INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 16, Issue 11, (2026) E-ISSN: 2222-6990

# Driving Sustainability in Malaysia's Motor Insurance Agency Sector: A Systematic Literature Review of Challenges and Overcoming Strategies

Kwan Thean Poh, Dr. Sathiswaran Uthamauthran

Universiti Teknologi Malaysia, Azman Hashim International Business School, UTM AHIBS

**DOI Link:** http://dx.doi.org/10.6007/IJARBSS/v16-i11/29185

***Published Date:*** 17 November 2026

**Abstract**

Motor insurance agents remain a critical distribution channel within Malaysia's insurance industry despite increasing digitalisation, regulatory changes, evolving customer expectations, and intensifying market competition. However, the emergence of online insurance platforms, direct insurer-to-customer channels, price comparison websites, and automated service technologies has significantly altered the traditional role of motor insurance agents. This study aims to systematically review the challenges faced by motor insurance agents in Malaysia and identify strategies that can enhance their competitiveness, sustainability, and long-term relevance. Guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework and structured using the Population-Interest-Context (PICo) approach, this systematic literature review synthesises empirical and conceptual studies published between 2020 and 2026. The review examines literature relating to insurance intermediaries, digital transformation, insurance distribution, customer behaviour, regulatory compliance, and agent performance. The thematic analysis identifies five key challenge dimensions: digital disintermediation, increasing market competition and price pressure, regulatory and compliance requirements, changing customer expectations, and agent capability and organisational readiness constraints. The findings further reveal that successful adaptation requires a combination of digital transformation initiatives, customer-centric service strategies, continuous professional development, technology adoption, and hybrid advisory models that integrate digital efficiency with personalised customer engagement. The review highlights that while technology presents significant disruption to the traditional insurance agency model, it also creates opportunities for agents to reposition themselves as trusted advisors delivering value-added services beyond transactional insurance sales. This study contributes to the insurance distribution and digital transformation literature by providing an integrated understanding of the challenges and strategic responses associated with motor insurance agencies in Malaysia. The findings offer practical insights for insurers, agency leaders, policymakers, and regulators seeking to strengthen the sustainability and effectiveness of the motor insurance agency sector in an increasingly digital environment.

**Keywords:** Motor Insurance Agents, Insurance Distribution, Digital Transformation, Customer Experience, Insurance Intermediaries, Strategic Adaptation, Motor Insurance, Malaysia, Systematic Literature Review, Agency Sustainability

## Introduction

The motor insurance sector represents one of the most important segments of the Malaysian general insurance industry and plays a critical role in supporting vehicle owners against financial risks arising from accidents, theft, and third-party liabilities. Within this sector, motor insurance agents serve as key intermediaries between insurers and policyholders by providing advisory services, facilitating policy issuance and renewals, and assisting customers throughout the claims process. Traditionally, insurance agents have relied on personal relationships, trust, and face-to-face interactions to establish customer loyalty and maintain long-term business sustainability. However, the operating environment of motor insurance agents has changed significantly due to digital transformation, evolving customer expectations, and increasing competition from digital platforms and alternative distribution channels (Eckert et al., 2023; Eling et al., 2021).

Existing studies have shown that digital transformation is significantly reshaping insurance distribution channels and intermediary roles (Stricker et al., 2023; Köhne & Köhne, 2024). However, the literature remains fragmented in several respects. First, most empirical evidence is derived from European and developed insurance markets, with limited research examining the Malaysian insurance ecosystem. Second, prior studies have primarily focused on individual dimensions of change, such as digitalisation, customer adoption, or intermediary performance, while giving limited attention to the combined influence of technological, regulatory, organisational, and customer-related challenges on agent sustainability (Köhne & Köhne, 2024; Wei et al., 2025). Third, digital insurance research has predominantly concentrated on consumer adoption and insurer digitalisation strategies rather than the adaptation and long-term viability of insurance agents themselves (Wei et al., 2025). Consequently, there remains insufficient understanding of how Malaysian motor insurance agents sustain their competitiveness and relevance amid accelerating digital transformation. This study addresses this gap by providing an integrated examination of the challenges faced by motor insurance agents in Malaysia and their implications for sustainability and future competitiveness.

Digital transformation has emerged as one of the most influential developments within the global insurance industry. The adoption of digital technologies such as artificial intelligence (AI), big data analytics, mobile applications, cloud computing, automation, and customer relationship management (CRM) systems has transformed the way insurance products are marketed, sold, and serviced (Demirel, 2022; Ramachandaran et al., 2025). Customers increasingly expect seamless digital experiences, instant policy issuance, online renewals, personalised recommendations, and efficient claims management through digital channels (Hanaysha et al., 2023; Méndez-Aparicio et al., 2022). Consequently, insurers are investing heavily in digital infrastructures and direct-to-consumer platforms that reduce dependence on traditional agency-based distribution models (Eckert et al., 2023).

The increasing popularity of InsurTech solutions, online insurance marketplaces, aggregator platforms, and mobile insurance applications has intensified competitive pressures within the

Malaysian motor insurance market. Customers can now compare premiums, evaluate policy benefits, purchase insurance, and manage renewals online without consulting insurance agents. This phenomenon, commonly referred to as digital disintermediation, challenges the traditional value proposition of motor insurance agents and raises concerns regarding their long-term relevance and sustainability (Gené-Albesa & de Andrés-Sánchez, 2025; Eling et al., 2021). Furthermore, digital-native consumers increasingly prefer self-service platforms that offer speed, convenience, and transparency, thereby reducing reliance on traditional interpersonal interactions during insurance transactions (Eckert et al., 2022; Gaviyau & Godi, 2025).

Apart from technological disruption, motor insurance agents face numerous operational and regulatory challenges. The implementation of stricter compliance requirements, data protection regulations, anti-money laundering obligations, and professional licensing standards has increased the complexity of insurance advisory services. Simultaneously, intense market competition, declining commission margins, talent retention issues, and workforce digital capability gaps continue to affect agency performance and sustainability (Ramachandaran et al., 2025; Skaf et al., 2024). As customer expectations continue to evolve, motor insurance agents are increasingly required to acquire digital competencies and adopt customer-centric approaches to maintain competitiveness in a rapidly changing environment (Demirel, 2022; Duc, 2022).

Customer experience has emerged as a critical determinant of success in service industries, including insurance. Contemporary customers expect omnichannel engagement, responsive service delivery, personalised communications, and transparent information throughout the insurance journey (Méndez-Aparicio et al., 2022). Research indicates that service quality, digital platform usability, trust, and perceived security significantly influence customer satisfaction and loyalty in insurance and financial services environments (Kim & Jindabot, 2022; Hanaysha et al., 2023). Consequently, motor insurance agents must reposition themselves beyond transactional sales roles and assume greater responsibility as trusted advisors capable of providing value-added services that complement digital technologies.

