

Intellectual Capital, Service Innovation, and Generation Z Performance: A systematic review

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Abstract

This systematic literature review investigates how intellectual capital enhances Generation Z employee performance through service innovation in the banking sector. Following the PRISMA 2020 guidelines, this study comprehensively identified and synthesized 36 empirical Scopus-indexed studies (2010-2026). Findings show that human, structural, and relational capital drive service innovation, which enhances Generation Z outcomes across productivity, service quality, innovative behavior, and knowledge utilization. However, technostress requires supportive digital leadership and moral governance as contextual moderators. This paper proposes an integrated conceptual framework that offers conceptual insights and practical recommendations for Southeast Asian banks.

Keywords: Intellectual Capital; Service Innovation; Generation Z; Quality of Life

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1.0 Introduction

Organizations operate in increasingly knowledge-driven, digitally connected environments marked by rapid technological advancement, evolving customer expectations, and intense global competition. The adoption of artificial intelligence (AI), financial technology (FinTech), big data analytics, and digital platforms has fundamentally changed how banks create value and sustain competitive advantage. Consequently, physical and tangible assets alone are no longer sufficient to attain superior organizational performance. Instead, financial institutions increasingly depend on intellectual capital, innovation capability, and a digitally competent workforce to enhance competitiveness and react effectively to transforming market conditions.

Within this context, Generation Z has emerged as a progressively vital workforce cohort, bringing digital fluency, adaptability, and innovation-oriented work preferences that support organizational transformation. At the same time, banking institutions must formulate effective strategies to employ these capabilities through knowledge management, organizational learning, and service innovation (Jikhan et al., 2023). As a result, intellectual capital—comprising human, structural, and relational capital—is widely recognized as a strategic

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organizational resource that facilitates innovation and improves organizational performance (Alhasani et al., 2023; Ali et al., 2021; Buenaño et al., 2025).

Although substantial research has examined intellectual capital, service innovation, and employee performance (Anggiani & Fatonah, 2025; Oraibi et al., 2024), studies have largely investigated these constructs independently or through isolated pairwise relationships. Existing studies have increasingly explored Generation Z employees and digital transformation in banking (Pertiwi et al., 2020); however, empirical evidence remains fragmented across theoretical perspectives and organizational contexts (Setyaningrum et al., 2025; Sidharta et al., 2019). Consequently, understanding how intellectual capital contributes to employee performance through service innovation remains limited, particularly among Generation Z employees in the Malaysian and Indonesian banking sectors (Zulkifli et al., 2023).

In order to address these gaps, this systematic literature review pursues four distinct, assessable research objectives:

- RO1: To map and systematically synthesize current empirical evidence regarding the impact of intellectual capital (human, structural, and relational) on banking performance.
- RO2: To examine the mediating role of service innovation in translating intellectual capital into frontline employee outcomes.
- RO3: To identify specific contextual pathways, dynamic capabilities, and workplace challenges influencing Generation Z employees in digital banking environments.
- To develop an integrated conceptual framework to guide future empirical research and managerial human resource management in Southeast Asian banking institutions.

The remainder of this paper is organized as follows. Section 2 describes the systematic review methodology based on the PRISMA 2020 guidelines. Section 3 presents the thematic synthesis of the selected studies. Section 4 proposes an integrated conceptual framework derived from the review findings, while Section 5 concludes the study by discussing its theoretical contributions, pragmatic implications, and future research directions.

2.0 Methodology

This systematic literature review followed the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Page et al., 2021) to ensure a transparent, rigorous, and fully reproducible synthesis. The literature search was conducted in Scopus, selected owing to its comprehensive multidisciplinary indexing, rigorous journal indexing standards, extensive business/management coverage, and lower rate of duplicate records than other indexing databases. Search parameters were restricted to peer-reviewed journal articles published in English between 2010 and 2026.

