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Bridging Faith and Technology: How Digital Financial Tools Strengthen MSME Financial Transparency Through Islamic Values in Pontianak, Indonesia

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Abstract

Objective & object: This study explores how digital financial tools support financial transparency among Micro, Small, and Medium Enterprises (MSMEs) while being guided by Islamic values in Pontianak, Indonesia.
Methods: Using an exploratory qualitative design, semi-structured interviews were conducted with six MSME owners from different business sectors. The interviews captured experiences of adopting digital financial management (from spreadsheets to integrated applications) and applying Islamic values such as honesty, trustworthiness, justice, and avoidance of *riba*. Data were analyzed using thematic analysis to identify recurring patterns and constraints.
Results & Conclusions: All informants had adopted digital tools for recording and reporting, and the level of tool sophistication generally increased with business scale. Digitalization was perceived to strengthen transparency through more systematic records, faster reporting, and improved accountability. Islamic values acted as an internal control that shaped decisions and reinforced transparency; several owners described prioritizing Sharia compliance even when it reduced potential profits. Key challenges included limited digital literacy, relatively high costs of adoption, concerns about data security, and limited availability of clearly Sharia-compliant digital solutions.
Limitations: The study relies on six MSMEs in one setting; thus, the findings are context-specific and not intended for statistical generalization.
Implications: The results highlight the need for supportive policies and capacity-building, particularly affordable digital platforms aligned with Islamic principles and practical training that integrates faith-based ethics with digital financial skills. Future research may expand informant diversity and examine specific design features of Sharia-compliant digital tools that best enable transparency.

Keywords: Digital transformation, financial transparency, Islamic values, MSME, Sharia compliance.

Abstrak

Tujuan & Objektif: Studi ini mengeksplorasi bagaimana alat keuangan digital mendukung transparansi keuangan di antara Usaha Mikro, Kecil, dan Menengah (UMKM) dengan berpedoman pada nilai-nilai Islam di Pontianak, Indonesia.

Metode: Dengan menggunakan desain kualitatif eksploratif, wawancara semi-terstruktur dilakukan dengan enam pemilik UMKM dari berbagai sektor bisnis. Wawancara tersebut menangkap pengalaman dalam mengadopsi manajemen keuangan digital (dari spreadsheet hingga aplikasi terintegrasi) dan menerapkan nilai-nilai Islam seperti kejujuran, kepercayaan, keadilan, dan menghindari riba. Data dianalisis menggunakan analisis tematik untuk mengidentifikasi pola dan kendala yang berulang.

Hasil & Kesimpulan: Semua informan telah mengadopsi alat digital untuk pencatatan dan pelaporan, dan tingkat kecanggihan alat umumnya meningkat seiring dengan skala bisnis. Digitalisasi dianggap memperkuat transparansi melalui pencatatan yang lebih sistematis, pelaporan yang lebih cepat, dan peningkatan akuntabilitas. Nilai-nilai Islam bertindak sebagai kontrol internal yang membentuk keputusan dan memperkuat transparansi; beberapa pemilik menggambarkan memprioritaskan kepatuhan Syariah bahkan ketika hal itu mengurangi potensi keuntungan. Tantangan utama meliputi literasi digital yang terbatas, biaya adopsi yang relatif tinggi, kekhawatiran tentang keamanan data, dan ketersediaan solusi digital yang jelas sesuai dengan Syariah yang terbatas.

Keterbatasan: Studi ini bergantung pada enam UMKM di satu lokasi; oleh karena itu, temuan bersifat spesifik konteks dan tidak dimaksudkan untuk generalisasi statistik.

Implikasi: Hasil penelitian menyoroti perlunya kebijakan pendukung dan peningkatan kapasitas, khususnya platform digital yang terjangkau dan selaras dengan prinsip-prinsip Islam serta pelatihan praktis yang mengintegrasikan etika berbasis agama dengan keterampilan keuangan digital. Penelitian selanjutnya dapat memperluas keragaman informan dan meneliti fitur desain spesifik dari alat digital yang sesuai dengan Syariah yang paling memungkinkan transparansi.

Kata kunci: Transformasi digital, transparansi keuangan, nilai-nilai Islam, UMKM, kepatuhan Syariah.