Despite growing scholarly interest in digital transformation and insurance innovation, the existing literature remains fragmented. Previous studies have largely focused on technology adoption, customer satisfaction, digital banking, InsurTech innovations, and organisational digital transformation, with relatively limited attention devoted specifically to the challenges faced by motor insurance agents and the strategic responses required to sustain agency performance (Demirel, 2022; Eckert et al., 2023). Furthermore, existing studies often examine these issues independently rather than offering a comprehensive synthesis of the interconnected technological, organisational, regulatory, and customer-related challenges facing insurance intermediaries.

From a theoretical perspective, examining the challenges encountered by motor insurance agents contributes to broader discussions on digital transformation, organisational adaptation, customer relationship management, and business sustainability. As insurance distribution channels become increasingly digitalised, agents must balance technological efficiency with human-centred service delivery to maintain customer trust and competitive advantage (Eling et al., 2021; Gené-Albesa & de Andrés-Sánchez, 2025). Understanding how

insurance intermediaries adapt to these changes provides important insights into organisational resilience and strategic adaptation within service industries.
To address the identified gap, this study adopts a Systematic Literature Review (SLR) guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework and structured using the Population-Interest-Context (PICo) approach. The review systematically synthesises existing literature relating to motor insurance agents, insurance distribution, customer experience, strategic adaptation, digital transformation, and agency sustainability within the Malaysian context. The study seeks to answer the following research question:
What challenges are faced by motor insurance agents in Malaysia, and what strategic adaptation mechanisms can support their sustainability in the digital era?

**Methodolgy**
A systematic literature review (SLR) protocol was developed and implemented in accordance with the PRISMA guidelines. PRISMA was selected because it provides clear and rigorous standards for planning, conducting, and transparently reporting systematic reviews. Following the PRISMA framework, the review process comprised four key stages: (1) formulating the research question, (2) implementing systematic search strategies across selected databases, (3) screening and assessing the eligibility and quality of identified studies, and (4) extracting and synthesising data from the final set of included studies. This PRISMA-aligned approach ensured methodological transparency, replicability, and a high standard of reporting throughout the SLR.

*Formulation of the research question*
To formulate the research question, the authors referred to the mnemonic PICo (population, interest, context) and references to several previous studies, such as those by Shaffril et al. (2020), Arkhurst et al. (2023), and Taylor et al. (2023). PICo, an idea of Lockwood et al. (2015), is used in any SLR analysis based on qualitative synthesis. Based on PICo and references to related studies, we chose several essential keywords such as Indigenous fishers (population), climate change (interest), and adaptation strategies (context). Based on the selected keywords, the authors formulated the research question: "What challenges are faced by motor insurance agents and insurance intermediaries in Malaysia, and what strategies can be adopted to enhance their sustainability and competitiveness in an increasingly digital insurance environment?"

*Systematic search strategies*
To ensure a comprehensive and systematic search for relevant documents, we practiced systematic searching 2 H. A. MOHAMED SHAFFRIL ET AL. strategies based on 3 processes: identification, screening, and eligibility (Fig. 1).

*Identification*
Identification is a process to identify basic keywords for the search process in the SLR. We enriched the keywords by searching an online thesaurus for synonyms, related terms, and variations to increase the potential of gathering more documents by referring to the keywords used by past studies, keywords suggested by Scopus and WOS, and asking for expert opinions. Based on this process, we selected additional keywords related to Digital transformation; Insurance industry; Customer experience; Digital trust; Platform usability and Service quality.

*Data Sources*

The review includes the **scholarly journals**, including SCOPUS and WEB OF SCIENCE.

**Selection Criteria**

*Inclusion and Exclusion Criteria*

The systematic review applied strict inclusion criteria to ensure relevance and quality. Only academic, peer-reviewed journal articles published between 2018 and 2026 were considered. Eligible studies focused on topics such as insurance, fintech, digital customer experience, artificial intelligence (AI), customer relationship management (CRM), security, user experience (UX), and digital platforms, and were written in English.

Conversely, documents that did not meet scholarly standards were excluded. This included news articles, non-peer-reviewed materials, books, dissertations, teaching cases, and company reports. These exclusions were necessary to maintain methodological rigor and ensure that the synthesis was based on validated research evidence.

*PRISMA Flow Summary*

The initial search identified 304 journal records (Scopus 204 and WOS 100). After screening and eligibility checks, 32 scholarly journal PDFs were uploaded for detailed review. Of these, 16 articles met all inclusion criteria and were retained for the final synthesis. 16 documents were removed because they were either non-journal sources, duplicates, or lacked complete metadata. Ultimately, 16 peer-reviewed articles formed the evidence base for the systematic literature review (SLR).

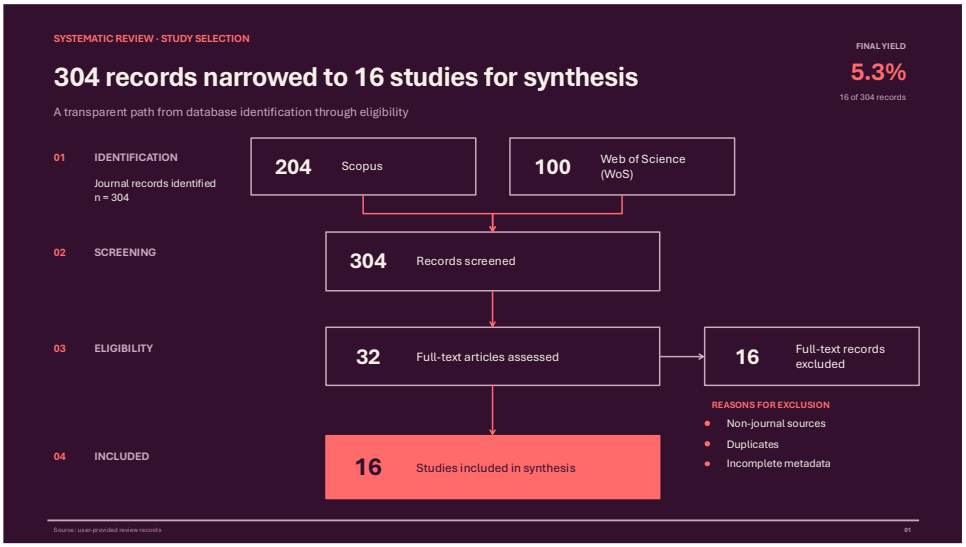


Figure 1. Flow diagram of the literature review study.

To avoid retrieval and publication biases, the authors preferred to 2 primary databases in the search process Scopus and World of Science. As Thomas et al. (2017) suggested, we practiced 2 main searching techniques, advanced and manual, to ensure the search process was comprehensive. For advanced search techniques, we developed a search string in Scopus based on search functions such as phrase searching, Boolean operator, field code, truncation, and wildcard.