To ensure systematic retrieval and reproducibility, the primary Boolean search string combined four keyword blocks across Title, Abstract, and Keywords: (“*intellectual capital*” OR “*human capital*” OR “*structural capital*” OR “*relational capital*”) AND (“*service innovation*” OR “*fintech innovation*” OR “*digital banking*” AND “*employee performance*” OR “*job performance*” OR “*innovative work behavior*”) AND (“*bank*” OR “*banking*” OR “*financial institution*”)

We screened records across four PRISMA stages: identification, duplicate removal, title/abstract screening, and full-text eligibility assessment. Initial database searching identified 32,067 records. Following automated and manual duplicate removal, 28,588 records underwent title and abstract screening. From this pool, we retrieved 708 full-text articles and subjected them to independent dual-reviewer eligibility assessment according to predefined criteria (Table 1). Ultimately, 36 high-quality empirical studies met all criteria and were included in the final thematic synthesis.

Table 1. Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Publication Type	Peer-reviewed empirical journal articles	Book chapters, conference abstracts, editorial reviews
Language & Period	English language; Published 2010 – 2026	Non-English articles; Published prior to 2010
Industry Context	Commercial, retail, and Islamic banking sector	Non-banking industries, manufacturing, agriculture
Thematic Scope	Empirical linkage between IC, Innovation, and Performance	Conceptual studies lacking empirical data or banking focus

3.0 Findings and Discussion

The PRISMA 2020 flow diagram (Fig. 1) illustrates the systematic literature selection process. Of 32,067 initial records identified in Scopus, 28,588 unique records were screened, resulting in 708 full-text articles assessed for eligibility. Ultimately, 36 studies met all inclusion criteria. The annual distribution of included studies shows a sharp increase from 2023 to 2025, reflecting post-pandemic acceleration of digital transformation in financial services. Geographically, studies concentrate heavily in emerging Asian economies, particularly Malaysia, Indonesia, and China.

Methodologically, the synthesis shows that empirical studies in this domain rely mainly on quantitative survey designs and structural equation modeling (PLS-SEM and CB-SEM), complemented by value-added intellectual coefficient (VAIC) econometric modeling and systematic bibliographic reviews. This methodological focus underscores a growing scholarly shift from static accounting measures of intellectual capital to dynamic, process-oriented evaluations of organizational innovation and human performance. Furthermore, the

geographic clustering in Southeast Asian and emerging market financial institutions highlights how rapid FinTech integration, shifting regulatory mandates, and demographic transitions are driving financial institutions to re-evaluate their intangible resource configurations.

Table 2 summarizes all 36 reviewed empirical studies, detailing author details, geographic context, methodology and sample characteristics, key constructs, and principal empirical findings.

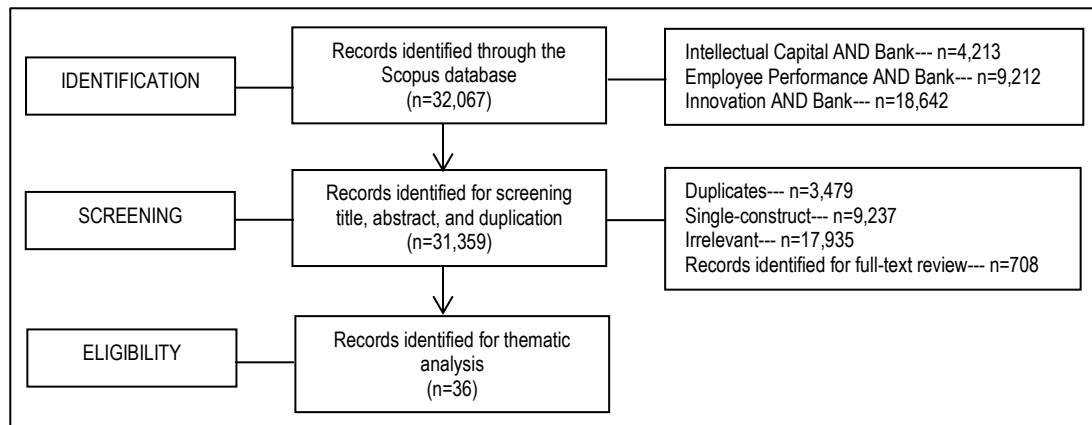


Fig. 1: PRISMA Flow Chart

Table 2. Comprehensive Summary of Reviewed Studies (N=36)

