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Digital Payment Integration in Accounting Information Systems to Support MSMEs Revitalization in Bali: A Literature Review

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ABSTRACT

MSMEs are a cornerstone of Bali's economy, relying heavily on local cultural strengths and tourism as the main attraction. The decline in tourist numbers due to the pandemic has necessitated adaptive revitalization strategies aligned with technological developments, including the digitalization of payments. Previous literature indicates that QRIS (Quick Response Code Indonesian Standard) can enhance transaction efficiency and MSME revenue; however, few studies have explored integrating these transaction data into Accounting Information Systems (AIS) to support strategic decision-making within the context of Balinese culture.This study employs a systematic literature review (SLR) to identify findings, gaps, and development opportunities from relevant studies published over the last five years. The analysis shows that integrating QRIS with AIS can produce accurate, real-time, and transparent financial data flows, facilitating reporting, cost control, and business planning. Such integration also has the potential to optimize the competitiveness of Bali's tourism-based MSMEs by considering cultural factors, such as the Tri Hita Karana values and the banjar social structure, which influence technology adoption. The study concludes that successful implementation requires supporting infrastructure, digital literacy, and policies aligned with the local socio-cultural context.

1. INTRODUCTION

MSMEs have become a key pillar of the economy, driving economic activity in Indonesia, particularly in Bali, which leverages its authentic culture as a major attraction for tourists. The decline in tourist visits during the pandemic has highlighted the urgent need to revitalize MSMEs in Bali to maintain regional social and economic stability. MSME revitalization aims to develop businesses so they can compete on a broader scale. Technological advances have significantly transformed payment systems in MSME business transactions. The digitalization of payments using QRIS has grown rapidly and become an essential option for supporting MSME transactions in the post-pandemic period (Permana & Aryowiloto, 2024). Data on QRIS usage by business actors in Bali Province in 2024 showed an increase of 15.25% compared to the previous year (Antara News, 2025). However, in practice, this adoption has primarily focused on technical aspects and has not been fully integrated into Accounting Information Systems.

Accounting Information Systems (AIS) play a strategic role in recording transactions and preparing financial statements accurately and systematically for MSMEs. In practice, the implementation of digital-based AIS has been proven to enhance operational efficiency and support business decision-making (Irhamuddin et al., 2025). AIS can improve recording accuracy and accelerate the reporting process. The integration of digital payments with AIS can assist MSMEs in identifying sales trends, managing cash flow, and planning other strategic initiatives. The limited research linking AIS usage with digital payment data integration in Bali's MSMEs makes this study particularly relevant. Moreover, no literature to date has specifically examined the connection between digital transactions and AIS within the context of Bali's cultural and tourism dynamics.

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Bali is one of the provinces in Indonesia with distinctive and unique cultural and traditional wealth, such as the banjar social system, religious ceremonies, and communal values, which influence local economic interactions. Cultural dimensions affect MSMEs' preferences for cash transactions and personal interactions, resulting in lower adoption of digital technologies. Previous studies have indicated that organizational culture and digital literacy are among the factors influencing the readiness of MSMEs in Bali for digital transformation (Suasih et al., 2022). Suasih et al. (2022) also stated that technology trust and acceptance in Bali are heavily shaped by local norms and public opinion. This implies that rigid cultural practices and limited human resource literacy may hinder the growth of digital MSMEs in Bali. Cultural dimensions are particularly critical for the older generation, who tend to be more resistant to technological developments.

Previous studies have highlighted the benefits of digital payments in increasing revenue and expanding market access for MSMEs by facilitating transactions, saving time, and enhancing consumer trust (Devi & Purbadharmaja, 2022). However, these studies primarily focused on financial aspects, overlooking the strategic potential of integrating transaction data into Accounting Information Systems (AIS). When processed, such data can be transformed into accurate, relevant, and timely accounting information that serves as a foundation for business decision-making. The integration of digital payments with AIS not only enables more systematic record-keeping but also provides MSMEs with opportunities to comprehensively analyze performance, predict market trends, and design business development strategies that are more adaptive to dynamic markets and the local cultural context in Bali.

The role of digital payment systems in supporting MSME revitalization has been highlighted in previous studies, such as (Handayani & Soeparan 2022), which indicate that digital payment systems provide convenience, speed, and security in transactions, thereby improving cash flow and expanding market reach. The same study also noted that digital payment systems facilitate the MSME revitalization process due to these advantages compared to cash payments. These benefits can contribute significantly to revitalization efforts, particularly in the local tourism sector, which requires flexibility in serving customers. However, the study was limited to transaction acceleration and did not elaborate on a systematic accounting framework. Digital payment systems should not only be evaluated based on transaction speed but also on how effectively transactions can be managed, processed, and integrated into an Accounting Information System (AIS) to produce accurate and accountable information. Without such integration, the benefits of digital payments may be short-term and carry the risk of recording errors or data manipulation.

