketing success and QRIS ease of use are positively correlated; that is, the more user-friendly the QRIS, the better the sales product marketing result (Nur et al., 2024). Based on the relationship as mentioned above, we propose a hypothesis as follows:

H_7: The ease of use of QRIS has a favorable and considerable impact on customer satisfaction.

The following basic conceptual model is suggested based on the factors of *zakat* literacy, digital literacy, QRIS usefulness, QRIS ease of use, and customer satisfaction and their relationships as previously described.

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[42] Muhammad Faheem Akram, Muhammad Ramzan Ali, and Zulayho Kadirova, "Role of Consumer Digital Literacy in Consumer Behavioral Intentions: Mediating Effect of Perceived Ease of Use, Usefulness and Customer Engagement," *Multidisciplinary Journal of Educational Research*, No. 13 (May), 2023).

[43] Mohammed T. Nuseir and Ghaleb A El-Refae, "The Effect of Social Media Marketing, Compatibility and Perceived Ease of Use on Marketing Performance: Evidence from Hotel Industry," *International Journal of Data and Network Science*, Vol. 6, No. 3, (2022), 885–894.

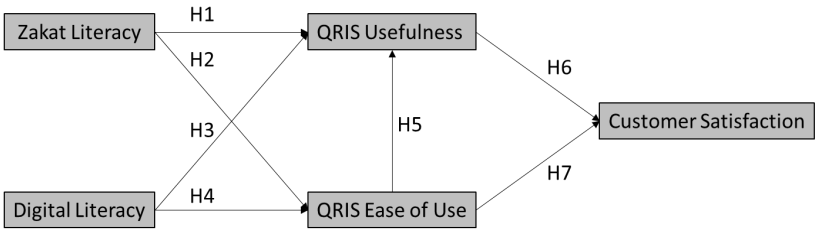

Figure 1. Conceptual Framework

Research Methods

This study employed an explanatory research design to examine the causal relationships among *zakat* literacy, digital literacy, perceived usefulness of QRIS, perceived ease of use of QRIS, and customer satisfaction in the context of digital *zakat* payments. Explanatory research is appropriate for identifying and analyzing the relationships between variables and explaining how certain factors influence particular outcomes.[44] In this study, the research model was developed based on the Technology Acceptance Model (TAM), which posits that technology adoption and user satisfaction are influenced by perceived usefulness and perceived ease of use. The most basic total sample size based on SEM is obtained by multiplying the number of latent variables by 5 to 10 times the number of indicators.[45]

The study population comprised individuals who paid *zakat*, *infaq*, and *sadaqah* through LAZIS in Semarang City, Jawa Tengah. Data were collected using a structured questionnaire distributed both in person and online to respondents with experience using QRIS-based digital *zakat* payment services. The sampling technique employed was purposive sampling, in which respondents were selected based on specific criteria, namely individuals who had conducted *zakat* transactions using digital payment methods, particularly QRIS. This approach was chosen to ensure that respondents had relevant experience with the variables under study. The research instrument was designed using measurement indicators adapted from previous validated studies related to digital literacy, *zakat* literacy, technology acceptance, and customer satisfaction. All variables were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Zakat literacy was operationalized using indicators that reflected respondents' understanding of zakat obligations, calculation methods, distribution mechanisms, and knowledge of digital *zakat* payments. Digital literacy was measured by respondents' ability to access, understand, evaluate, and use digital financial technology safely and effectively, including QRIS-based payment systems. Perceived usefulness referred to the degree to which respondents believed that QRIS improved the effectiveness, efficiency, and convenience of *zakat* payments, while perceived ease of use measured the extent to which QRIS was perceived as simple, understandable, and easy to operate. Customer satisfaction was assessed using respondents' overall satisfaction, perceived service quality, convenience, and positive experiences with QRIS-based *zakat* payment services.

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[44] Imam Ghozali, *Analisis Multivariate dan Ekonometrika Teori, Konsep, dan Aplikasi dengan Eviews*, (Semarang: Badan Penerbit UNDIP, 2017).

[45] Augusty Tae Ferdinand, *Metode Penelitian Manajemen: Pedoman Penelitian untuk Penulisan Skripsi Tesis dan Disertasi Ilmu Manajemen,* (BP Universitas Diponogoro, 2006).