Author(s) & Year	Context	Design & Methodology	Key Constructs	Findings
Abdallah et al. (2024)	Global	Systematic Review	IC Antecedents, Innovation, Performance	Establishes IC as a foundational driver of organizational innovation.
Abubakr & Khalifa (2025)	Libya	Quantitative (SEM)	Sustainability Knowledge, IC, Innovation	Knowledge sharing drives service innovation via IC and learning.
Akdeniz et al. (2023)	Global	Methodological Review	Technical Efficiency, Bank Methods	Reviews innovations in technical efficiency and data modeling in banking.
Alhasani et al. (2023)	Oman	Empirical Quantitative	Human Capital, Social Innovation	Human capital significantly enhances social and operational innovation.
Ali et al. (2021)	Global	Systematic Review	IC Dimensions, Innovation Performance	Demonstrates the synergistic impact of human, structural, and relational capital.
Almuayad et al. (2024)	Yemen	Quantitative/Survey	Knowledge Application, FinTech, Performance	Knowledge storage and application enhance performance through FinTech.
Al-Omouh & Alsmadi (2024)	Jordan	Quantitative (PLS-SEM)	IC, FinTech, Competitive Agility	IC and FinTech drive competitive agility and financial inclusion.
Anggiani & Fatonah (2025)	Indonesia	Quantitative	Digital Leadership, Satisfaction, Gen Z Performance	Digital leadership mitigates job insecurity and boosts Gen Z performance.
Arifah (2024)	Malaysia & Indonesia	Comparative Empirical	Islamic Work Ethics, IC, Performance	Islamic work ethics strengthen IC performance in Malaysian & Indonesian banks.
Asutay & Ubaidillah (2023)	Global	Quantitative (VAIC)	IC Performance, Islamic Bank Performance	Human and structural capital drive financial returns in Islamic banks.
Buenaño et al. (2025)	Ecuador	Comparative VAIC	IC, Financial Performance	Demonstrates varied efficiency returns across structural and human capital.
Chahal & Bakshi (2016)	India	Quantitative Survey	IC Measurement, Bank Productivity	Intellectual capital directly correlates with bank workers' productivity.
Chen et al. (2014)	UK / EU	Qualitative / Case Study	Intangibles, Bank Business Models	Intangible assets form the core mechanism of sustainable business models.
Chen et al. (2021)	China	Empirical Panel Data	FinTech, Commercial Bank Performance	FinTech adoption significantly improves operational and staff efficiency.