The search string in Scopus was as follows:
TITLE-ABS-KEY(("motor insurance agent" OR "insurance agent*" OR "insurance intermediary*" OR "insurance broker*" OR "insurance advisor*" OR "insurance consultant*" OR "insurance distribution" OR "insurance agency*") AND ("motor insurance" OR "vehicle insurance" OR "automobile insurance" OR "car insurance" OR "motor takaful") AND ("digital transformation" OR digitalisation OR digitization OR digitalization OR "digital innovation" OR "technology adoption" OR insurtech OR fintech OR automation OR "artificial intelligence" OR AI) AND ("customer experience" OR "customer satisfaction" OR "customer engagement" OR "customer loyalty" OR "service quality") AND (challenge* OR barrier* OR obstacle* OR disruption* OR competition OR adaptation OR resilience OR sustainability OR "strategic adaptation") AND (Malaysia OR Malaysian)).

The search string in WOS was as follows:
TS = (("motor insurance agent" OR "insurance agent*" OR "insurance intermediary*" OR "insurance broker*" OR "insurance advisor*" OR "insurance distribution" OR "insurance agency") AND ("motor insurance" OR "vehicle insurance" OR "automobile insurance" OR "motor takaful") AND ("digital transformation" OR digitalisation OR digitization OR "digital innovation" OR "technology adoption" OR insurtech OR automation OR "artificial intelligence") AND ("customer experience" OR "customer satisfaction" OR "customer engagement" OR "customer loyalty" OR "service quality") AND (challenge* OR barrier* OR disruption* OR competition OR adaptation OR resilience OR sustainability OR "strategic adaptation") AND (Malaysia OR Malaysian)).*

*Screening*
Screening, the second process in the systematic searching strategies, in the process, although 32 scholarly journal PDFs were initially identified for full-text assessment, only 16 met the inclusion criteria. Eleven articles were excluded because they were (i) non-journal or non-peer-reviewed sources, (ii) duplicates retrieved across Scopus and Web of Science, (iii) lacking essential bibliographic metadata, (iv) conceptually misaligned with the research scope, or (v) methodologically insufficient for systematic analysis. Consequently, 16 high-quality, peer-reviewed studies formed the final evidence base for the SLR."

Eligibility
The final 16 articles were retained because their keywords showed strong alignment with the SLR's core concepts. All included studies contained explicit keywords relating to digital transformation, online insurance or digital banking, customer satisfaction or experience, technology adoption behaviours (TAM, AI, chatbots), or digital service quality. These keyword domains directly match the SLR's aim of examining how digitalisation influences customer expectations and satisfaction in insurance and financial services.

*Quality appraisal*
Because the current SLR is a mixed-method systematic review, we referred to the Mixed-Method Appraisal Tool (MMAT) for the quality appraisal process because it allowed us to appraise the methodological quality of 5 categories of studies: qualitative research, randomized controlled trials, nonrandomized studies, quantitative descriptive studies, and mixed-methods studies (Hong et al., 2018; Table 1).

Table 1

*Quality appraisal criteria*

| **Qualitative Studies - Quality Appraisal Criteria** | |
|---|---|
| QA1 | Is the qualitative approach appropriate to answer the research question relating to challenges and sustainability of motor insurance agents? |
| QA2 | Are the qualitative data collection methods adequate to address the research question? |
| QA3 | Are the findings adequately derived from the data collected? |
| QA4 | Is the interpretation of results sufficiently substantiated by the data? |
| QA5 | Is there coherence between data sources, data collection methods, analysis procedures, and interpretation of findings? |

| **Mixed-Method Studies - Quality Appraisal Criteria** | |
|---|---|
| QA1 | Is there an adequate rationale for using a mixed-methods design to address the research question? |
| QA2 | Are the qualitative and quantitative components effectively integrated to answer the research question? |
| QA3 | Are the outputs of the integration of qualitative and quantitative findings adequately interpreted? |
| QA4 | Are divergences and inconsistencies between quantitative and qualitative findings adequately addressed? |
| QA5 | Do the different components of the study adhere to the quality criteria of their respective methodological traditions? |

Each appraisal criterion was assessed using a three-point scale comprising **Yes (1 point), Partly (0.5 point), and No (0 points)**. The maximum possible score for each study was **5.0 points**. Studies obtaining a score above **3.0 points** were deemed to possess adequate methodological quality and were included in the final thematic synthesis. This threshold ensured that the review was based on evidence derived from sufficiently rigorous and relevant research while maintaining a comprehensive representation of the emerging literature on motor insurance agents, digital transformation, insurance distribution, customer experience, and agency sustainability.

*Revised Scoring Table*

| **Total Score** | **Quality Level** | **Inclusion Decision** |
|---|---|---|
| 4.0 - 5.0 | High Quality | Included |
| 3.0 - 3.9 | Acceptable Quality | Included |
| Below 3.0 | Insufficient Quality | Excluded |

| he screened documents | **Article Title** | **Method** | **QA1** | **QA2** | **QA3** | **QA4** | **QA5** | **Total** | **Decision** |
|---|---|---|---|---|---|---|---|---|---|

| were then appraised in the study category based on 5 main quality criteria (Table 2).**No.** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Multichannel Customer Journeys and Their Determinants: Evidence from Motor Insurance | Quantitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 2 | Understanding the Omnichannel Customer Journey: Determinants of Interaction Choice | Quantitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 3 | Managing Customer Satisfaction: Digital Applications for Insurance Companies | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |
| 4 | The Impact of Digitalization on the Insurance Value Chain and the Insurability of Risks | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |
| 5 | Technology Investments and Firm Performance Under the Wave of InsurTech | Quantitative | 1.0 | 0.5 | 1.0 | 1.0 | 1.0 | 4.5 | Include |
| 6 | Uncovering the Impact of Digitalization on the Performance of Insurance Distribution | Quantitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 7 | Exploring Characteristics and Transformational Capabilities of InsurTech Innovations to Understand Insurance Value Creation in a Digital World | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |
| 8 | Management of Distribution Risks and Digital Transformation of Insurance Distribution: A Regulatory Gap in the IDD | Qualitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 9 | The Future of Insurance Intermediation in the Age of the Digital Platform Economy | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |
| 10 | Multichannel Search Patterns and Webrooming Behaviours | Quantitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | in the Service Industries: The Case of Motor Insurance | | | | | | | | |
| 11 | How Digitalization Affects Insurance Companies: Overview and Use Cases of Digital Technologies | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |
| 12 | The Status Quo of Digital Transformation in Insurance Sales: An Empirical Analysis of the German Insurance Industry | Quantitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 13 | A Framework for the Evaluation of InsurTech | Qualitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 14 | Insurance: Models, Digitalization, and Data Science | Qualitative | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 4.5 | Include |
| 15 | Digital Agendas in the Insurance Industry: The Importance of Comprehensive Approaches | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |
| 16 | Understanding Digital Transformation: A Review and a Research Agenda | Qualitative | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.0 | Include |

**Results of Quality Appraisal**

The methodological quality of the 16 included studies was assessed using the Mixed Methods Appraisal Tool (MMAT). Overall, the appraisal indicated that all studies exceeded the predetermined inclusion threshold of 3.0 out of 5.0 points, demonstrating adequate methodological rigor and relevance for inclusion in the systematic literature review.

