

## **Corporate Reputation Links Dynamic Capabilities to Performance in Indonesian Life Insurance Firms**

Ardhyanto Budirachman <sup>a,\*</sup>, Bachtiar Usman <sup>b</sup>, Wahyuningsih Santosa <sup>c</sup>

*<sup>a,b,c</sup> Program Doktor, Fakultas Ekonomi dan Bisnis, Universitas Trisakti, Indonesia*

*<sup>a\*</sup> ardhyanto@pa.adonai.co.id*

*<sup>b</sup> bachtiar.usman@trisakti.ac.id*

*<sup>c</sup> wahyuningsih@trisakti.ac.id*

### **ABSTRACT**

Prior studies link agility and digital adoption to performance and show that reputation and moral hazard matter, but the evidence remains fragmented and rarely integrated in insurance settings. This study examines how innovation, technology adoption, employee moral competence, and organizational agility shape firm performance in Indonesian life insurance through corporate reputation and moral hazards. Grounded in resource-based and dynamic capability perspectives, a survey of senior managers in Indonesian life insurance firms was conducted using partial least squares Structural Equation Modeling in Smart-PLS. Corporate reputation is the main pathway to performance; innovation, technology adoption, moral competence, and agility strengthen reputation, and reputation is strongly associated with better performance. Moral hazard control is selective: Organizational agility is associated with lower employee moral hazards, while the other antecedents show no direct association. Employees' moral hazards show a weak positive association with performance, pointing to potential short-run gains alongside conduct risk. This study integrates capability renewal, stakeholder evaluation, and ethical risk in an insurance-specific model for Indonesia, clarifying why performance gains depend more on reputation building and agile control than on capability investment alone.

*JEL Classifications: G22; L25; O33*

*Keywords: firm performance, corporate reputation, moral hazards, resource-based view, dynamic capabilities*

## I. INTRODUCTION

Life insurance performance depends heavily on intangible factors, because customers purchase long-term promises whose value becomes visible only when claims are serviced. In such settings, corporate reputation functions as an accumulated market evaluation that shapes stakeholders' willingness to engage, remain loyal, and forgive occasional service failures, which helps explain why reputable firms can sustain superior performance over time (Roberts and Dowling, 2002; Parker et al., 2020). At the same time, competitive advantage in services is increasingly shaped by digitalization and artificial intelligence, which change what resources matter and raise the premium on capabilities that can be combined, redeployed, and renewed as the environment evolves (Helfat et al., 2023; Krakowski et al., 2023). Dynamic capabilities theory further suggests that firms differ not only in their own but also in how effectively they reconfigure ordinary routines to keep pace with shifting customer expectations and risk conditions (Schulze and Brusoni, 2022). These dynamics are particularly salient for Indonesian life insurers, where growth ambitions, digital service expectations, and trust-based competition intensify the need to balance innovation with credible ethical conduct.

Despite strong investments in innovation and technology adoption, insurers often face uneven performance outcomes because service improvements can be undermined by opportunism and perceived unfairness. Reputation can rapidly deteriorate when misconduct becomes visible and scandalized, especially in industries in which stakeholders interpret violations as signals of deeper character and governance problems (Bundy et al., 2021; Han et al., 2024). In parallel, moral hazard remains a persistent friction in insurance and related contracting environments, because hidden actions and information asymmetry allow value leakage through fraud, misreporting, and opportunistic behaviors (Bhutta and Keys, 2022; Kao et al., 2022). Empirical work also shows that moral hazard and misconduct risks can be economically meaningful and difficult to detect early, creating managerial challenges in separating short-term output gains from long-term fragility (Campbell and Shang, 2022; Landais et al., 2021). Consequently, the practical problem is not only how insurers innovate and digitize but also how they prevent ethical erosion and reputational decline while doing so.

Theoretically, prior research provides important insights, but remains fragmented across capability, reputation, and moral hazard streams, leaving limited guidance on the combined mechanisms that matter in insurance. Reputation research highlights the need for conceptual clarity and shows that firms manage multiple reputational judgments that respond differently to violations but rarely connect reputation formation to a full bundle of operational and ethical capabilities (Parker et al., 2020; Bundy et al., 2021). Dynamic capabilities research explains how firms change and renew ordinary capabilities through attention control and problem solving, but it is less explicit about how such reconfiguration interacts with ethical risk and opportunism, which can erode value creation (Schulze and Brusoni, 2022; Helfat et al., 2023). Moral hazard studies in economics, finance, and operations rigorously model incentive problems and contracting frictions; however, they seldom test how firm-level capability building shapes hazards and how hazards jointly operate with reputation as channels to performance (Landais et al., 2021; Bhutta and Keys, 2022; Kao et al., 2022). Innovation research also documents

that innovation can have context-dependent performance effects, reinforcing the need to examine how stakeholder evaluations and risk control conditions shape returns from innovation and technology adoption (Li and Vermeulen, 2021).