Costa et al. (2023)	Portugal	Systematic Review	IC Assessment, Uncertainty	Proposes a framework to measure IC during dynamic technological shifts.
Fariz & Winarsih (2026)	Indonesia	Quantitative (SEM)	IC, Innovation, Institutional Performance	Service innovation fully mediates the relationship between IC and performance.
Githaiga (2020)	East Africa	Panel Regression	Human Capital, Income Diversification	Human capital investments improve bank profitability and risk management.
Hariyati et al. (2019)	Indonesia	Quantitative (PLS-SEM)	IC, Management Accounting Systems	Accounting systems and IC synergistically boosts internal process performance.
Hermawan et al. (2021)	Indonesia	Quantitative Panel	IC, Financial Returns, Firm Value	Financial returns mediate the link between IC and institutional value.
Islam et al. (2023)	Bangladesh	Quantitative Survey	Success Factors, Bank Performance	Technology adoption and staff competence are critical success factors.
Jayathilake et al. (2021)	Sri Lanka	Conceptual Framework	Gen Z Retention, Development	Identifies learning and digital flexibility as keys to Gen Z retention.
Jikhan et al. (2023)	Indonesia	State-of-the-Art Review	IC, Firm Performance	Synthesizes IC literature, emphasizing dynamic capability mediation.
Klimontowicz & Majewska (2022)	Poland	Quantitative Survey	IC, Process Capital, Competitive Edge	Process capital and standardized digital practices drive service innovation.
Kuchciak & Warwas (2021)	Poland	Conceptual Roadmap	HRM in Banking 4.0, Digital Skills	Outlines HR strategies for integrating digital skills in Banking 4.0.
Li et al. (2024)	China	Empirical Panel Data	Digitalization, Total Factor Productivity	FinTech innovation drives total factor productivity and worker efficiency.
Mahayani & Darma (2025)	Indonesia	Quantitative (SEM)	Digital Culture, Learning, Gen Z Performance	Digital culture and learning empower staff technology adoption.
Malchev et al. (2024)	Macedonia	Quantitative (VAIC)	IC Dimensions, Financial Performance	Human capital is the strongest individual contributor to financial returns.
Masyhuri et al. (2024)	Indonesia	Quantitative (SEM)	Human Capital, Service Industry 4.0	Human capital directly boosts operational performance in Service 4.0.
Milošević et al. (2021)	Serbia	Managerial Perception	Human Capital, Innovation, Performance	Managerial perception links human capital investments directly to innovation.
Mukaro et al. (2023)	Zimbabwe	Quantitative Survey	IC, Organizational Adaptability	Relational and structural capital improves institutional adaptability.
Nguyễn & Trang (2025)	Vietnam	Quantitative (SEM)	Knowledge Sharing, Governance, Innovation	Knowledge sharing and governance drive banking innovation capability.
Oraibi et al. (2024)	Middle East	Quantitative	Job Insecurity, Retention Gen Z	Psychological empowerment reduces job insecurity among Gen Z workers.
Pertiwi et al. (2024)	Indonesia	Quantitative (SEM)	Human Capital, Engagement, Innovation	Employee engagement strengthens human capital's impact on innovation.
Rahmandika et al. (2025)	Indonesia	Quantitative Moderation	Digital Leadership, Gen Z Creativity	Digital leadership fosters Gen Z creativity and innovative work behavior.
Shin et al. (2010)	Taiwan	Quantitative (SEM)	Knowledge Creation, Human Capital, Customer Capital, Structural Capital	Banks accumulate intangible value through a clear chain of knowledge creation, human capital, customer capital, and structural capital.
Satryo et al. (2025)	Indonesia	Quantitative (PLS-SEM)	IC, Absorptive Capacity, Innovation	Absorptive capacity mediates IC and sharia bank innovative performance.

(Source:) SCOPUS database

3.1 Theme 1: Intellectual Capital as a Strategic Organizational Resource

Intellectual capital is widely recognized as the basic strategic resource that enables banks to achieve sustainable competitive advantage. Abdallah et al. (2024) identify intellectual capital as a key antecedent of organizational innovation, while Zafar and Yasin (2025) demonstrate through meta-analysis that human, structural, and relational capital operate jointly to increase overall financial effectiveness. Human capital—comprising digital skills, decision-making skills, and employee expertise—remains the primary catalyst (Malchev et al., 2024; Githaiga, 2020). Structural capital embeds individual expertise inside organizational systems and databases (Shih et al., 2010; Hariyati et al., 2019), while relational capital fosters external stakeholder cooperation (Shome et al., 2023; Mukaro et al., 2023).

Building on these core pillars, human capital serves as the individual-level engine of knowledge creation, where individual competencies, analytical competencies, and continuous vocational learning enable frontline personnel to solve complex fiscal tasks and adapt to fast technological change (Alhasani et al., 2023; Asutay & Ubaidillah, 2023). In commercial and Islamic banking environments, investments in human capital directly bolster functional flexibility and risk management, provided that employee engagement and leadership support promote knowledge sharing across organizational units (Pertiwi et al., 2024; Masyhuri et al., 2024). Furthermore, human resource capabilities build institutional resilience, guaranteeing that banking institutions maintain consistent customer service standards during financial volatility and structural market reorganizations (Malchev et al., 2024).

Structural capital serves as the institutional backbone that codifies individual tacit knowledge into explicit organizational routines, proprietary databases, and digital infrastructure. Without robust structural capital—such as advanced management accounting information systems and cloud-based knowledge management repositories—individual human capital remains isolated and vulnerable to employee turnover (Hariyati et al., 2019; Kuchciak & Warwas, 2021).