1. Introduction

The rapid advancement of digital technology has fundamentally reshaped financial management practices and the broader business landscape, creating new opportunities for Micro, Small, and Medium Enterprises (MSMEs) to improve the quality, speed, and accessibility of their financial information. In Indonesia, this transformation is increasingly relevant because MSMEs operate in dynamic markets while often facing internal constraints in documentation, reporting, and managerial decision-making. Within the context of Islamic economics, digital transformation is not merely a technical shift, but also a normative opportunity to align modern financial tools with Sharia principles that emphasize accountability, fairness, and responsible business conduct (Kurniawan & Nisa, 2024; Qalbia & Saputra, 2024).

Recent scholarship highlights that digital-based entrepreneurship can expand market access and enhance transaction transparency in Islamic economic ecosystems, while Sharia fintech development is expected to strengthen the halal industry and improve access to Sharia-compliant financial services (Qalbia & Saputra, 2024; Dewi & Adinugraha, 2023). However, the practical adoption of digital tools among MSMEs often varies substantially, and a significant portion of business actors still depend on manual or semi-manual recording practices. Such reliance may reduce efficiency and increase the risk of errors, weakening the credibility of financial information used for internal evaluation and external accountability (Safitri, 2024). This challenge becomes more consequential when digital adoption is hindered by limited digital financial literacy, cost barriers, and uncertainties around technology governance and data security (Qalbia & Saputra, 2024; Mariska, 2024). Empirical evidence also suggests that fintech adoption among Indonesian SMEs is strongly shaped by trust, perceived usefulness, and enabling conditions, indicating that technology benefits do not automatically materialize without capability building and institutional support (Nugraha et al., 2022).

In Islamic finance, transparency carries a broader ethical and spiritual meaning compared to conventional reporting systems. Islamic accountability is grounded in values such as honesty (*shidq*), trustworthiness (*amanah*), justice, and transparency, which are consistently emphasized in Islamic teachings (Azwar, 2023). Islamic accounting further operationalizes these values by positioning financial reporting as a mechanism to ensure Sharia compliance, fairness, and social responsibility in organizational practice (Ulfitri & Firdaus, 2024). The emphasis on careful documentation is also strongly reflected in Qur'anic guidance on recording financial transactions, which has been discussed in Islamic accounting literature as a foundation for disciplined and transparent record-keeping (Syukriyana et al., 2021). From a market perspective, transparency is also widely recognized as essential for strengthening stakeholder confidence in Islamic finance environments (Sekreter, 2013).

Despite the promising role of digital tools in improving reporting speed, traceability, and information quality, research remains limited in explaining *how* MSMEs can translate Islamic transparency principles into concrete digital financial management practices. Existing studies tend to focus on adoption, inclusion, or performance outcomes rather than the operational mechanisms that connect technology features (e.g., automated recording, audit trails, real-time reporting) with Islamic norms of accountability and fairness (Anggara & Nuraeni, 2025; Menne et al., 2022). Meanwhile, broader digital transformation literature increasingly links digitalization with improvements in accounting information quality and transparency, suggesting the importance of examining governance, organizational readiness, and contextual constraints in shaping transparency outcomes (Alassuli et al., 2025). This gap is particularly important for MSMEs because they often require practical, low-cost solutions that remain consistent with Sharia compliance expectations.

The importance of transparency in Islamic finance has been recognized as crucial for strengthening client confidence in Islamic finance markets (Sekreter, 2013). However, in MSME practice, transparency is often challenged by the continued reliance on manual recording, uneven digital capability, and the lack of clearly Sharia-compliant digital infrastructures that can support both efficiency and compliance (Safitri, 2024; Mariska, 2024). At the same time, studies that emphasize the role of Sharia *fintech* in fostering inclusion and sustainable entrepreneurship (Anggara & Nuraeni, 2025) and improving SME performance (Menne et al., 2022) tend to focus on outcomes, while providing less explanation of the mechanisms through which digital tools can operationalize Islamic transparency principles (e.g., honesty, trustworthiness, justice, and accountability) in everyday MSME financial management (Azwar, 2023; Ulfitri & Firdaus, 2024). This is particularly relevant because the complexity of Sharia regulations and low levels of digital financial literacy can prevent MSMEs from translating Islamic ethical commitments into structured, consistent, and verifiable reporting routines (Qalbia & Saputra, 2024).

Accordingly, this study positions the intersection of technology adoption and Sharia-based accountability as a critical area that remains underexplored: how MSMEs can implement digital financial solutions that strengthen transparency while maintaining full adherence to Islamic values. By focusing on this implementation pathway, the study aims to bridge technological capabilities and Islamic financial principles and to provide practical insights for MSMEs and stakeholders seeking Sharia-compliant digital transparency solutions (Kurniawan & Nisa, 2024; Dewi & Adinugraha, 2023).