This study systematically examines the integration of digital payments, Accounting Information Systems (AIS), and cultural dimensions in Bali to support MSME revitalization. The novelty of this research lies in the combination of three aspects: digital payments, AIS adoption, and strategic decision-making linked to the local cultural context in Bali. The study aims to illustrate the integration of QRIS digital payments with AIS and how these aspects can support MSME revitalization in Bali. The resulting conceptual model can provide both academic and practical contributions in designing policies, training programs, and accounting systems that are responsive to local cultural and tourism characteristics. This research not only bridges theoretical gaps but also offers contributions that can enhance the sustainability and competitiveness of Bali's MSMEs in the digital era.

2. LITERATURE REVIEW

Previous studies (Titasari, 2023) have outlined the benefits of digital payments in enhancing transaction efficiency and expanding market access for MSMEs in Indonesia. However, these studies primarily focused on technical aspects and technology adoption behavior, without addressing the integration of digital payments into an adequate Accounting Information System (AIS). In fact, such integration is crucial to ensure financial data accuracy, transparency, and compliance with reporting standards. Previous research (Irianto & Chanvarasuth, 2025;

Sapriyadi et al., 2023) has also insufficiently examined the role of payment digitalization in supporting culture- and tourism-based MSMEs, despite the unique characteristics of business processes in this context. Furthermore, there is a gap in the literature regarding how digital transaction data can be leveraged for strategic planning and data-driven decision-making. These conditions indicate a research opportunity to integrate technological, accounting, and cultural dimensions within the framework of MSME revitalization in Bali. Accordingly, this study aims to address the literature gap by connecting the technical aspects of digital payments with accounting information systems and the local cultural context.

The novelty of this study lies in its approach, which integrates the concepts of digital payments, Accounting Information Systems (AIS), and cultural dimensions within the context of MSME revitalization in Bali. Unlike previous research that tended to treat technology and accounting separately, this study examines the direct integration of digital payment data into AIS designed to support financial reporting and business analysis. This approach enables the real-time utilization of data for strategic decision-making, which is particularly relevant for MSMEs in Bali that largely rely on the tourism sector.

The study also positions local culture as a contextual factor, ensuring that digital payment implementation strategies are not only technical but also adaptive to the values and practices of Balinese society. Using a comprehensive literature review method, this research outlines an integration framework that has been scarcely addressed in Indonesian literature. This approach has the potential to enrich academic discourse on culturally grounded MSME digitalization while providing practical contributions for policy development and business strategy. Integrating these three aspects is also expected to enhance the competitiveness of Bali's MSMEs in facing post-pandemic global competition. Therefore, this study not only fills existing gaps but also offers new perspectives that can be applied in other regions with similar characteristics.

3. METHOD

This study employs a qualitative method using a systematic literature review (SLR) approach to analyze, synthesize, and identify findings from various studies related to the integration of digital payments, Accounting Information Systems (AIS), and cultural dimensions in the context of MSME revitalization in Bali. The SLR method was chosen because it allows researchers to systematically, transparently, and replicably examine previous research findings (Snyder, 2019). This approach is also appropriate given the multidisciplinary nature of the topic, encompassing accounting information systems, financial technology, and culture-based MSME management. The literature review process was conducted through three main stages: planning, execution, and reporting of the review results.

The first stage involved identifying relevant literature by establishing inclusion and exclusion criteria. Inclusion criteria comprised publications from the last five years (2019–2024), articles indexed in reputable databases such as Scopus, Web of Science, and Sinta, and studies relevant to the keywords digital payment, accounting information system, MSMEs, Bali, and cultural-based business. Exclusion criteria were applied to eliminate studies that were not related to system integration or that focused solely on technical aspects without linking them to accounting information systems. The initial search yielded 112 articles, which were then screened based on titles and abstracts, resulting in 48 articles. Further selection produced 17 articles that met the criteria and were analyzed in depth.

The second stage involved analyzing the collected literature using content analysis techniques to identify key themes, patterns, and research gaps. The analysis was conducted through coding of research findings, both manually and with the assistance of qualitative analysis software such as NVivo (Bengtsson, 2016). The collected data were interpreted descriptively to establish the relationships between digital payments, accounting information systems, and local cultural dimensions. The third stage involved synthesizing the findings by integrating the analysis results into a conceptual model that illustrates the role of digital payments in strengthening culture-based MSME accounting information systems. The outcomes emphasize the theoretical, practical, and policy contributions of the study. Using this method, the research is expected to provide a robust scientific foundation for developing MSME revitalization strategies in Bali that are adaptive to technological advancements while remaining rooted in local cultural values.