Finally, relational capital bridges internal capabilities with external market ecosystems by institutionalizing trust-based networks with clients, strategic FinTech partners, and governing authorities (Al-Omouh & Alsmadi, 2024). When harmonized, human, structural, and relational capital create an integrated knowledge architecture that improves institutional resilience, sustains customer satisfaction, and lays the necessary resource foundation for continuous service innovation (Chen et al., 2014; Milošević et al., 2021).

3.2 Theme 2: Intellectual Capital as a Driver of Service Innovation

Service innovation constitutes the critical transformation mechanism that converts intangible knowledge assets into commercial banking value. Knowledge sharing and dynamic absorptive capacity enable banks to integrate human, structural, and relational resources to produce innovative FinTech services (Abubakr & Kalifa, 2025; Satryo et al., 2025). Process capital and organizational learning further accelerate service delivery improvement (Klimontowicz & Majewska, 2022; Mahayani & Darma, 2025), allowing financial institutions to sustain competitive agility in digital markets (Al-Omouh & Alsmadi, 2024; Chen et al., 2014).

Converting intellectual capital into service innovation requires dynamic organizational capabilities, most notably absorptive capacity and organizational learning. Satryo et al. (2025) show that both potential absorptive capacity (the ability to recognize and acquire external knowledge) and realized absorptive capacity (the ability to transform and exploit knowledge) mediate the relationship between intellectual capital dimensions and innovative performance in Islamic banking. Knowledge-sharing behaviors further strengthen this transformation by removing functional silos and facilitating cross-functional collaboration (Nguyễn & Trang, 2025; Zulkifli et al., 2023).

Furthermore, process capital—encompassing standardized digital procedures, customer-centric workflows, and technological interfaces—serves as the operational engine that turns innovative ideas into workable banking products (Klimontowicz & Majewska, 2022). In digitally transforming retail banks, digital culture and organizational learning act as catalysts that encourage frontline staff to embrace technological change rather than resist it (Mahayani & Darma, 2025). By embedding FinTech applications, open banking APIs, and artificial intelligence within daily business workflows, financial institutions build competitive agility, expand financial inclusion, and continuously refresh their service portfolios to match evolving market expectations (Al-Omouh & Alsmadi, 2024; Fariz & Winarsih, 2026). Consequently, service innovation functions not simply as a technological improvement, but as an ongoing capability that alters bank-customer interactions and operational quality.

3.3 Theme 3: Service Innovation Improving Employee Performance Pathways

The literature identifies four separate operational pathways through which service innovation improves frontline employee performance:

- **Productivity:** Automated FinTech workflows reduce routine tasks, allowing staff to focus on high-value client advisory (Al-Husseini, 2023; Li et al., 2024).
- **Service Quality:** Digital tools enable faster, more accurate service customization, elevating client satisfaction (Hermawan et al., 2021; Chen et al., 2021).
- **Innovative Work Behaviour:** Innovation-oriented work cultures motivate active problem-solving (Islam et al., 2023; Sidharta et al., 2019).
- **Knowledge Utilization:** Centralized knowledge repositories optimize decision-making effectiveness during customer engagements (Almuayad et al., 2024; Tajeddini et al., 2019).

A closer analysis of these four operational pathways reveals how service innovation fundamentally transforms the daily work experience and performance output of banking personnel:

- Along the Productivity Pathway, FinTech adoption and automated processing systems improve total factor productivity by eliminating repetitive manual data entry and transaction bottlenecks (Li et al., 2024). This operational streamlining frees staff capacity, enabling

employees to shift from low-margin transactional tasks to complex financial planning and relationship management (Chahal & Bakshi, 2016; Chen et al., 2021).

- Along the Service Quality Pathway, digital service innovations provide frontline employees with real-time customer analytics, omnichannel communication platforms, and customized account management tools. These upgrades enable staff to deliver prompt, accurate, and highly customized financial solutions, directly driving client retention and elevating overall firm value (Hermawan et al., 2021; Tajeddini et al., 2019).
- Along the Innovative Work Behaviour Pathway, an organizational climate that actively promotes service innovation encourages employees to exhibit proactive, innovative problem-solving behaviors. Frontline staff feel empowered to propose process improvements and experiment with novel service delivery techniques, fostering a continuous improvement mindset across branch networks (Islam et al., 2023; Sidharta et al., 2019).
- Along the Knowledge Utilization Pathway, integrated FinTech platforms and standardized storage systems guarantee that critical organizational knowledge is readily accessible at the point of customer service (Almuayad et al., 2024). Immediate access to institutional expertise speeds decision-making, lowers error rates, and secures consistent conformance with stringent financial regulations.