Qualitative Studies

All qualitative studies satisfied QA1, indicating that the selected qualitative approaches were appropriate for addressing the research questions related to digital transformation, insurance distribution, customer experience, insurance intermediation, and agency sustainability. This finding was expected because qualitative methods are particularly suitable for exploring "how" and "why" questions concerning organisational change, digital disruption, and intermediary adaptation within the insurance sector.

Regarding QA2, most qualitative studies demonstrated adequate data collection procedures and methodological transparency. Studies such as Managing Customer Satisfaction: Digital Applications for Insurance Companies, The Future of Insurance Intermediation in the Age of the Digital Platform Economy, and How Digitalization Affects Insurance Companies: Overview and Use Cases of Digital Technologies received full scores due to their clear data sources, systematic analytical procedures, and well-defined research methods. However, Management of Distribution Risks and Digital Transformation of Insurance Distribution received a partial score (0.5) under QA4 because some interpretations extended beyond the evidence explicitly presented.

For QA3, all qualitative studies adequately derived their findings from the available evidence. The relationships between the collected information, analytical procedures, and final conclusions were clearly explained. Consequently, all qualitative studies received full scores for this criterion.

In relation to QA4 and QA5, most qualitative studies demonstrated strong coherence between data sources, analysis procedures, and interpretation of findings. Five qualitative studies achieved the maximum MMAT score of 5.0, indicating excellent methodological alignment and reporting quality. One qualitative study achieved a score of 4.5 due to a minor limitation in the interpretation of findings.

*Quantitative Studies*

Most quantitative studies satisfied QA1, demonstrating appropriate sampling and measurement strategies that were aligned with their research objectives. The quantitative studies employed established analytical approaches relating to customer behaviour, omni-channel journeys, insurance distribution, digital transformation, and InsurTech adoption. Statistical techniques including regression analysis, structural equation modelling (SEM), and multivariate analysis were commonly utilised, resulting in full scores for QA1 and QA3.

Regarding QA2, some studies received partial scores because sample representativeness was not always comprehensively justified. Although sample sizes were generally adequate and clearly reported, information concerning population parameters, response rates, or sampling rationale was occasionally limited. Consequently, one quantitative study (Technology Investments and Firm Performance Under the Wave of InsurTech) received a score of 0.5 for QA2.

For QA4, several quantitative studies received partial scores (0.5) due to limited discussion of non-response bias, sampling limitations, or alternative explanations for the reported relationships. This explains why most quantitative studies achieved overall scores of 4.5 rather than the maximum score of 5.0.

Despite these minor limitations, all quantitative studies achieved scores above the inclusion threshold and demonstrated strong methodological quality. Their findings provide valuable empirical evidence regarding customer experience, digitalisation, insurance distribution performance, and technology adoption.

Overall Assessment

The quality appraisal revealed that seven studies achieved the maximum score of 5.0, while nine studies achieved scores of 4.5. No study scored below 4.5, indicating a consistently high level of methodological quality across the evidence base.

Specifically:
7 studies achieved 5.0/5.0
9 studies achieved 4.5/5.0
0 studies scored below 4.5

The average quality score across all included studies was 4.72 out of 5.00, indicating a highly robust evidence base. Although minor methodological limitations were identified in several

studies, these limitations were primarily associated with reporting depth, sample justification, or interpretation rather than fundamental flaws in research design.

Consequently, all 16 studies were retained for thematic synthesis. Collectively, they provide a strong empirical foundation for examining the challenges faced by motor insurance agents in Malaysia and for identifying strategic adaptation mechanisms relating to digital transformation, insurance distribution, customer experience, InsurTech innovation, insurance intermediation, and agency sustainability.

**Results: Thematic Findings**

The systematic analysis of the 16 selected studies revealed five major themes that characterise the challenges faced by motor insurance agents in an increasingly digital insurance environment. These themes emerged consistently across studies from Europe, Asia, and North America, highlighting common challenges confronting insurance intermediaries globally despite differences in regulatory and market contexts. The five themes identified were Digital Disintermediation, Increasing Market Competition and Price Pressure, Regulatory and Compliance Requirements, Changing Customer Expectations, and Agent Capability and Organisational Readiness Constraints.

*Theme 1: Digital Disintermediation*

Studies such as The Impact of Digitalization on the Insurance Value Chain and the Insurability of Risks (Eling & Lehmann, 2018), Exploring Characteristics and Transformational Capabilities of InsurTech Innovations to Understand Insurance Value Creation in a Digital World (Stoeckli et al., 2018), and The Future of Insurance Intermediation in the Age of the Digital Platform Economy (Stricker et al., 2023) demonstrate that digital technologies are fundamentally transforming insurance distribution channels. The findings indicate that artificial intelligence (AI), automation, InsurTech innovations, and platform-based insurance ecosystems increasingly enable customers to access insurance products and services without relying on traditional intermediaries.

Sub-themes identified under this category include AI disruption, automation, digitalisation of insurance functions, reduced dependency on intermediaries, digital innovation, platform-based insurance, business model transformation, platform economy, and direct digital distribution. Collectively, these developments challenge the traditional role of motor insurance agents by transferring information provision, policy comparison, and purchasing activities to digital platforms. Consequently, insurance agents are increasingly required to reposition themselves as advisors rather than transaction facilitators.

*Theme 2: Increasing Market Competition and Price Pressure*

Studies such as The Status Quo of Digital Transformation in Insurance Sales: An Empirical Analysis of the German Insurance Industry (Eckert et al., 2021) and A Framework for the Evaluation of InsurTech (Xu & Zweifel, 2020) reveal that digitalisation has intensified competition within insurance markets. The emergence of InsurTech firms, comparison websites, digital insurers, and alternative distribution channels has increased market transparency and reduced the information advantage historically enjoyed by insurance intermediaries.

Key sub-themes identified include digital competition, new sales channels, pressure on agent-based distribution, market transformation, InsurTech competition, digital business models, and technology-driven competitors. The literature suggests that customers can now compare premiums, coverage options, and insurer reputations more efficiently, creating downward pressure on pricing and agency commissions. As a result, motor insurance agents face increasing challenges in differentiating themselves based solely on product knowledge or access to insurers.