The objectives of this research are to: (1) analyze the current state of financial transparency practices among SMEs in the context of Islamic values; (2) examine how digital technologies can be integrated with Islamic principles to enhance financial transparency; (3) develop a conceptual framework for implementing Sharia-compliant digital transparency solutions in SME financial management; and (4) assess the potential impact of such implementations on SME sustainability and stakeholder trust within the Islamic economic ecosystem.

2. Literature Review

2.1. Digital technology in Islamic finance: permissibility, maslahah, and governance

The integration of digital technology into Islamic finance has accelerated scholarly and industry attention because it simultaneously expands service reach and raises new Sharia governance questions. Laldin & Djafri (2019) argue that financial innovation is generally permissible and may be considered beneficial (*maslahah*) unless it clearly contradicts core Sharia rules. This positioning is important because it frames digital innovation not as an “external” disruption, but as a tool whose permissibility depends on how it is designed, governed, and used.

Within this landscape, *fintech* development offers efficiency and accessibility gains, particularly where conventional access is limited (Mariska, 2024). Digital transformation in Islamic finance also extends beyond payment or financing applications to broader technologies such as *blockchain* and *artificial intelligence*, which can change verification, automation, and risk management practices (Sudarmanto et al., 2024). However, the literature also signals that digital transformation benefits depend on Sharia governance capacity, regulatory clarity, and ethical safeguards, not merely on technology availability. This aligns with broader Islamic *fintech* mapping studies, which show the field has developed multiple thematic streams (e.g., governance, adoption, and ecosystem design) rather than a single dominant trajectory (Alshater et al., 2022).

2.2. Sharia fintech and MSME development: inclusion, sustainability, and performance pathways

A large portion of the literature evaluates Sharia *fintech* through MSME development outcomes. Menne et al. (2022) provide evidence that Sharia *fintech* usage alongside internal capabilities such as human resource capacity and business diversification relates to MSME performance and sustainability. Similarly, Syarifuddin et al. (2021) emphasize that Sharia *fintech* can widen financing access by enabling cooperation with Islamic banks and Sharia cooperatives, including outreach to more remote MSME segments. Anggara & Nuraeni (2025) broaden the argument by positioning Sharia *FinTech* as an enabler of financial inclusion and sustainable entrepreneurship, linking it to SDG-oriented narratives and ESG considerations.

While these studies establish *why* Sharia *fintech* matters for MSMEs, they often treat "transparency" as an assumed byproduct of digitalization, rather than unpacking transparency as a process. In other words, MSME outcomes (inclusion, sustainability, performance) are frequently foregrounded, while the operational mechanisms that produce trustworthy financial information (recording discipline, traceability, reporting routines) receive less explicit attention especially in a Sharia-value context.

2.3. Digital transformation constraints in Islamic MSME ecosystems: capability, regulation, and adoption frictions

Digital transformation research also consistently highlights adoption frictions. Qalbia & Saputra (2024) identify barriers such as low digital financial literacy and the complexity of Sharia regulations, implying that technology adoption is partly an institutional and capability issue rather than purely an individual choice. Safitri (2024) similarly notes that many MSMEs still rely on manual recording, leading to efficiency and accuracy problems, and stresses constraints such as limited technological literacy and weak supporting regulation. Kurniawan & Nisa (2024) further suggest that the positive impacts of Islamic *fintech*, *blockchain*, and Islamic crowdfunding depend on ecosystem readiness and collaboration, implying that inclusion and efficiency gains require more than tool availability.

A key implication from this stream is that Sharia-based digital transformation must be evaluated as a socio-technical process: MSMEs may face cost constraints, uneven digital competence, and uncertainty about what "Sharia-compliant technology" concretely looks like in daily bookkeeping and reporting practices (Mariska, 2024; Qalbia & Saputra, 2024; Safitri, 2024).

2.4. Islamic principles as the normative foundation of transparency and accountability

In Islamic finance, transparency is inseparable from accountability as a moral and religious obligation. Azwar (2023) emphasizes that accountability in Islamic transactions encompasses honesty, trustworthiness, justice, and transparency grounded in Qur'an and Hadith. Ulfitri & Firdaus (2024) position Islamic accounting as a Sharia-based system that does not merely report performance but also ensures that operations remain consistent with Islamic principles and social responsibility. Sekreter (2013) adds that transparency is crucial for strengthening confidence in Islamic financial markets, suggesting that trust formation is tied to the visibility and credibility of information, not only to compliance claims.