The data analysis technique used in this study was Structural Equation Modelling (SEM). SEM was selected because it enables the simultaneous examination of multiple relationships among latent variables and their indicators, as well as the testing of direct and indirect effects within a comprehensive research model. In addition, SEM is considered suitable for theory-based studies involving complex relationships among constructs such as literacy, technology acceptance, and satisfaction. Following Ferdinand (2005), the minimum sample size in SEM analysis was determined based on five to ten times the number of indicators used in the research model.

The data analysis process was conducted in several stages. First, descriptive statistical analysis was performed to identify respondents' demographic characteristics and general responses to each variable. Second, validity and reliability tests were conducted to evaluate the quality of the measurement instruments using factor loadings, construct reliability, and average variance extracted (AVE). Third, the goodness-of-fit test was employed to assess whether the proposed structural model fit the empirical data. Finally, hypothesis testing was carried out to analyze the relationships among variables by examining path coefficients, critical ratios, and significance values. Through these procedures, the study aimed to provide a comprehensive explanation of the factors influencing customer satisfaction in QRIS-based digital *zakat* payment services.

Table 1. Indicator Statement

Indicator	Item	Statement	Refference
Zakat Literacy	ZTL1	I understand zakat knowledge in general.	Indeks Literacy *Zakat* (ILZ), Pusat Kajian Strategis (Puskas) BAZNAS 2019.
	ZTL2	I am aware of the obligation to pay zakat.	
	ZTL3	I am aware of the knowledge about the calculation of zakat.	
	ZTL4	I understand about the object of zakat.	
Digital Literacy	DLT1	I am proficient with digital tools.	Thengadi et al., 2019
	DLT2	I am aware of the importance of information evaluation skills.	
	DLT3	I understand how to create material content.	
	DLT4	I understand how to collaborate online.	
QRIS Perceived Usefulness	QSF1	If I had QRIS, my life would be better.	Wang et al., 2008, 2011)
	QSF2	For me, having QRIS in my gadget would be beneficial.	
	QSF3	QRIS allows me to shop without the need to carry cash.	
	QSF4	It would be convenient for me to have QRIS installed in my gadget.	
QRIS Perceived Ease of Use	QEU1	I believe it could be easily using a QRIS.	Ahmad et al., 2017; Fatoki, 2022)
	QEU2	I think I'll have no problem learning how to operate QRIS.	
	QEU3	I believe it would be easily understand how QRIS works.	
	QEU4	I think QRIS would be a good way to simplify payments.	
Customer Satisfaction	CSF1	I love using QRIS to pay my zakat.	Yas et al., 2020
	CSF2	I would prefer QRIS over a traditional payment system.	
	CSF3	I'll use QRIS again for payments.	
	CSF4	I'll advise people to use QRIS.	

Source: Developed for this research (2025)

Results and Discussion

There were 190 respondents in total, and all surveys were completed in full. However, 12 of the 190 respondents' responses were outliers and were excluded from this study. Thus, 178 responses make up the sample of analysis or the total.

Based on Table 3, the results indicate that all constructs have demonstrated satisfactory levels of validity and reliability. Convergent validity is confirmed

because all standardized loading values are above the recommended threshold of 0.50, indicating that each indicator adequately explains its respective construct. In addition, the Variance Extracted (AVE) values for all variables exceed 0.50, namely *Zakat* Literacy (0.646), Digital Literacy (0.655), QRIS Usefulness (0.693), QRIS Ease of Use (0.628), and Customer Satisfaction (0.709). These findings show that each construct explains more than 50% of the variance in its indicators, thereby meeting the requirement for convergent validity.

Furthermore, the reliability test also shows strong internal consistency among the indicators. The Construct Reliability (CR) values for all variables are above the recommended cut-off value of 0.70, namely *Zakat* Literacy (0.880), Digital Literacy (0.884), QRIS Usefulness (0.900), QRIS Ease of Use (0.871), and Customer Satisfaction (0.907). Therefore, it can be concluded that all constructs used in this study are both valid and reliable, meaning that the measurement model is appropriate and consistent for further analysis.