Responding to these theoretical and practical gaps, this study is motivated by the resource-based view's emphasis on value creation and value capture through distinctive resource bundles, while recognizing that those bundles must be orchestrated and protected from value leakage (Barney, 2021; Barney et al., 2021). Therefore, this study tests an integrated framework in Indonesian life insurance firms that links innovation, technology adoption, employee moral competence, and organizational agility to firm performance through two parallel mechanisms: corporate reputation and employee moral hazards. This framing aligns with the argument that resources and capabilities must be renewed for new competitive contexts, including digitalization and shifting stakeholder expectations (Helfat et al., 2023), which recognizes that ethical capacity matters because moral disengagement and related cognitive mechanisms are strongly associated with workplace misconduct (Ogunfowora et al., 2022). By combining these elements, this study seeks to explain not only whether capability investments matter but also why performance gains are amplified in some insurers and eroded in others.

Guided by this motivation, the central research question is how innovation, technology adoption, employee moral competence, and organizational agility influence corporate reputation and employee moral hazards, and how these two mechanisms subsequently shape firm performance in Indonesian life insurance firms. This study contributes by developing and testing a unified model that connects capability renewal with stakeholder evaluation and ethical risk, addressing calls to study resource-based logic in new contexts, and clarifying the role of reputation as a strategic construct rather than a vague label (Parker et al., 2020; Helfat et al., 2023). It also extends reputation research by examining how capability and character-related inputs jointly build reputational standing in a trust-intensive industry, where violations can escalate into scandalization (Bundy et al., 2021; Han et al., 2024). Finally, by pairing corporate reputation with employee moral hazards as parallel mechanisms, this study offers a more complete account of how firms can pursue innovation and technology-driven change while confronting the incentive frictions that moral hazard research shows to be persistent and economically consequential (Kao et al., 2022; Landais et al., 2021).

## II. LITERATURE REVIEW

### A. Previous Studies and Gaps

Prior studies have provided strong but fragmented evidence on how capabilities translate into performance. In service contexts, organizational agility has been shown to mediate the knowledge–performance relationship, indicating that faster knowledge use is a critical pathway for stronger outcomes (Cegarra-Navarro et al., 2016). In parallel, technology adoption research consistently reports performance benefits, such as improved revenue and margins from deeper ICT use in service-oriented SMEs (Jongwanich and Kohpaiboon, 2025) and improved sustainable outcomes through innovation and business model enhancement following digital adoption in manufacturing (Yang et al., 2025). Reputation studies further suggest that intangible perceptions matter, yet their effects are contingent; innovation reputation can increase firm value while

producing mixed financial impacts across industry conditions (Randrianasolo and Semenov, 2025), and meta-analytic evidence indicates that the reputation–performance link is context-sensitive, weakening during crises or reputation-damaging periods (Jeon and Nolan, 2024). Ethical capability and risk are also recognized as important, with leaders’ moral competence improving employee outcomes via empowerment and trust (Kim and Kim, 2013). Moral hazard theory highlights how incentive problems shape financing choices and growth trajectories (Anderson and Nyborg, 2011).

However, clear gaps remain that justify and strengthen the significance of this research. Existing work is largely non-insurance and non-Indonesian, and typically examines only one part of the mechanism at a time, leaving limited guidance for insurers operating in emerging markets where digitalization, trust, and opportunism can interact. Critically, prior studies rarely integrate innovation, technology adoption, employee moral competence, and organizational agility into a single model, and rarely assess corporate reputation and moral hazards as dual mediators explaining why performance gains occur in some firms but are eroded in others. By testing an integrated framework in the Indonesian insurance industry, this study addresses both the contextual gap and the theoretical gap, providing a more complete explanation of how insurers can pursue innovation and digital adoption while strengthening their reputation and reducing moral hazards to improve firm performance.