3.4 Theme 4: Critical Comparative Synthesis and Generation Z Workplace Realities

A critical comparative synthesis discloses distinct areas of empirical convergence, contradiction, and boundary conditions across the reviewed literature:

- Empirical Convergence: Studies across several banking contexts consistently agree that Human Capital and Structural Capital exert strong, direct positive impacts on service innovation and operational functioning (Satryo et al., 2025; Zafar & Yasin, 2025; Githaiga, 2020).
- Contradictory & Mixed Findings: In contrast, empirical findings regarding Relational Capital yield mixed outcomes. While Shome et al. (2023) report direct positive effects on service quality, Setyaningrum et al. (2025) find that Relational Capital fails to produce statistically meaningful financial performance returns unless moderated by firm competitive advantage and strong corporate governance.
- Insignificant & Negative Outcomes (Technostress): Regarding Generation Z, while digital fluency generally enhances innovative behaviour (Li et al., 2024), rapid FinTech adoption without adequate organizational support leads to insignificant performance gains or amplified technostress, job insecurity, and digital fatigue (Anggiani & Fatonah, 2025; Oraibi et al., 2024).
- Contextual Moderation: In Southeast Asian banking (Malaysia and Indonesia), organizational well-being, supportive digital leadership, and Islamic work ethics act as essential contextual moderators that protect against technostress and maximize Gen Z performance (Arifah, 2024; Rahmandika et al., 2025; Syarifuddin & Ilham, 2025).

Building on these structural links, the synthesis highlights key nuances about Generation Z employees—a cohort with high digital fluency, innate technological comfort, and strong preferences for flexible, collaborative workplaces (Jayathilake et al., 2021; Tathavadekar & Mahankale, 2025). While Generation Z workers excel at using digital service innovations to complete tasks quickly, they are also vulnerable to the ‘dark side’ of digital transformation. Uncontrolled FinTech expansion, constant digital connectivity, and ambiguous workplace expectations can induce severe technostress, job insecurity, and psychological fatigue (Anggiani & Fatonah, 2025; Oraibi et al., 2024).

In order to mitigate these adverse outcomes, empirical research in Southeast Asian banking emphasizes the key role of contextual moderators. Supportive digital leadership provides clear strategic vision and sensitive communication, transforming technological disruption into a source of mental empowerment (Rahmandika et al., 2025). Furthermore, in Malaysian and Indonesian banking institutions, integrating Islamic work ethics—which emphasize moral responsibility, equity, mutual respect, and comprehensive well-being—builds an ethical organizational climate that protects employee well-being while sustaining high levels of performance and creative output (Arifah, 2024; Syarifuddin & Ilham, 2025). Shariah governance frameworks further reinforce institutional integrity and stakeholder trust, creating an environment where technological innovation aligns with ethical workplace values.

4.0 Integrated Conceptual Framework

Building upon established intellectual capital theory (Jayathilake et al., 2021; Tathavadekar & Mahankale, 2025), this study proposes an integrated conceptual framework that addresses the fragmented nature of prior research (Fig. 2). Rather than viewing intellectual capital solely as a direct predictor of firm performance, the framework explicitly positions Service Innovation as the core mediating mechanism linking Human, Structural, and Relational Capital to individual employee outcomes.

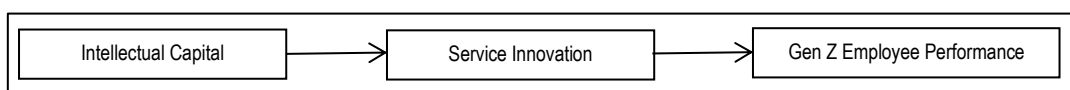


Fig. 2: Integrated Conceptual Framework

The framework highlights that intellectual capital constructs provide the essential intangible input, service innovation acts as the dynamic operational processing vehicle, and Generation Z performance represents the individual output across productivity, service quality, innovative behaviour, and knowledge application. Organizational context—encompassing digital leadership, employee well-being initiatives, and regional ethical frameworks such as Islamic work ethics—moderates these structural relationships.