*Theme 3: Regulatory and Compliance Requirements*

The study by Marano (2021) highlights the growing importance of regulatory and compliance considerations in digitally transforming insurance industries. As insurers increasingly utilise digital distribution channels, regulators must ensure consumer protection, transparency, cybersecurity, and fair market practices.

The major sub-themes identified were regulatory compliance, digital governance, distribution risk management, and consumer protection. The literature indicates that digital transformation introduces new compliance obligations concerning data privacy, cybersecurity, algorithmic decision-making, and customer disclosure requirements. For motor insurance agents, these evolving requirements increase administrative complexity and necessitate continuous professional development to ensure compliance with industry regulations.

*Theme 4: Changing Customer Expectations*

The most frequently discussed customer-related theme emerged from studies such as Multichannel Customer Journeys and Their Determinants: Evidence from Motor Insurance (Hu & Tracogna, 2020), Understanding the Omnichannel Customer Journey: Determinants of Interaction Choice (Barwitz & Maas, 2018), Managing Customer Satisfaction: Digital Applications for Insurance Companies (Eckert et al., 2022), and Multichannel Search Patterns and Webrooming Behaviours in the Service Industries: The Case of Motor Insurance (Hu & Tracogna, 2021).

The findings suggest that insurance customers increasingly expect seamless and integrated experiences across multiple channels. Major sub-themes include omnichannel behaviour, customer journey complexity, self-service preference, digital channel adoption, customer channel preference, digital engagement, service convenience, customer satisfaction, digital service quality, customer-centred digital applications, online information seeking, webrooming behaviour, and digital purchasing behaviour.

Customers increasingly use websites, social media platforms, mobile applications, and comparison tools during their insurance purchasing journeys. The studies reveal that modern customers value convenience, speed, transparency, and flexibility, while also expecting personalised interactions. Consequently, motor insurance agents must adapt to increasingly sophisticated customer expectations and integrate digital tools into their customer engagement strategies.

*Theme 5: Agent Capability and Organisational Readiness Constraints*

The most dominant theme identified in the review was Agent Capability and Organisational Readiness Constraints, supported by six studies including Technology Investments and Firm

Performance Under the Wave of InsurTech (Chang, 2024), Uncovering the Impact of Digitalization on the Performance of Insurance Distribution (Köhne & Köhne, 2024), How Digitalization Affects Insurance Companies: Overview and Use Cases of Digital Technologies (Eckert & Osterrieder, 2020), Insurance: Models, Digitalization, and Data Science (Albrecher et al., 2019), Digital Agendas in the Insurance Industry: The Importance of Comprehensive Approaches (Bohnert et al., 2019), and Understanding Digital Transformation: A Review and a Research Agenda (Vial, 2019).

These studies consistently emphasise that successful digital transformation depends on organisational readiness and agent capability rather than technology alone. The identified sub-themes include digital capability, technology investment, organisational transformation, innovation readiness, digital skills, agent productivity, digital stress, organisational support, technology adoption, digital readiness, process digitisation, data analytics capability, digital competencies, strategic transformation, leadership support, organisational change, strategic adaptation, transformation capability, and organisational resilience.

The findings indicate that many insurance intermediaries face challenges associated with limited digital skills, insufficient organisational support, and resistance to change. Leadership commitment, employee training, technology investment, and organisational learning emerged as critical enablers of successful transformation. The literature further suggests that motor insurance agents who actively develop digital competencies and adapt to changing business models are more likely to maintain long-term competitiveness and sustainability.

Table 3
*Themes and subthemes in the literature review analysis. / denotes a positive response*

| No | Studies | Theme | Sub-Themes | Sub-Themes | Sub-Themes |
|---|---|---|---|---|---|
| 1 | Multichannel Customer Journeys and Their Determinants: Evidence from Motor Insurance | Changing Customer Expectations | Omnichannel Behaviour; | Customer Journey Complexity; | Self-Service Preference; Digital Channel Adoption |
| 2 | Understanding the Omnichannel Customer Journey: Determinants of Interaction Choice | Changing Customer Expectations | Customer Channel Preference; | Digital Engagement; Service Convenience; | Channel Switching Behaviour |
| 3 | Managing Customer Satisfaction: Digital Applications for Insurance Companies | Changing Customer Expectations | Customer Satisfaction; | Digital Service Quality; | Customer-Centred Digital Applications |

| | | | | | |
|---|---|---|---|---|---|
| 4 | The Impact of Digitalization on the Insurance Value Chain and the Insurability of Risks | Digital Disintermediation | AI Disruption; | Automation; Digitalisation of Insurance Functions; | Reduced Dependency on Intermediaries |
| 5 | Technology Investments and Firm Performance Under the Wave of InsurTech | Agent Capability and Organisational Readiness Constraints | Digital Capability; | Technology Investment; | Organisational Transformation; Innovation Readiness |
| 6 | Uncovering the Impact of Digitalization on the Performance of Insurance Distribution | Agent Capability and Organisational Readiness Constraints | Digital Skills; | Agent Productivity; Digital Stress; | Organisational Support |
| 7 | Exploring Characteristics and Transformational Capabilities of InsurTech Innovations to Understand Insurance Value Creation in a Digital World | Digital Disintermediation | InsurTech Disruption; | Digital Innovation; | Platform-Based Insurance with Business Model Transformation |
| 8 | Management of Distribution Risks and Digital Transformation of Insurance Distribution: A Regulatory Gap in the IDD | Regulatory and Compliance Requirements | Regulatory Compliance and Digital Governance; | Distribution Risk Management; | Consumer Protection |
| 9 | The Future of Insurance Intermediation in the Age of the Digital Platform Economy | Digital Disintermediation | Platform Economy; | Insurance Intermediation Challenges; | Direct Digital Distribution with Ecosystem Transformation |
| 10 | Multichannel Search Patterns and Webrooming Behaviours in the Service Industries: The Case of Motor Insurance | Changing Customer Expectations | Customer Search Behaviour; | Online Information Seeking; | Webrooming Behaviour; Digital Purchasing Behaviour |

| | | | | | |
|---|---|---|---|---|---|
| 11 | How Digitalization Affects Insurance Companies: Overview and Use Cases of Digital Technologies | Agent Capability and Organisational Readiness Constraints | Technology Adoption; | Digital Readiness; | Process Digitisation within Organisational Capability |
| 12 | The Status Quo of Digital Transformation in Insurance Sales: An Empirical Analysis of the German Insurance Industry | Increasing Market Competition and Price Pressure | Digital Competition; | Pressure on Agent-Based Distribution; | Market Transformation |
| 13 | A Framework for the Evaluation of InsurTech | Increasing Market Competition and Price Pressure | InsurTech Competition; | Digital Business Models; | Technology-Driven Competitors |
| 14 | **AI**nsurance: Models, Digitalization, and Data Science | Agent Capability and Organisational Readiness Constraints | Data Analytics Capability; | Digital Competencies; | Technological Adaptation |
| 15 | Digital Agendas in the Insurance Industry: The Importance of Comprehensive Approaches | Agent Capability and Organisational Readiness Constraints | Strategic Transformation; | Leadership Support; | Organisational Change |
| 16 | Understanding Digital Transformation: A Review and a Research Agenda | Agent Capability and Organisational Readiness Constraints | Strategic Adaptation; | Transformation Capability; | Organisational Resilience |