This stream clarifies an important theoretical point for your study: "financial transparency" in an Islamic MSME context should be conceptualized as both (1) the availability and clarity of financial information and (2) the alignment of the underlying financial practices with Sharia norms (e.g., avoiding *riba* and ensuring fairness).

2.5. Financial inclusion and empowerment via digital Islamic economy: from access to accountable practice

Digital Islamic economy studies underline inclusion and empowerment potentials. Dewi & Adinugraha (2023) highlight that Sharia *fintech* can improve halal financial inclusion by enabling MSMEs to access Islamic financial services more conveniently. Yulia et al. (2024) similarly argue that Sharia-based *fintech* contributes to empowerment and participation in the digital economy, particularly among groups often emphasized in inclusion agendas. Nur'aeni (2024) frames Sharia *fintech* in microfinance as a transparent access channel based on risk-sharing principles, supporting competitiveness and empowerment.

Despite these contributions, the inclusion-focused literature still leaves room to clarify the pathway from "access to services" to "accountable transparency practices." Access alone does not guarantee disciplined recording, consistent reporting, or the internal controls needed to prevent manipulation and error. This is where Islamic governance framing becomes essential. Widjaja (2024), for example, argues that aligning *fintech* regulation with *Maqasid al-Shariah* requires Sharia supervision, data protection, and transparency policies elements that can be translated into practical expectations for digital bookkeeping and reporting in MSMEs.

2.6. Synthesis: why transparency mechanisms in Sharia-compliant MSME digitalization remain underexplored

Overall, existing studies strongly support the importance of Sharia *fintech* for MSME inclusion and sustainability (Anggara & Nuraeni, 2025; Menne et al., 2022; Syarifuddin et al., 2021) and identify persistent adoption barriers (Qalbia & Saputra, 2024; Safitri, 2024). The literature also provides a clear normative basis for Islamic transparency and accountability (Azwar, 2023; Sekreter, 2013; Ulfitri & Firdaus, 2024) and governance principles such as *Maqasid al-Shariah* alignment (Widjaja, 2024). Yet, comparatively fewer studies explain *how* MSMEs operationalize those Islamic transparency norms through everyday digital financial management routines especially in practical, low-cost settings where MSMEs often combine spreadsheets, apps, and informal controls. This limitation is also consistent with broader Islamic *fintech* research mapping that calls for deeper work on mechanisms and implementation pathways rather than adoption narratives alone (Alshater et al., 2022).

3. Research Method

3.1. Research design

This study adopts an exploratory qualitative approach to understand *how* digital financial tools are used to strengthen financial transparency among MSMEs while being guided by Islamic values. Qualitative inquiry is appropriate because the research focuses on meanings, lived experiences, and contextual processes rather than statistical generalization (Creswell & Poth, 2016). In line with the study objective, the primary technique used is *in-depth semi-structured interviews*, allowing participants to explain their practices, rationales, and ethical considerations in detail (Kvale & Brinkmann, 2009).

3.2. Research setting

The study was conducted in Pontianak City, West Kalimantan, Indonesia. Pontianak was selected because it represents an urban MSME ecosystem where digital tools are increasingly accessible, while Islamic business values remain salient in daily commercial decisions. The setting enables observation of the interaction between practical digital adoption and Sharia-based norms within a real MSME environment.

3.3. Participants and sampling strategy

Participants consisted of six (6) MSME owners selected using *purposive sampling*. This strategy is used when researchers intentionally select information-rich cases that are relevant to the research problem (Patton, 2014). The inclusion criteria were: (1) operating the business for at least two years, (2) directly involved in financial management decisions, and (3) having a basic understanding of Islamic business principles.

To strengthen variation in perspectives, the six MSMEs were selected from different sectors and levels of digital bookkeeping maturity (from spreadsheets to integrated applications). This variation helps capture a wider range of transparency practices and constraints across MSMEs (Patton, 2014).