5.0 Conclusion and Recommendations

This systematic literature review demonstrates that intellectual capital enhances Generation Z employee performance in banking primarily when mediated by service innovation. By synthesizing 36 empirical studies following PRISMA 2020 guidelines, the study addresses critical theoretical gaps and establishes a unified conceptual framework tailored for financial institutions undergoing digital transformation.

Evidence-Grounded Managerial Recommendations:

- **Structured Micro-Learning for Human Capital:** As evidenced by Githaiga (2020) and Mahayani and Darma (2025), bank HR management should transition from periodic training workshops to continuous micro-learning modules integrated into daily digital workflows, aligning with Gen Z's learning preferences.
- **Centralized Knowledge Repositories for Structural Capital:** Grounded in Shih et al. (2010) and Hariyati et al. (2019), banks must replace siloed systems with cloud-based knowledge management platforms that allow frontline staff instant retrieval of operational data during client interactions.
- **Technostress Mitigation & Ethical Leadership:** Supported by Arifah (2024) and Anggiani and Fatonah (2025), leadership must foster psychological safety and integrate Islamic work ethics in Malaysian and Indonesian banks, establishing clear digital disconnect policies to prevent burnout while sustaining high performance.

This review has methodological limitations, primarily its reliance on Scopus as a single bibliographic database and its restriction to English-language journal articles published between 2010 and 2026. Future research should expand data retrieval across Web of Science and PubMed. Furthermore, empirical testing of the proposed conceptual framework is recommended across commercial and Islamic banking sectors in Southeast Asia using structural equation modeling (SEM) and longitudinal mixed-methods research designs (Syarifuddin & Ilham, 2025; Wei & Yazid, 2026).

Beyond organizational financial metrics, the review findings directly connect knowledge management and digital service innovation with individual, organizational, and societal Quality of Life (QoL). At the individual level, human capital development and service innovation support Generation Z employees by building professional self-efficacy, job satisfaction, and task productivity. However, to safeguard employee Quality of Work Life (QWL), financial institutions must address the adverse effects of rapid digital transformation—specifically technostress, digital burnout, and cognitive overload—by establishing supportive digital leadership, clear work-life boundaries, and psychological safety protocols. At the organizational and societal levels, integrating Islamic work ethics and human-centric governance ensures that deploying intellectual capital builds ethical workplace environments, supports employee well-being, and advances broader financial inclusion. In summary, this review shows that sustainable banking performance and digital service innovation can be maintained only when technological advancement operates in harmony with the overall Quality of Life and well-being of the workforce and the communities they serve.

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Paper Contribution to Related Field of Study

This systematic review advances the fields of intellectual capital, service innovation, and strategic human resource management by delivering a rigorous, PRISMA-compliant synthesis of knowledge assets in digital banking. It bridges isolated literature streams into a coherent conceptual framework, explicitly positioning service innovation as the core mediator for Generation Z performance. Furthermore, it offers actionable, evidence-based guidance for banking executives in Southeast Asia to balance digital capability building with technostress mitigation and ethical leadership. Specifically, this review makes four distinct contributions to the literature: First, theoretically, it advances intellectual capital theory by moving beyond direct-effect accounting models to establish service innovation as the crucial dynamic mediating mechanism linking intangible assets to employee outcomes. Second, demographically, it addresses a major gap in human resource management literature by contextualizing intellectual capital deployment around the unique capabilities, expectations, and technostress vulnerabilities of Generation Z workers. Third, geographically and contextually, it enriches emerging market research by examining commercial and Islamic banking in Malaysia and Indonesia, demonstrating how Islamic work ethics and digital leadership act as vital contextual moderators. Fourth, methodologically and practically, it offers banking executives an evidence-grounded roadmap for structuring continuous micro-learning, cloud knowledge repositories, and psychological safety protocols to achieve sustainable competitive advantage.

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