4. DISCUSSION

4.1. Digital Payment Ecosystem for MSMEs in Bali

The use of digital payments in Bali, including QRIS, has grown rapidly in the post-pandemic period, marked by an increasing number of merchants in Denpasar and Badung, as well as expansion into traditional markets. In other regencies, QRIS adoption has not shown significant growth. QRIS has proven to shorten payment processes and reduce cash-related risks, although challenges remain in digital literacy, socialization, and device costs, which burden some MSME operators (Juliandini et al., 2023). Previous studies examining MSME perceptions indicate that perceived benefits, ease of use, and risk perception positively influence the intention to adopt QRIS. This suggests that MSME adoption of QRIS continues to rise despite obstacles such as limited digital literacy, cash-preferred vendors, and technical issues.

The growing demand for QRIS usage among consumers also encourages MSMEs to take initial digital steps, particularly through payment systems. As the government promotes QRIS as a cashless payment alternative that simplifies transactions for consumers due to its speed, MSMEs are likewise motivated to monitor their business performance more efficiently. The use of QRIS positively impacts MSMEs because it aligns with increased revenue (Wardani & Darmawan, 2020). This condition strengthens the transactional scale of tourism and creative MSMEs in Bali.

4.2. Accounting Information Systems (AIS) in Supporting MSME Revitalization

Accounting Information Systems (AIS) do not merely serve as a recording tool but also function as a system linking business sales with reporting and decision-making processes. Previous studies have indicated that AIS quality, financial inclusion, and cost control positively and significantly affect financial performance, suggesting that AIS can enhance the performance of MSMEs in Buleleng District (Dayanthi & Sujana, 2024). In the context of Bali's tourism sector, the implementation of AIS contributes significantly to improved recording accuracy, fraud prevention, and provision of real-time information for decision-making (Putri et al., 2025). Fraud and recording errors by staff can be minimized through AIS adoption.

Therefore, strengthening AIS adoption among MSME operators becomes crucial to ensure that digital payments can contribute optimally, including timely reporting, cash flow transparency, and cost control. These studies collectively indicate that AIS not only functions as a recording and reporting system but also provides valuable information for MSME owners to plan strategies and devise appropriate solutions to business challenges. On the other hand, implementing AIS requires considerable investment, depending on the complexity of MSME transactions; however, it becomes a promising investment once MSMEs are financially stable. Considering these advantages, AIS implementation can support the revitalization of local MSMEs, enabling them to compete in the global business arena.

4.3. Integration of Digital Payments with Accounting Information Systems (AIS)

The integration of QRIS with AIS can facilitate audit trails, accelerate cash and bank reconciliations, and reduce misstatements caused by manual or traditional record-keeping. MSME operators with complex transactions benefit significantly from this integration. As QRIS usage correlates with improved MSME performance and revenue, data processed from QRIS can be transformed into reports that provide insights into business performance and support critical decision-making. This process is simplified because manual recording is eliminated; all transaction data obtained from QRIS is automatically converted into financial transactions that can be processed by AIS (Juliandini et al., 2023).

Despite these benefits, gaps in financial and digital literacy, limited socialization, and connectivity infrastructure constraints remain challenges for MSME operators. Therefore, substantial investment in adequate infrastructure and relevant training is necessary to enhance human resource competencies and skills (Ujianti et al., 2023). Technology integration should also be supported by internal controls (authorization, segregation of duties, and reporting) to maintain reporting quality, especially as MSME transaction patterns shift from cash to cashless systems. The integration of these systems can positively impact both the performance and sustainability of MSMEs in Bali (Dewi et al., 2024).

4.3. The Relationship Between Cultural Dimensions and the Integration of Digital Payments and AIS

Bali's cultural dimensions, particularly those aligned with the Tri Hita Karana philosophy and the presence of local organizations or communities such as banjar, traders' associations, or tourism villages, can influence technology adoption, including digital payments. Bali's unique characteristics differentiate its products and shape the customer experience compared to other regions. To support competitive business operations, the integration of QRIS and AIS can serve as a key solution to produce reliable reports for stakeholders. QRIS has also been shown to increase MSME revenue (Pratiwi et al., 2024), providing opportunities to scale up MSME businesses.