Table 1. Profile of informants and digital financial tools (anonymized)

Code	Business sector	Main digital tools used for financial management	Digital maturity (indicative)
R1	Culinary	Excel spreadsheets	Basic

R2	Food & Beverage	Google Spreadsheet (multi-device)	Basic–Intermediate
R3	Automotive	Combination of apps and spreadsheets	Intermediate
R4	Transportation services	Digital applications (managed with family support)	Intermediate
R5	IT services	Spreadsheets, Kledo, and custom HTML-based recording	Intermediate–Advanced
R6	Reseller	Multiple apps (Excel, BukuWarung, Kasir Pintar)	Intermediate–Advanced

Source: Data processing

3.4. Data collection procedure

Data were collected through *semi-structured interviews* lasting approximately 60–90 minutes per informant.

The interview guide covered: (1) current financial recording and reporting practices, (2) perceived meaning and indicators of “financial transparency,” (3) adoption history and perceived usefulness of digital tools, (4) constraints (cost, literacy, security, organizational factors), and (5) the role of Islamic values (e.g., honesty, *amanah*, justice, prohibition of *riba*) in shaping financial decisions and transparency routines. The semi-structured format ensured comparability across informants while allowing probing questions to explore unique experiences (Kvale & Brinkmann, 2009).

3.5. Data analysis technique

The study employed *thematic analysis* to identify patterns of meaning across the interview dataset. The analysis followed the well-established steps proposed by Braun & Clarke (2006): (1) familiarization with data (listening/reading and memoing), (2) generating initial codes systematically, (3) searching for themes (grouping codes),(4) reviewing themes (coherence and boundaries), (5) defining and naming themes, and (6) producing the report with representative evidence.

This process was used to connect digital-tool adoption features (e.g., systematic records, reporting routines, traceability) with Islamic transparency values and accountability expectations.

3.6. Ensuring research quality and trustworthiness

To ensure *trustworthiness* in qualitative research, this study applied procedures aligned with the criteria of *credibility*, *transferability*, *dependability*, and *confirmability* (Lincoln & Guba, 1988). Credibility iterative questioning and probing during interviews; checking consistency of narratives across key topics. Transferability: providing thick description of the setting, informant sectors, and digital tool usage (Table 1) so readers can assess contextual relevance. Dependability: maintaining a clear documentation trail of interview guides, coding decisions, and theme development. Confirmability: using analytic memos and retaining evidence links between claims and coded excerpts to reduce researcher bias.

3.7. Ethical considerations

Ethical principles were applied throughout the study, including informed consent, confidentiality (anonymization using codes R1–R6), and respectful treatment of cultural and religious values during interviews.

4. Results and Discussion

4.1. Results

This section reports the empirical themes emerging from semi-structured interviews with six MSME owners in Pontianak, West Kalimantan. To protect confidentiality, respondents are referenced as R1-R6 and business identifiers are omitted. The results are organized into two parts: (i) descriptive profile of respondents and their digital financial practices, and (ii) cross-case themes on transparency and Islamic values.

Table 2. Profile of Respondents and Digital Financial Tools Used

Respondent	Sector	Established	Employees	Monthly turnover (approx.)	Digital tools used for finance
R1	Culinary	Not disclosed	Not disclosed	Varies across sample (< IDR 10m - 500m)	Excel (basic)
R2	Food & beverage	2014	1-2	< IDR 10m	Google Spreadsheet (multi-device, automated formulas)
R3	Automotive	Not disclosed	Not disclosed	Not disclosed	Apps + spreadsheets (hybrid)
R4	Transportation services	Not disclosed	Not disclosed	Not disclosed	Digital application managed by family
R5	IT services	Not disclosed	Not disclosed	Not disclosed	Spreadsheets, Kledo, and custom HTML-based bookkeeping
R6	Reseller	Not disclosed	Not disclosed	Not disclosed	Excel, BukuWarung, and Kasir Pintar (multiple apps)

Source : Data processing

As shown in Table 2, respondents span diverse sectors and business scales. All respondents reported some level of digital adoption in financial management, from basic spreadsheets (e.g., Excel) to multi-application ecosystems and customized systems. The diversity of tools reflects both resource constraints and the perceived need for faster, more reliable bookkeeping to support decision making and stakeholder communication.

Theme 1. Financial transparency is understood as both internal discipline and external accountability

Respondents associated *financial transparency* with disciplined recording, separation of personal and business funds, and the ability to produce understandable reports for internal evaluation. For example, one respondent emphasized that transparency helps avoid the common MSME problem of mixing personal and business finances and enables periodic evaluation and decision making. Another respondent described transparency as a 'foundation' for sustainability, because it supports real-time monitoring of *cash flow*, profitability, and operational health. (Interview, R2).