Table 2. Construct Reliability and Variance Extracted

No	Variable	Indicator	Std Loading	Standard Loading^2	Measurement Error	Construct Reliability	Variance Extracted
1	*Zakat* Literacy	ZTL1	0,827	0,684	0,316	0,880	0,646
		ZTL2	0,789	0,623	0,377		
		ZTL3	0,811	0,658	0,342		
		ZTL4	0,788	0,621	0,379		
		∑	3,215	2,586	1,415		
2	Digital Literacy	DLT1	0,787	0,619	0,381	0,884	0,655
		DLT2	0,860	0,740	0,260		
		DLT3	0,774	0,599	0,401		
		DLT4	0,814	0,663	0,337		
		∑	3,235	2,621	1,379		
3	QRIS Usefulness	QSF1	0,855	0,731	0,269	0,900	0,693
		QSF2	0,843	0,711	0,289		
		QSF3	0,811	0,658	0,342		
		QSF4	0,821	0,674	0,326		
		∑	3,330	2,774	1,226		
4	QRIS Ease of Use	QEU1	0,822	0,676	0,324	0,871	0,628
		QEU2	0,811	0,658	0,342		
		QEU3	0,885	0,783	0,217		
		QEU4	0,762	0,581	0,419		
		∑	3,280	2,698	1,302		
5	Customer Satisfaction	CSF1	0,853	0,728	0,272	0,907	0,709
		CSF2	0,861	0,741	0,259		
		CSF3	0,890	0,792	0,208		
		CSF4	0,758	0,575	0,425		
		∑	3,362	2,836	1,164		

Sumber: Data Processed (2025)

The Mahanalobis distance, which has a degree of freedom based on the total number of indicators and a significance level of (p) 0.001, can be used to identify outliers in SEM analysis. Using the $\chi 2$ (20, 0,001) test, the study's 20 indicators yielded a $\chi 2$ value of 45.315, with a p-value < 0.001. According to the Mahalanobis d-squared tests, the highest value is 35.583, which is below 45.315. This result indicates that the study's data contains no multivariate outliers (Table 4).

Table 3. Multivariate Outliers Testing

Observation Number	Mahalanobis d-squared	p1	p2
20	35,583	,017	,955
7	33,484	,030	,971
21	33,145	,033	,931
155	32,987	,034	,856
94	32,708	,036	,777

Source: Processed data (2025)

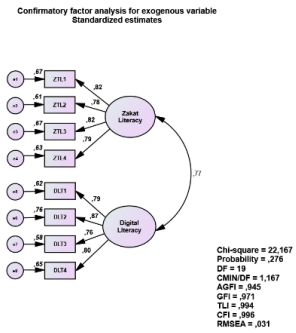
The normality assessment indicates that the data generally satisfy the assumptions required for SEM analysis. At the univariate level, all indicators have skewness values within the acceptable range of ±2.58, suggesting that the data distribution is reasonably symmetric. Likewise, the critical ratio (c.r.) values for kurtosis are below the ± 2.58 threshold, indicating the absence of severe kurtosis and supporting univariate normality (Table 5). The multivariate normality assessment yielded a multivariate kurtosis of 10.170 and a critical ratio (c.r.) of 2.287. Since the multivariate c.r. is below the recommended cut-off value of 2.58, the data can be considered to meet the assumption of multivariate normality. Therefore, the dataset is appropriate for further analysis using Structural Equation Modeling (SEM).

Table 4. Normality Test for Data

Variable	Min	Max	skew	c.r.	kurtosis	c.r.
CSF4	4,000	10,000	-,354	-1,927	-,681	-1,855
QEU1	4,000	10,000	-,234	-1,275	-,651	-1,774
QSF1	4,000	10,000	-,172	-,938	-,819	-2,232
DLT4	4,000	10,000	-,329	-1,790	-,826	-2,248
CSF1	4,000	10,000	-,338	-1,840	-,652	-1,776
CSF3	4,000	10,000	-,439	-2,390	-,854	-2,325
CSF2	4,000	10,000	-,455	-2,476	-,628	-1,709
QSF2	4,000	10,000	-,254	-1,385	-,714	-1,945
DLT2	4,000	10,000	-,301	-1,638	-,753	-2,050
DLT3	4,000	10,000	-,344	-1,876	-,863	-2,349
DLT1	4,000	10,000	-,230	-1,251	-,807	-2,198
QSF4	4,000	10,000	-,356	-1,938	-,484	-1,319
QEU2	4,000	10,000	-,325	-1,772	-,715	-1,946
ZTL4	4,000	10,000	-,388	-2,113	-,359	-,978
ZTL2	4,000	10,000	-,162	-,884	-,893	-2,433
QEU4	4,000	10,000	-,426	-2,320	-,520	-1,415
QEU3	4,000	10,000	-,343	-1,870	-,854	-2,325
QSF3	4,000	10,000	-,289	-1,573	-,920	-2,506
ZTL1	4,000	10,000	-,282	-1,538	-,647	-1,761
ZTL3	4,000	10,000	-,215	-1,174	-,797	-2,170
Multivariate					10,170	2,287

Source: Processed data (2025)

Confirmatory factor analysis, the next step in the evaluation process leading up to the research model, is used to assess indicators and create latent variables. Prior to validation in the full model (Figure 4), the expediency of the exogenous variable (Figure 2) and the endogenous variable (Figure 3) was assessed using confirmatory factor analysis.