Across all 16 studies, the evidence consistently demonstrates that the challenges faced by motor insurance agents arise from the interaction of technological disruption, increasing competition, regulatory complexity, changing customer expectations, and organisational capability constraints. While digital transformation creates opportunities for enhanced efficiency and customer engagement, it simultaneously threatens traditional intermediary roles through automation, platformisation, and direct digital distribution. The findings collectively suggest that the future sustainability of motor insurance agents depends on their ability to develop digital competencies, embrace organisational transformation, deliver customer-centric value, and strategically reposition their role within evolving digital insurance ecosystems.

## Discussion

The findings of this systematic literature review demonstrate that the sustainability of motor insurance agents in Malaysia is increasingly influenced by the interaction between digital transformation, customer behaviour, insurance distribution structures, regulatory requirements, and organisational readiness. The review identified five major challenge dimensions, namely digital disintermediation, increasing market competition and price pressure, regulatory and compliance requirements, changing customer expectations, and agent capability and organisational readiness constraints. Collectively, these themes suggest that the traditional agency model is being reshaped by technological innovations and changing market dynamics, requiring agents to continuously adapt in order to remain relevant and competitive.

A prominent finding concerns the growing phenomenon of digital disintermediation. Studies by Eling and Lehmann (2018), Stoeckli et al. (2018), and Stricker et al. (2023) indicate that technological advancements such as artificial intelligence (AI), automation, InsurTech platforms, and digital ecosystems are reducing customers' reliance on traditional insurance intermediaries. The emergence of online policy comparison tools, direct insurer platforms, and platform-based insurance models enables customers to obtain information, compare products, and purchase policies independently. These findings support the broader digital transformation literature, which suggests that technology can reduce intermediary dependency while simultaneously creating opportunities for intermediaries to redefine their roles as trusted advisors rather than transactional sales representatives. The evidence therefore suggests that motor insurance agents must increasingly focus on consultative and relationship-based services that remain difficult to replicate through automated digital systems.

The review also highlights the significant impact of increasing market competition and price pressure. The studies by Eckert et al. (2021) and Xu and Zweifel (2020) reveal that digital transformation has intensified competition by increasing market transparency and lowering entry barriers for new technology-driven competitors. InsurTech firms, digital insurers, and online comparison platforms have introduced alternative distribution models that challenge traditional agency channels. Customers can now compare products and premiums quickly, creating greater price sensitivity and reducing opportunities for product differentiation. This finding aligns with competitive strategy literature, which argues that digitalisation frequently shifts competition away from information access toward value-added services and customer experience. Consequently, motor insurance agents can no longer rely solely on product knowledge, but must differentiate through personalised advice, relationship management, and superior customer support.

Another key finding relates to regulatory and compliance requirements. Marano (2021) emphasises that the increasing digitalisation of insurance distribution creates new regulatory obligations concerning consumer protection, privacy, governance, and risk management. As insurance transactions become increasingly digital, regulators face growing pressure to ensure transparency, cybersecurity, and ethical use of technology. For motor insurance agents, these developments result in additional compliance responsibilities and administrative burdens. The findings suggest that although regulatory frameworks are essential for protecting consumers and maintaining market integrity, they also require agents

to invest in compliance knowledge, digital governance awareness, and continuous professional development.

The review further demonstrates that changing customer expectations constitute one of the most influential drivers of industry transformation. Studies by Hu and Tracogna (2020), Barwitz and Maas (2018), Eckert et al. (2022), and Hu and Tracogna (2021) consistently indicate that customers increasingly expect seamless, omnichannel experiences across digital and traditional platforms. Contemporary customers value convenience, speed, flexibility, transparency, and personalised interactions throughout the insurance journey. The findings reveal growing preferences for self-service technologies, digital information search, webrooming behaviour, and integrated customer journeys. These results support customer experience and service quality theories which suggest that satisfaction is increasingly determined by the overall customer journey rather than isolated service encounters. Consequently, motor insurance agents are required to integrate digital engagement strategies into their business practices while maintaining personalised advisory services that strengthen long-term customer relationships.

The most dominant theme emerging from the review is agent capability and organisational readiness constraints, which was supported by the largest number of studies. Research by Chang (2024), Köhne and Köhne (2024), Eckert and Osterrieder (2020), Albrecher et al. (2019), Bohnert et al. (2019), and Vial (2019) consistently emphasises that technology alone does not guarantee successful digital transformation. Rather, competitive advantage depends upon organisational readiness, workforce capabilities, leadership support, and strategic adaptability. The literature highlights critical sub-themes including digital skills, technology adoption, innovation readiness, data analytics capability, organisational transformation, leadership commitment, and organisational resilience. The findings suggest that agents who actively invest in digital competencies and organisational learning are better positioned to adapt to changing industry conditions. Conversely, insufficient digital skills, resistance to change, and inadequate organisational support may significantly hinder transformation efforts.

The interrelationship between these five themes reveals a central insight regarding the future of motor insurance agencies. Digital transformation simultaneously creates both opportunities and challenges. On one hand, digital technologies improve operational efficiency, customer accessibility, and service convenience. On the other hand, they increase competition, intensify regulatory complexity, and threaten traditional intermediary roles. The evidence suggests that the sustainability of motor insurance agents depends on their ability to balance technological advancement with human-centred service delivery. While automation can improve efficiency and reduce transaction costs, customers continue to value professional advice, trust, reassurance, and relationship-building during complex insurance decisions and claims situations.

Therefore, the findings indicate that successful adaptation requires a hybrid agency model that combines digital capabilities with personalised advisory services. Rather than viewing digitalisation as a threat, motor insurance agents should leverage technology to enhance customer engagement, improve productivity, and deliver more value-added services. Simultaneously, insurers, regulators, and industry associations should support agents through

training initiatives, technology adoption programmes, and capability-building strategies designed to strengthen organisational readiness.

Overall, the discussion highlights that the future competitiveness of motor insurance agents in Malaysia will depend not only on technological adoption but also on their capacity to develop digital capabilities, respond to evolving customer expectations, comply with regulatory requirements, and continuously adapt their business models to an increasingly digital insurance ecosystem. These findings contribute to the growing literature on insurance distribution, digital transformation, and organisational sustainability by demonstrating that long-term success requires the integration of technological innovation, strategic adaptability, and customer-centred value creation.