**Table 1**  
Previous Studies and Gaps

| References                       | Focus & Context                                       | Key Findings   | Main Gaps                         | Relevance to This Study  |
|----------------------------------|---|--|-----------------------------------|--|
| Cegarra Navarro et al. (2016)    | Agility & knowledge management in services            | Agility mediates the knowledge–performance link, showing how quick knowledge use improves performance          | No reputation; no insurance       | Informs the agility mediator and the strategic value of knowledge processes  |
| Jongwanich and Kohpaiboon (2025) | ICT adoption in Thai SMEs                             | Deep ICT boosts revenue/margins, demonstrating that service sector depth matters                               | No reputation; SME focus          | Highlights technology adoption effects and sector differences  |
| Yang, Chen, and Sun (2025)       | Digital adoption in manufacturing                     | Adoption improves sustainable performance through enhanced innovation and business models while reducing waste | Not financial; no hazards         | Shows the technology–innovation link and suggests a shift to financial outcomes  |
| Randrianasolo and Semenov (2024) | Innovation reputation across industries               | Reputation raises value and yields mixed performance; effects vary across innovation levels                    | No moral hazard; not insurance    | Stresses innovation, reputation, and motivates broader corporate reputation investigation, and emphasizes reputational risk management |
| Kim and Kim (2013)               | Moral competence & employee outcomes                  | Competence significantly boosts performance via empowerment and encourages citizenship, and fosters trust      | Small sample; no reputation       | Supports moral competence and its role in reducing hazards   |
| Anderson and Nyborg (2011)       | Moral hazard & financing theory                       | High hazard deters equity financing; financing methods strongly influence growth paths                         | Theoretical; lacks sector context | Emphasises moral hazard significance and inspires investigation of ethical risk  |
| Jeon and Nolan (2024)            | Reputation–performance meta-analysis across sectors   | Performance substantially influences reputation strongly, but the link weakens during crises                   | No antecedents; general context   | Reinforces the need for antecedents and innovation   |
| This study                       | Innovation, technology adoption, competence & agility | Dynamically integrated model linking antecedents via reputation and moral hazards                              | No prior integrated study         | Fills insurance gap by balancing innovation and ethics, and offers practical guidance for insurers locally                             |

### **A. Resource-Based View and Dynamic Capabilities**

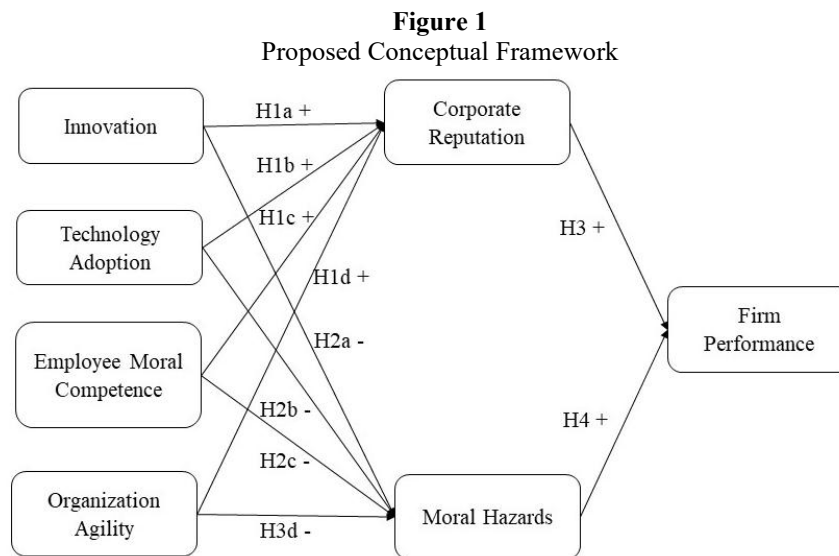
The resource-based view explains performance differences by focusing on firm-specific resources and capabilities that enable value creation and that are difficult to replicate. Barney (2021) emphasizes how this perspective explains why some firms consistently outperform others, while Barney et al. (2021) clarify that the strategic importance of resources lies in how they support value creation and capture. Recent work also argues that the resource-based view must be renewed for new competitive contexts, including digitalization and shifting stakeholder expectations, which change what resources matter and how they are studied (Helfat et al., 2023). In addition, the rise of artificial intelligence reshapes the sources of competitive advantage and increases the strategic premium for intangible capabilities that can be combined with data and technology (Krakowski et al., 2023). For insurance firms, corporate reputation can be treated as an intangible resource that is closely connected to performance outcomes, yet its effects are sensitive to context and can weaken during reputation-damaging conditions (Jeon and Nolan, 2024). Evidence of innovation reputation shows benefits for firm value but mixed effects for financial performance depending on industry conditions (Randrianasolo and Semenov, 2024). Therefore, this study positions innovation, technology adoption, employee moral competence, organizational agility, and corporate reputation as resource bundles whose performance impact depends on how well they are orchestrated and protected from moral hazard-related erosion.

Dynamic capabilities complement the resource-based view by explaining how firms renew and reconfigure their resources under change. Teece (2020) links dynamic capabilities with open innovation and highlights the need to sense opportunities, seize them through investment and design choices, and transform operations as the environment evolves. Building on this logic, Schulze and Brusoni (2022) show how dynamic capabilities reshape ordinary capabilities through attention control and problem-solving, which is especially relevant for insurers that must continuously adjust products, channels, and risk routines. Evidence from a meta-analytic study also indicates that managerial cognition is meaningfully related to dynamic capabilities, supporting the idea that how leaders perceive and interpret information matters for capability renewal (Durán and Aguado, 2022). Further, governance and organizational arrangements can shape how dynamic capabilities translate into financial outcomes, reinforcing that capability reconfiguration must be accompanied by appropriate oversight and decision-making processes (Heaton et al., 2023). In this study, organizational agility represents a visible expression of dynamic capabilities; innovation and technology adoption represent capability renewal in products and processes; and employee moral competence strengthens ethical routines that reduce moral hazard pressures, thereby supporting corporate reputation and improving firm performance in the Indonesian insurance industry.