Source: Processed data (2025)

Figure 2. Confirmatory Factor Analysis Testing with Exogenous Variable

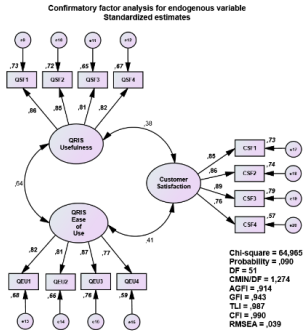
Except for those where the additional value of factor loading was larger than 0.07 or the lambda was not less than 0.50, testing reveals that every indicator in every exogenous variable met the standards (Ghozali, 2021). It demonstrates how those indicators considerably create unidimensionality with regard to latent variables, such as digital literacy and zakat literacy.

Tabel 5. Result of Confirmatory Factor Analysis Testing with Exogenous Variable

Goodness of fit Index	Cut-off Value	Result of this model	Model Evaluation
Chi-square (df = 19)	(<30.143)	22.167	Good
Probability	≥ 0.05	0.276	Good
CMIN/DF	≤ 2.00	1.167	Good
AGFI	≥ 0.90	0.945	Good
GFI	≥ 0.90	0.971	Good
TLI	≥ 0.95	0.994	Good
CFI	≥ 0.95	0.996	Good
RMSEA	≤ 0.08	0.031	Good

Source: Processed Data (2025)

The results of the confirmatory factor analysis test with the exogenous variable (in table 6) show that the The chi-square value is 22.167, and the probability value is 0.276. It demonstrates that the readings are below the predetermined cut-off point. RMSEA of 0.031, TLI of 0.994, AGFI of 0.945, GFI of 0.971, CMIN/DF of 1.167, and CFI of 0.996 are additional evaluation criteria. Since each of these criteria yields positive findings, the requirements for testing the exogenous variable confirmatory factor analysis have been met.



Source: Processed data (2025)

Figure 3. Confirmatory Factor Analysis Testing with Endogenous Variable

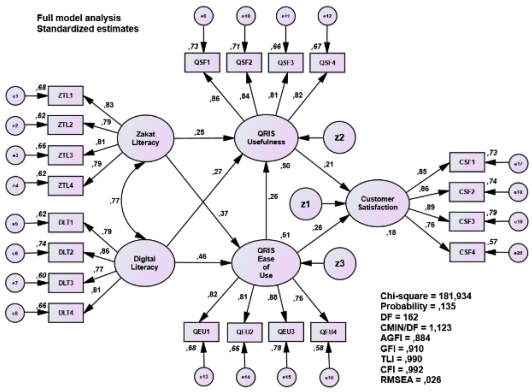
Every sign in every endogenous variable met the standards, according to the tests, except for those where the additional value of the factor loading was greater than 0.07 or the lambda was not less than 0.50 (Ghozali, 2021). It demonstrates how those indicators significantly contribute to unidimensionality with regard to latent variables such as customer happiness, QRIS utility, and QRIS ease of use.

Table 6. Result of Confirmatory Factor Analysis Testing with Endogenous Variable

Goodness of Fit Index	Cut-off Value	Result of this model	Model Evaluation
Chi-square (df = 51)	(<65.669)	64.965	Good
Probability	≥ 0.05	0.090	Good
CMIN/DF	≤ 2.00	1.274	Good
AGFI	≥ 0.90	0.914	Good
GFI	≥ 0.90	0.943	Good
TLI	≥ 0.95	0.987	Good
CFI	≥ 0.95	0.990	Good
RMSEA	≤ 0.08	0.039	Good

Source: Processed Data (2025)

The results of the confirmatory factor analysis test with the exogenous variable (in table 7) show that the chi-square value is 64.965 and the probability value is 0.090. It demonstrates that the readings are below the predetermined cut-off point. Among the other evaluation criteria, CMIN/DF is 1.274, AGFI is 0.914, GFI is 0.943, TLI is 0.987, CFI is 0.990, and RMSEA is 0.039. The requirements for endogenous variable confirmatory factor analysis have been satisfied, as indicated by affirmative outcomes for each criterion.