Table 4

*Positive and Negative Impacts of the Identified Themes*

The relationship between the five themes identified in Table 3 demonstrates that digital transformation creates both opportunities and challenges for motor insurance agents. The positive and negative impacts are summarised below.

| Theme | Positive Impacts | Negative Impacts |
|---|---|---|
| Digital Disintermediation | Faster service delivery; improved customer accessibility; greater operational efficiency; wider market reach through digital platforms | Reduced reliance on insurance agents; direct insurer-to-customer channels; loss of traditional intermediary roles; lower commission opportunities |
| Increasing Market Competition and Price Pressure | Encourages innovation; improves service quality; promotes customer-centred business models; enhances market transparency | Increased competition from InsurTech firms and digital insurers; commission pressure; product commoditisation; reduced customer loyalty |
| Regulatory and Compliance Requirements | Enhances consumer protection; increases transparency and trust; improves governance standards; strengthens cybersecurity practices | Higher compliance costs; increased administrative burden; more complex regulatory requirements; additional training needs |
| Changing Customer Expectations | Greater customer engagement; enhanced customer experience; improved satisfaction; stronger omnichannel communication | Rising service expectations; demand for instant responses; greater customer switching behaviour; increased pressure on service delivery performance |
| Agent Capability and Organisational Readiness Constraints | Development of digital skills; improved productivity; better use of technology; enhanced organisational resilience and innovation capability | Skills gaps; resistance to change; digital stress; technology investment costs; organisational transformation challenges |

**Discussion of Positive and Negative Impacts**

The interaction between the positive and negative impacts revealed in Table 4 highlights a central paradox facing motor insurance agents in the digital era. While digital transformation offers significant opportunities to improve operational performance, customer experience,

and business sustainability, it simultaneously introduces new risks and challenges that threaten traditional agency models.

The theme of digital disintermediation illustrates this duality clearly. On the positive side, technologies such as artificial intelligence, automation, and digital platforms enable faster service delivery, streamlined processes, and improved customer accessibility. Customers can obtain quotations, purchase policies, and manage claims more efficiently than through traditional channels. However, these same technologies reduce customers' dependence on insurance intermediaries, creating concerns regarding the future relevance of motor insurance agents. As digital platforms continue to evolve, agents increasingly face the challenge of redefining their value proposition beyond transactional insurance sales.

Similarly, increasing market competition and price pressure generates both benefits and threats. Digitalisation has improved market transparency and encouraged insurers to innovate, resulting in better products and improved customer experiences. Nevertheless, greater transparency also enables customers to compare prices more easily, intensifying competition among insurers, agents, and technology-based service providers. Consequently, many agents experience declining margins, commission pressures, and growing difficulties in differentiating their services.

The findings relating to regulatory and compliance requirements reveal another example of this balancing effect. Regulatory oversight contributes positively by strengthening consumer confidence, improving transparency, and protecting policyholders. At the same time, compliance obligations increase administrative complexity and require continuous monitoring of regulatory developments. For motor insurance agents, meeting these requirements often involves additional investments in training, technology, and compliance systems.

The theme of changing customer expectations demonstrates that digitalisation has significantly altered customer behaviour. Customers increasingly value convenience, speed, transparency, and omnichannel interactions. These developments provide opportunities for agents to strengthen customer relationships through enhanced digital engagement and personalised services. However, higher expectations also increase service pressures. Customers now expect immediate responses, real-time information, and seamless interactions across multiple platforms. Failure to meet these expectations may quickly result in customer dissatisfaction and switching behaviour.

The most dominant theme, agent capability and organisational readiness constraints, further emphasises the importance of preparedness in navigating digital transformation. Digital technologies create opportunities to improve productivity, develop new capabilities, and strengthen organisational resilience. However, many agents continue to encounter barriers associated with digital skills shortages, resistance to change, limited technology adoption, and investment constraints. The literature consistently suggests that successful adaptation depends not only on technological acquisition but also on leadership support, organisational learning, workforce development, and strategic transformation.

*Central Insight from Table 4*

The positive and negative impacts collectively underscore a central insight: digital transformation is neither inherently beneficial nor inherently detrimental to motor insurance agents. Rather, its outcomes depend on the extent to which agents can balance technological efficiency with human-centred value creation.

Although automation and digital platforms can improve speed, efficiency, and convenience, customers continue to require professional advice, trust, reassurance, and personalised support, particularly in complex insurance decisions and claims situations. Likewise, while digital technologies enhance productivity, inadequate digital skills, poor implementation, or weak organisational support may reduce rather than improve performance.

Overall, the evidence indicates that long-term sustainability will depend on the adoption of a hybrid model, whereby motor insurance agents leverage digital technologies to increase operational efficiency while simultaneously maintaining advisory, relationship-building, and customer-support functions that cannot easily be replicated by technology. Such a balanced approach allows agents to maximise the benefits of digital transformation while mitigating its risks, thereby strengthening their competitiveness and relevance within Malaysia's evolving insurance ecosystem.

**Conclusion and Recommendations**

This systematic literature review examined the challenges faced by motor insurance agents in Malaysia through the analysis of sixteen empirical studies. The findings revealed five major challenge dimensions: digital disintermediation, increasing market competition and price pressure, regulatory and compliance requirements, changing customer expectations, and agent capability and organisational readiness constraints. Together, these themes highlight the significant impact of digital transformation on the traditional insurance agency model and demonstrate how technological, organisational, and customer-related factors are reshaping the insurance distribution landscape.

The findings indicate that digital transformation presents both opportunities and challenges for motor insurance agents. On one hand, digital technologies improve operational efficiency, customer accessibility, and service convenience through automation, digital platforms, and online distribution channels. On the other hand, these same technologies reduce customers' dependence on traditional intermediaries, intensify competition from InsurTech firms and digital insurers, and place pressure on commission-based distribution models. As customers increasingly utilise online platforms to search for information, compare products, and purchase insurance policies, the traditional role of insurance agents is evolving from transaction facilitators to trusted advisors and relationship managers.

The review also highlights the growing importance of customer expectations in shaping insurance service delivery. Customers increasingly demand seamless omnichannel experiences, faster responses, personalised recommendations, and convenient self-service capabilities. Consequently, insurance agents must adapt their engagement strategies to meet these expectations while simultaneously preserving the trust, reassurance, and personalised support traditionally associated with insurance advisory services. Failure to meet these

evolving expectations may result in reduced customer satisfaction, lower loyalty, and increased switching behaviour.