Beyond internal control, several respondents positioned transparency as a mechanism for building credibility with external stakeholders such as partners, banks, and investors. A respondent recounted that disorganized records delayed a financing application and raised doubts about administrative readiness, which later motivated the respondent to reform bookkeeping and prepare regular monthly reports. (Interview, R3).

Theme 2. Digital tools strengthen transparency through automation, real-time visibility, and traceability

Digital tools were perceived to improve efficiency, reduce manual errors, and make periodic evaluation easier. One respondent explained that digitalization made business management more efficient and minimized manual mistakes. In practice, spreadsheet-based systems were valued for flexibility and low cost, while integrated applications were valued for convenience, structured reporting, and easier sharing of financial information within small teams and families. (Interview, R5).

Across cases, respondents repeatedly linked digitalization with better accountability because records can be reviewed, summarized, and shared more systematically than in purely manual systems. However, respondents also acknowledged that benefits depend on consistent data entry and basic digital literacy, which become new requirements in the digital workflow.

Theme 3. Islamic values provide the ethical 'why' of transparency, shaping what is recorded and what is refused

Islamic values were not only described as abstract norms, but also as operational criteria guiding everyday financial decisions. Respondents frequently referred to *shidq* (honesty) and *amanah* (trustworthiness), the prohibition of *riba*, and commitments to *halal* transactions and fairness. One respondent explicitly connected truthful recording with Islamic ethics, noting that every inflow and outflow should be recorded honestly and transparently as part of Islamic business conduct. (Interview, R1-R6).

Respondents also articulated broader Islamic principles such as avoiding *gharar*, recognizing wealth as a trust under *tawhid*, and fulfilling social obligations such as *zakat* and *infaq*. (Interview, R4).

Theme 4. 'Profit versus compliance' dilemmas surface most clearly when products, partners, or practices are ethically ambiguous

Three respondents reported dilemmas where financially attractive opportunities were rejected to avoid non-compliant practices (e.g., questionable product legality/halal status, piracy, or partnerships perceived as inconsistent with Sharia). These dilemmas illustrate that transparency is not only informational, but also moral: the same digital systems that support reporting also make the consequences of decisions more visible and measurable.

Theme 5. The main constraints are capability, costs, and the scarcity of Sharia-compliant digital solutions

Respondents mentioned limited digital literacy, perceived high costs of adopting advanced tools, and concerns about data security as barriers. In addition, respondents highlighted the lack of Sharia-compliant digital platforms that can simultaneously support modern bookkeeping and Islamic requirements.

In terms of future needs, one respondent suggested developing an 'i-halal' application that could help both consumers and MSMEs access halal products and facilitate halal certification processes, alongside training for transparent Sharia-based bookkeeping. (Interview, R6).

Table 3. Summary of Themes on Digital Financial Transparency and Islamic Values

Theme	How it appears in practice	Illustrative respondents
Transparency as discipline & accountability	Separate business/personal cash; periodic summaries; documentation for partners/banks.	R2, R3
Digital tools as transparency infrastructure	Automation, real-time visibility, easier sharing and verification.	R1, R5, R6
Islamic values as ethical frame	Honesty (shidq), trust (amanah), avoiding riba and gharar, halal orientation.	R1-R6
Profit vs compliance dilemmas	Rejecting high-profit options that are legally/ethically doubtful or non-halal.	R1, R4, R6
Constraints & expectations	Digital literacy, cost, data security; demand for Sharia-compliant tools and training.	R5, R6

Source : Data processing

4.2. Discussion

The findings reinforce the view that digitalization can act as an infrastructure for transparency, but transparency itself is socio-technical: it depends on users' capabilities, routines, and the ethical commitments that define what counts as 'proper' reporting. In Islamic economic settings, transparency functions not only as a governance tool but also as a religiously grounded obligation tied to *amanah* and accountability to God and society (Azwar, 2023; Sekreter, 2013).

First, the study clarifies the *mechanism* linking digital technology to transparency in MSMEs: automation and real-time visibility reduce recording frictions, while traceability makes transactions easier to verify and review. This mechanism is consistent with prior evidence that digital tools can improve MSME reporting quality and stakeholder trust (Komala & Firdaus, 2023; Safitri, 2024), and with international accounting information systems research showing how cloud-based client accounting reshapes reporting processes and inter-organizational information flows (Ma et al., 2021).