As a digital payment method implemented by MSMEs, QRIS represents a sustainable transaction solution and holds particular significance for local communities in Bali. Research indicates that business strategies grounded in Tri Hita Karana and adopting digitalization can enhance business performance sustainably. The values of togetherness can support the implementation of financial and accounting technology in Bali's local MSMEs (Yasa et al., 2024). Tri Hita Karana emphasizes the balance of human relationships with God (parahyangan), fellow humans (pawongan), and the environment (palemahan), which plays a crucial role in the adoption of QRIS and AIS by MSME operators in Bali.

In the context of QRIS, the pawongan principle encourages transparency, togetherness, and trust. This makes MSME operators in Bali more receptive to digital payments, as they are perceived to align with the values of mutual cooperation, efficiency, and transaction security (Pratiwi et al., 2024). Meanwhile, the integration of QRIS with AIS reflects the parahyangan and palemahan values, emphasizing honesty, accountability, and business sustainability. AIS contributes to more accurate and transparent financial recording, thereby supporting ethical and responsible business practices in accordance with the THK harmony principles (Putri et al., 2025).

Thus, Tri Hita Karana not only serves as an ethical foundation but also functions as a cultural framework that strengthens the legitimacy of QRIS and AIS usage, aligning with local identity and contributing to the sustainability of Bali's MSMEs amid digital transformation (Yasa et al., 2024). Providing education on QRIS usage can further support the integration of QRIS with AIS within Bali's tourism ecosystem. Therefore, the relationship among these three aspects can be illustrated as follows: transaction data obtained from QRIS is automatically processed by AIS, which then generates financial reports that serve as a basis for decision-making, while the cultural dimension acts as a supportive element for AIS adoption.

5. CONCLUSION

Based on the findings of this literature review, it can be concluded that the integration of digital payment systems, specifically QRIS, with an Accounting Information System (AIS) has significant strategic potential in supporting the revitalization of culture-based MSMEs in Bali. The analysis shows that QRIS can enhance transaction efficiency, expand market access, and drive MSME revenue growth, while the AIS provides support for accurate, transparent, and timely financial data management. The integration of both systems enables an end-to-end data flow that minimizes manual recording, strengthens the audit trail, and improves the accuracy of financial reporting.

Local cultural dimensions, such as the values of Tri Hita Karana and the social structure of the banjar, have been shown to play a key role in determining MSMEs' technology acceptance. However, this study also identifies challenges, including limited digital literacy, insufficient infrastructure, and cultural resistance to change, which require policy interventions and ongoing training programs. A research gap exists due to the limited studies that integrate all three aspects, digital payment, AIS, and cultural dimensions—within a single conceptual framework specific to Bali.

Future research is recommended to conduct empirical studies using mixed-method approaches to assess the impact of QRIS and AIS integration on financial performance and MSME sustainability, while exploring the moderating role of local culture. Research could also focus on developing cloud-based AIS models optimized for Bali's tourism MSMEs, featuring automated reporting directly integrated with QRIS data. Furthermore, collaboration with financial institutions, local government, and cultural communities should be strengthened to ensure that technology adoption is not only technical but also contextually and culturally sustainable. Digital literacy education for MSME operators should be prioritized so that technology becomes an integral part of adaptive business strategies rather than a short-term trend. Future studies may also compare similar integration models in other regions with different cultural characteristics to enrich theoretical frameworks and provide broader practical insights. Consequently, this review provides a foundation for policymakers to design mentoring programs and digital literacy training, particularly for cloud-based accounting applications aligned with digital payment systems. For MSME operators, integrating QRIS with AIS can simplify daily transaction recording, enable real-time cash flow monitoring, and facilitate the preparation of financial reports.

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7. REFERENCES

Antara News. (2025). BI genjot sistem pembayaran QRIS di Bali. *Antara News*. https://bali.antaranews.com/berita/368850/bi-genjot-sistem-pembayaran-qris-di-bali

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, *2*, 8–14. https://doi.org/10.1016/j.npls.2016.01.001

Dayanthi, M. R. N., & Sujana, E. (2024). Pengaruh Sistem Informasi Akuntansi, Inklusi Keuangan dan Pengendalian Biaya Terhadap Kinerja Keuangan Pada Usaha Mikro Kecil dan Menengah (UMKM) di Kecamatan Buleleng. *Jurnal Ilmiah Akuntansi Dan Humanika*, *14*(3), 402–413. https://doi.org/10.23887/jiah.v14i3.79352

Devi, K. S. C., & Purbadharmaja, I. B. P. (2022). Influence Of Financial Technology (E-Wallet) On MSMEs' Turnover In Denpasar. *Jurnal Ekonomi Kuantitatif Terapan*, *15*(2), 307–315.