Source: Processed Data (2025)

Figure 4. Full Model Analysis Testing

The CFA findings also confirm that all indicators significantly represent their respective latent constructs, as reflected in standardized factor loadings above the acceptable threshold of 0.50. In addition, construct reliability and variance extracted values exceeded the recommended criteria, supporting both reliability and convergent validity. From the model, *Zakat* Literacy and Digital Literacy were found to positively influence QRIS Usefulness and QRIS Ease of Use. Furthermore, QRIS Usefulness and QRIS Ease of Use positively contributed to Customer Satisfaction, indicating that perceptions of QRIS usefulness and ease of use play important roles in enhancing user satisfaction.

Table 7. Result of Full Model Analysis Testing

Goodness of Fit Index	Cut-off Value	Result of this model	Model Evaluation
Chi-square (df = 162)	(< 192.700)	181.934	Good
Probability	≥ 0.05	0.135	Good
CMIN/DF	≤ 2.00	1.123	Good
AGFI	≥ 0.90	0.884	Marginal
GFI	≥ 0.90	0.910	Good
TLI	≥ 0.95	0.990	Good
CFI	≥ 0.95	0.992	Good
RMSEA	≤ 0.08	0.026	Good

Source: Processed Data (2025)

According to the results of the entire model, the probability value is 0.135, and the chi-square value is 181.934. That's what it implies. It demonstrates that the values have risen to the specified threshold. Among other evaluation criteria, the CMIN/DF is 1.123, the AGFI is 0.884, the GFI is 0.910, the TLI is 0.990, the CFI is 0.992, and the RMSEA is 0.026. With the exception of AGFI, which shows a marginal but acceptable result, all other criteria indicate good results; it can be claimed that the model has met the standards of comprehensive model testing.

Table 8. Regression Weights Full Model

Hypotheses			C.R	P	Note
QRIS_Usefulness	**<--- H1:**	Zakat_Literacy	2.002	.045	Sig
QRIS_Ease_of_Use	**<--- H2:**	Zakat_Literacy	3.357	.***	Sig
QRIS_Usefullness	**<--- H3:**	Digital_Literacy	2.041	.041	Sig
QRIS_Ease_of_Use	**<--- H4:**	Digital_Literacy	4.149	***	Sig
QRIS_Usefulness	**<--- H5:**	QRIS_Ease_of_Use	2.233	.026	Sig
Customer_Satisfaction	**<--- H6:**	QRIS_Usefulness	1.984	.047	Sig
Customer_Satisfaction	**<--- H7:**	QRIS_Ease_of_Use	2.397	.017	Sig

Source: Processed Data (2025)

The hypothesis testing results indicate that all proposed relationships in the model are statistically significant. The first hypothesis demonstrates that *zakat* Literacy positively affects QRIS Usefulness (p = 0.045), indicating that individuals with a better understanding of *zakat* concepts and digital payment mechanisms tend to perceive QRIS as more beneficial for conducting *zakat* transactions. This finding supports the study of Rohman and Ghoni (2025). In the context of digital financial services, users with adequate literacy are more likely to understand the practical advantages of QRIS, including transaction efficiency, transparency, and convenience when making Islamic social finance payments.

The second hypothesis confirms that *Zakat* Literacy positively influences QRIS Ease of Use (p < 0.05). This result suggests that respondents with stronger knowledge of *zakat* and digital financial practices tend to experience fewer difficulties when using QRIS technology. The findings are consistent with Zaeni, Mukhsin, and Abduh (2024). Users who are already familiar with Islamic financial obligations and digital payment systems generally exhibit greater technological confidence, which enhances their perceived ease of operating QRIS applications.

The third and fourth hypotheses reveal that Digital Literacy positively affects both QRIS Usefulness (p = 0.041) and QRIS Ease of Use (p < 0.001). These findings

support the Technology Acceptance Model (TAM) proposed by Venkatesh and Davis (2000) and are also in line with Akram, Ramzan Ali, and Kadirova (2023). Respondents with stronger digital competence, such as the ability to operate smartphones, access mobile applications, and understand online transaction procedures, are better able to adapt to QRIS technology. Higher digital literacy reduces technological anxiety and increases users' confidence in utilizing QRIS efficiently and effectively.