Second, adoption sophistication appears to scale with business complexity and resource capacity. This pattern supports the argument that human resource capacity and business diversification shape financial outcomes and the ability to implement more structured systems (Menne et al., 2022). In the wider digital transformation literature, digitalization has been linked to improvements in accounting information quality and governance-related transparency, although such effects are contingent on organizational readiness and environmental conditions (Alassuli et al., 2025).

Third, integrating Islamic values with digital transparency adds an important normative layer. Respondents' emphasis on *shidq*, *amanah*, justice, and the prohibition of *riba* aligns with Islamic accounting perspectives that frame reporting as both informational and ethical, oriented toward fairness and social responsibility (Ulfitri & Firdaus, 2024; Hasanah, 2024). These themes also resonate with broader Sharia governance discussions that view transparency as essential to trust and informed stakeholder decision making (Sekreter, 2013).

Fourth, the 'profit versus compliance' dilemmas highlight why transparency should not be reduced to disclosure alone. Digital tools may increase visibility, but Sharia consistency depends on value-based decision rules, which can constrain profit-maximizing choices. This supports arguments that Sharia-compliant fintech and regulation should embed *maqasid al-shariah* considerations, including protection of wealth and ethical safeguards (Widjaja, 2024; Polas et al., 2025).

Finally, respondents' calls for Sharia-compliant, affordable tools and faith-based training point to a practical gap: digital infrastructure is expanding faster than MSME capability development. Prior studies suggest that Islamic fintech can widen inclusion and access to financing, but implementation requires aligned governance, literacy, and usable products (Dewi & Adinugraha, 2023; Yulia et al., 2024; Nur'aeni, 2024; Anggara & Nuraeni, 2025).

From a qualitative rigor standpoint, the structured coding and cross-case theme consolidation employed in this study follow established thematic analysis guidance (Braun & Clarke, 2006) and can be strengthened in future work via more explicit documentation of trustworthiness strategies such as thick description, peer debriefing, and audit trails (Nowell et al., 2017; Ahmed, 2024).

5. Conclusion

This study shows that digital technology meaningfully strengthens MSME financial transparency when it is used not only as a bookkeeping tool, but also as a control mechanism that supports *amanah* (trustworthiness), *shidq* (honesty), justice, and the avoidance of *riba* and other non-compliant practices. Across the six MSMEs, digital adoption ranged from basic spreadsheets to multi-application ecosystems, and the practical benefits were consistently reported as more orderly records, faster reporting, improved traceability of transactions, and stronger accountability toward key stakeholders.

Key conclusions are, digital tools improve transparency through operational mechanisms (automation, real-time summaries, and audit trails), reducing manual error and making it easier for owners to monitor cash flow and justify transactions. Islamic values actively shape technology and business decisions, including the willingness of several respondents to forego profitable opportunities to preserve Sharia compliance, reflecting a value-driven approach to sustainability. The main barriers are both technical and Sharia-related: limited digital literacy, cost and security concerns, and the scarcity of accessible Sharia-compliant platforms that embed compliance features into day-to-day workflows. Support ecosystems matter: respondents' expectations converge on capacity building (faith-based digital and financial literacy), affordable tools, and improved access to Islamic financing, supported by clearer enabling regulations and multi-stakeholder collaboration.

Recommendations focus on practical implementation. For MSMEs: adopt a stepwise pathway (spreadsheet standardization → integrated bookkeeping apps → features for audit trail, access control, and compliance checks) while formalizing internal rules for documentation, approvals, and periodic reviews aligned with Sharia principles. For policymakers and Islamic finance stakeholders: prioritize low-cost Sharia-compliant bookkeeping solutions, targeted training, incentives/subsidies for adoption, and partnerships between fintech developers, Islamic financial institutions, and Sharia scholars to design usable compliance-by-design features.

The findings are based on a small qualitative sample (six MSMEs) in a specific context, and rely primarily on owner self-reports; therefore, the results are not intended for broad statistical generalization. Future studies should (1) expand samples and include multiple stakeholder views (employees, customers, regulators), (2) use mixed-method or longitudinal designs to test whether digital transparency improvements persist and translate into measurable performance outcomes, and (3) develop and evaluate practical compliance frameworks or prototypes (e.g., automated Sharia compliance notifications, Sharia audit modules, and integration with Islamic financing platforms).

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