Dewi, G. A., Wulandari, A. A. A. I., & Sanjiwani, P. D. A. (2024). Digitalisasi Sistem Informasi Akuntansi pada Kinerja dan Keberlanjutan UMKM di Indonesia. *Jurnal Akuntansi*

Kompetif, *7*(2), 220–226.

Handayani, N. L. P., & Soeparan, P. F. (2022). Peran Sistem Pembayaran Digital Dalam Revitalisasi UMKM. *Transformasi: Journal of Economics and Business Management*, *1*(3), 20–32.

Irhamuddin, Aryani, W. N., Umar, N. H., Sukaisih, & Sari, L. (2025). Strategi Digital Accounting Untuk Meningkatkan Kinerja Usaha Mikro, Kecil, Dan Menengah (UMKM). *Jurnal Riset Akuntansi Dan Bisnis*, *25*(1), 17–26. https://doi.org/10.30596/24331%0AABSTRACT

Irianto, A. B. P., & Chanvarasuth, P. (2025). Drivers and Barriers of Mobile Payment Adoption Among MSMEs: Insights from Indonesia. *Journal of Risk and Financial Management*, *18*(5). https://doi.org/10.3390/jrfm18050251

Juliandini, N. K. W., Budiartha, N. P., & Ujianti, N. M. P. (2023). Efektivitas Penggunaan Quick Response Code Indonesian Standard (Qris) Dalam Transaksi Jual Beli di Pasar Kumbasari Denpasar. *Jurnal Analogi Hukum*, *5*(2), 227–232.

Permana, D. G. Y., & Aryowiloto, J. (2024). Implementation of QRIS Digital Payments to Encourage The Development of Local MSMEs in Bali. *Ilomata International Journal of Management*, *5*(2), 559–568. https://doi.org/10.61194/ijjm.v5i2.1149

Pratiwi, L. A., Ningsih, N. A., Amaliah, F., & Tiara Sri Intan. (2024). Analisis Pengaruh Penggunaan Pembayaran Digital Qris Terhadap Kenaikan Omset Penjualan Pada Umkm. *Jurnal Bisnis Kolega*, *10*(1), 12–23. https://doi.org/10.57249/jbk.v10i1.127

Putri, N. M. N. A., Juliani, D. K., Kumlasari, N. P. E., Pradnyani, N. P. R., & Pratiwi, N. N. D. (2025). Innovative Accounting for Bali Tourism Management and Competitiveness. *Journal of Tourism Economics and Policy*, *5*(2), 267–273.

Sapriyadi, S., Syaiful, M., & Wakiya, N. (2023). Pemanfaatan Digitalisasi Untuk Meningkatkan Pendapatan Pelaku Usaha Mikro (UMK) Perempuan Di Lorong Wisata Kota Makassar. *Benefit: Jurnal Manajemen Dan Bisnis*, *8*(2), 197–215. https://doi.org/10.23917/benefit.v8i2.2483

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*(March), 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Suasih, N. N. R., Wijaya, P. Y., & Yudha, I. M. E. K. (2022). Keyfactors Transformasi Digital Umkm (Pendekatan Analisis Micmac Pada Umkm Di Bali). *Jurnal Akuntansi Dan Pajak*, *22*(2), 1060–1066. https://jurnal.stie-aas.ac.id/index.php/jap/article/view/4014

Titasari, H. I. (2023). Pengaruh E-Commercedan Digital Payment terhadap Pendapatan Usaha Mikro Kecil Menengah (UMKM) di Daerah Istimewa Yogyakarta. *Sunan Kalijaga: Islamic Economics Journal*, *2*(1), 25–51. https://ejournal.uin-suka.ac.id/febi/skiej/article/view/1750/1098

Ujianti, N. M. P., Maharani, N. P. L. K., Indrawan, I. A. K., & Sastradi, I. K. S. C. (2023). *The Effectiveness of Using the Quick Response Code Indonesian Standard (Qris) in Buying and Sale Transactions in the Denpasar Traditional Market* (Issue 2017). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-180-7_121

Wardani, A. P. Y. K., & Darmawan, N. A. S. (2020). Peran Financial Technology pada UMKM: Peningkatan Literasi Keuangan Berbasis Payment Gateway. *Jurnal Ilmiah Akuntansi Dan Humanika*, *10*(2), 170. https://doi.org/10.23887/jiah.v10i2.25947

Yasa, N. N. K., Ekawati, N. W., Rahmayanti, P. L. D., & Tirtayani, I. G. A. (2024). The role of Tri Hita Karana-based business strategy and digital marketing to improve sustainable business performance. *International Journal of Data and Network Science*, *8*(1), 629–640. https://doi.org/10.5267/j.ijdns.2023.8.022