Furthermore, the fifth hypothesis shows that QRIS Ease of Use positively influences QRIS Usefulness ($p = 0.026$). This finding implies that when users perceive QRIS as simple and uncomplicated, they are more likely to recognize its practical benefits. The result is consistent with Fahrizal, Suherman, and Febrilia (2023). Ease of operation encourages continuous usage behavior because users can complete transactions quickly without requiring advanced technical knowledge.

The sixth and seventh hypotheses confirm that QRIS Usefulness ($p = 0.047$) and QRIS Ease of Use ($p = 0.017$) both positively affect Customer Satisfaction. These findings support previous studies by Keni (2020) and Fahrudi and Amalia (2021). Users tend to feel more satisfied when QRIS provides functional benefits, secure transactions, and an uncomplicated payment process. Satisfaction arises when the technology meets users' expectations for convenience, speed, and accessibility in digital financial transactions.

In addition, respondent characteristics may also explain the findings of this study. Demographic factors such as age, educational background, occupation, and level of technology exposure potentially influence QRIS adoption and customer satisfaction. Younger respondents and individuals with higher educational attainment generally possess greater familiarity with smartphones, mobile banking, and digital payment applications, leading to stronger perceptions of usefulness and ease of use. Conversely, older users or respondents with limited digital experience may require more time to adapt to QRIS technology and may perceive greater complexity in its usage. Similarly, respondents who frequently engage with digital platforms in their daily activities are more likely to demonstrate higher digital competence and greater acceptance of QRIS services. Therefore, technological familiarity and digital capability play important roles in shaping perceptions toward QRIS adoption and overall customer satisfaction.

The hypothesis testing results indicate that all proposed relationships in the model are statistically significant. The first hypothesis is also consistent with the broader financial literacy literature, which suggests that individuals with higher financial knowledge are better able to evaluate the benefits of financial innovations and are more willing to adopt technology-based financial services. The second hypothesis confirms that users already familiar with Islamic financial obligations and digital payment systems generally exhibit higher technological confidence, which enhances their perceived ease of operating QRIS applications. The third and fourth hypotheses reveal that higher digital literacy reduces technological anxiety and increases users' confidence in utilizing QRIS efficiently and effectively. These findings are further supported by research on digital payment adoption, which indicates that digitally literate individuals are more likely to recognize the advantages of cashless payment systems and encounter fewer barriers when using technology. The fifth hypothesis

aligns with the original TAM framework, which posits that perceived ease of use directly influences perceived usefulness. The sixth and seventh hypotheses confirm that users tend to feel more satisfied when QRIS provides functional benefits, secure transactions, and an uncomplicated payment process. Satisfaction arises when the technology meets users' expectations for convenience, speed, and accessibility in digital financial transactions.

Conclusion

The study confirms that *zakat* literacy and digital literacy significantly influence the perceived usefulness and ease of use of QRIS-based *zakat* payments, thereby increasing customer satisfaction. These findings demonstrate that users who understand *zakat* principles and possess adequate digital skills are more likely to adopt QRIS technology effectively and confidently. The study's main contribution lies in integrating *zakat* literacy and digital literacy into the Technology Acceptance Model (TAM) framework within the context of Islamic social finance, particularly QRIS-based *zakat* payments. This integration shows that both religious understanding and technological competence are essential factors in encouraging digital *zakat* adoption.

The findings also highlight the strategic role of QRIS in improving the effectiveness of zakat institutions such as LAZIS. User-friendly and useful QRIS systems simplify *zakat* transactions, improve transparency and accessibility, and strengthen customer satisfaction. As a result, LAZIS can optimize fundraising processes, expand donor participation, and improve the efficiency of *zakat* distribution to support community welfare.

Several practical implications emerge from this study. First, LAZIS should strengthen educational programs related to digital *zakat* payments through social media campaigns, community outreach, and digital literacy training. LAZIS should also improve the usability of QRIS services by providing simpler interfaces, clear transaction guidance, and responsive customer support. Second, policymakers should encourage digital Islamic financial inclusion through supportive regulations, improved digital infrastructure, and collaborations between financial institutions, fintech companies, and *zakat* organizations. Third, digital payment providers should continuously enhance QRIS security, ease of use, and interoperability across banking and fintech platforms to increase public trust and adoption.

Future studies are recommended to employ longitudinal approaches to examine changes in literacy, technology adoption, and customer satisfaction over time. Further research may also investigate demographic influences such as age, education, and socioeconomic status, and evaluate alternative digital *zakat* payment technologies beyond QRIS, including their impact on measurable community welfare outcomes.

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