Among the five identified themes, agent capability and organisational readiness constraints emerged as the most dominant challenge. The evidence suggests that successful digital transformation depends not only on technological adoption but also on organisational preparedness, workforce competencies, leadership commitment, and strategic adaptability. Digital skills, technology readiness, innovation capability, organisational support, and resilience were consistently identified as critical factors influencing the long-term sustainability of insurance intermediaries. Agencies that invest in employee development, technology adoption, and organisational transformation are more likely to achieve successful adaptation and maintain competitiveness in a rapidly changing environment.

Several recommendations emerge from the findings of this review. **First,** motor insurance agents should adopt a hybrid service model that combines digital technologies with personalised advisory services. While routine transactions such as quotations, renewals, and policy enquiries can be automated, agents should focus on value-added activities including customer education, risk advisory services, claims assistance, and relationship management. This approach enables agents to leverage technological efficiency while maintaining the human interaction that remains important for many customers.

**Second,** insurance agencies should prioritise digital capability development through continuous professional training and upskilling programmes. Investments in digital marketing, customer relationship management systems, data analytics, artificial intelligence applications, and customer experience management can help agents remain competitive and responsive to changing market conditions. Strengthening digital competencies will not only improve productivity but also support more effective customer engagement.

**Third,** insurers and agency leaders should strengthen organisational readiness by fostering a culture of innovation, learning, and adaptability. Leadership support, effective change management, knowledge sharing, and organisational learning mechanisms are essential to ensuring that digital transformation initiatives are successfully implemented and sustained over time.

**Fourth,** policymakers and regulators should continue to strengthen digital governance frameworks that promote consumer protection, cybersecurity, data privacy, and ethical technology use. At the same time, industry-wide support initiatives, including digital training programmes and technology adoption assistance, can help smaller agencies overcome resource constraints and participate more effectively in digital transformation.

In conclusion, the review demonstrates that the future sustainability of motor insurance agents in Malaysia depends on their ability to adapt to technological disruption while continuing to provide customer-centred value. Digital transformation is neither inherently beneficial nor detrimental; rather, its outcomes depend on how effectively agents integrate technology, organisational capabilities, and personalised customer service. Motor insurance agents that embrace digital innovation, invest in capability development, and reposition

themselves as trusted advisors will be better equipped to maintain their relevance, competitiveness, and long-term sustainability in Malaysia's evolving insurance ecosystem.

**Declaration of statements**

The authors declare that there is no conflict of interest in the study.

**Disclosure statement**

No potential conflict of interest was reported by the author(s).

**Funding**

This study did not receive any financial support from funding agencies, commercial organisations, or any other interested parties.

**References**

Hu, T.-I., & Tracogna, A. (2020). Multichannel customer journeys and their determinants: Evidence from motor insurance. Journal of Retailing and Consumer Services, 54, 102022.

Barwitz, N., & Maas, P. (2018). Understanding the omnichannel customer journey: Determinants of interaction choice. Journal of Interactive Marketing, 43, 116-133.

Eckert, C., Neunsinger, C., & Osterrieder, K. (2022). Managing customer satisfaction: Digital applications for insurance companies. The Geneva Papers on Risk and Insurance: Issues and Practice, 47, 569-602.

Eling, M., & Lehmann, M. (2018). The impact of digitalization on the insurance value chain and the insurability of risks. The Geneva Papers on Risk and Insurance: Issues and Practice, 43(3), 359-396.

Chang, V. Y. L. (2024). Technology investments and firm performance under the wave of InsurTech. The Geneva Papers on Risk and Insurance: Issues and Practice, 49(3), 501-536.

Köhne, T., & Köhne, M. (2024). Uncovering the impact of digitalization on the performance of insurance distribution. Risks, 12(8), 129.

Stoeckli, E., Dremel, C., & Uebernickel, F. (2018). Exploring characteristics and transformational capabilities of InsurTech innovations to understand insurance value creation in a digital world. Electronic Markets, 28(3), 287-305.

Marano, P. (2021). Management of distribution risks and digital transformation of insurance distribution: A regulatory gap in the IDD. Risks, 9(8), 143.

Stricker, L., Wagner, J., & Zeier Röschmann, A. (2023). The future of insurance intermediation in the age of the digital platform economy. Journal of Risk and Financial Management, 16(9), 381.

Hu, T.-I., & Tracogna, A. (2021). Multichannel search patterns and webrooming behaviours in the service industries: The case of motor insurance. Italian Journal of Marketing, 57-81.

Eckert, C., & Osterrieder, K. (2020). How digitalization affects insurance companies: Overview and use cases of digital technologies. Zeitschrift für die gesamte Versicherungswissenschaft, 109, 333-360.

Eckert, C., Eckert, J., & Zitzmann, A. (2021). The status quo of digital transformation in insurance sales: An empirical analysis of the German insurance industry. Zeitschrift für die gesamte Versicherungswissenschaft, 110, 133-155.

Xu, X., & Zweifel, P. (2020). A framework for the evaluation of InsurTech. Risk Management and Insurance Review, 23(4), 305-329.

Albrecher, H., Bommier, A., Filipović, D., Koch-Medina, P., Loisel, S., & Schmeiser, H. (2019). Insurance: Models, digitalization, and data science. European Actuarial Journal, 9, 349-360.

Bohnert, A., Fritzsche, A., & Gregor, S. (2019). Digital agendas in the insurance industry: The importance of comprehensive approaches. The Geneva Papers on Risk and Insurance: Issues and Practice, 44(1), 1-19.

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. Journal of Strategic Information Systems, 28(2), 118-144.

Skaf, Y., Eid, C., Thrassou, A., El Nemar, S., & Rebeiz, K. S. (2022 2024). Technology and service quality achieving satisfaction. Lebanon.

Eckert, C., Eckert, J., & Zitzmann, A. (2023). Digital transformation in insurance sales: An empirical analysis of the effects of COVID-19. Germany

Eling, M., Nuessle, D., & Staubli, J. (2021). The impact of artificial intelligence along the insurance value chain and on the insurability of risks. Switzerland

Ramachandaran, S., Mahalley, Z., Nuraini, R., & Dhar, B. K. (2025). Exploring the challenges of AI-driven business intelligence systems in the Malaysian insurance industry. Malaysia & Thailand

Demirel, D. (2022). Digital CRM service quality and satisfaction. Turkey.

Duc, P. M. (2022). Customer satisfaction in digital banking (Vietnam). Vietnam.

Köhne, T., & Köhne, M. (2024). Uncovering the Impact of Digitalization on the Performance of Insurance Distribution.

Stricker, L., Wagner, J., & Zeier Röschmann, A. (2023). The Future of Insurance Intermediation in the Age of the Digital Platform Economy.

Wei, A., Talib, Y. Y. A., & Sharif, Z. (2025). Exploring Digital Insurance Solutions: A Systematic Literature Review and Future Research Agenda.