### **B. The Study's Focus Area**

This study focuses on Indonesian insurance companies by examining how innovation, technology adoption, employee moral competence, and organizational agility shape firm performance through two parallel mechanisms: corporate reputation and moral hazards, as shown in the proposed theoretical framework in Figure 1. Evidence from the service

settings shows that agility can mediate the link between knowledge processes and performance, supporting its role as a key enabling capability for service firms (Cegarra Navarro et al., 2016). Evidence on digital capability building also indicates that deeper ICT adoption improves revenue and margins, demonstrating that the intensity of technology use matters for performance (Jongwanich and Kohpaiboon, 2025), and that digital adoption can improve outcomes through technological innovation and business model innovation, which aligns with insurers' efforts to strengthen underwriting, claims handling, and distribution processes (Yang et al., 2025). Because insurance markets rely on trust, corporate reputation is treated as a central pathway to performance while recognizing that the strength of the reputation and performance relationship can vary by context and weaken during reputation-damaging conditions (Jeon and Nolan, 2024). At the same time, moral hazards are treated as incentive and behavioral problems that can erode value creation and constrain growth, consistent with the theory that emphasizes the economic consequences of moral hazard (Anderson and Nyborg, 2011). The model therefore incorporates employee moral competence as an ethical capability that supports performance and trust-building behaviors (Kim and Kim, 2013), and tests whether strengthening these capabilities can build reputation, reduce moral hazards such as claim fraud and misselling, and ultimately improve insurer performance in Indonesia.



### III. HYPOTHESIS DEVELOPMENT

#### A. Corporate Reputation

Corporate reputation can be understood as a collective, comparative evaluation of a firm that accumulates over time through stakeholder interpretations of what the firm does and what it signals. Recent work stresses that clear conceptual boundaries are essential because reputation is frequently conflated with related constructs, which can distort

theorizing and measurement (Parker et al., 2020). The construct has progressed in strategy research from being treated as a single overall standing to being modeled as finer-grained and expectation-based, where different reputational domains shape how audiences interpret the same action. For instance, evidence on growth and dividend reputations shows that reputational expectations influence how investors interpret acquisitions and whether they view them as positive or negative expectation violations (Blagoeva et al., 2020). Complementing this expectation lens, research on multiple reputations distinguishes capability reputation from character reputation and demonstrates that the effectiveness of response strategies depends on both the type of violation and the specific reputational judgment being made, highlighting reputation as dynamic and situational rather than as a stable score (Bundy et al., 2021). Corporate reputation is also widely leveraged as a strategic asset that affects access to resources, with evidence that reputation shapes how firms respond to resource mobilization opportunities and that low- and high-reputation actors show different patterns of mobilizing funds under firm-specific versus market-wide opportunity conditions (DeSantola et al., 2024). Building on this stream, this study conceptualizes corporate reputation in the Indonesian insurance context as the overall stakeholder evaluation of an insurer's capability and character, reflected in perceptions of service reliability, claims fairness, digital service competence, and responsible conduct, and positions it as a central mediating mechanism through which innovation, technology adoption, employee moral competence, and organizational agility translate into stronger firm performance

## **B. Moral Hazards**

Moral hazards refer to incentive-driven behaviors that emerge after insurance protection or contractual coverage is granted, when one party can take hidden actions that increase the probability or size of losses while shifting part of the cost to another party. Therefore, the concept was first developed in insurance and principal-agent reasoning and has since progressed into a broader analytical lens to understand inefficiency, risk-taking, and control problems across insurance and finance. Recent empirical work continues to leverage moral hazards to separate true behavioral responses from selection effects and to quantify their economic consequences; for example, moral hazards account for a substantial share of the correlation between risk and supplemental coverage in unemployment insurance settings (Landais et al., 2021) and estimate sizable profit costs of moral hazard in an automobile insurance market following a credit-related reform (Annan, 2022). Research also uses moral hazards to motivate contract design and monitoring choices in modern insurance products and operational settings, such as business interruption insurance, where unobservable forecasting and recovery efforts create both adverse selection and moral hazard frictions that shape optimal contracting outcomes (Kao et al., 2022). Beyond traditional insurance, recent studies show how new governance and financing mechanisms can reduce moral hazard by aligning incentives such as tokenization and decentralized governance designs that alleviate effort and commitment frictions between founders, investors, and users (Chod et al., 2022), and how disclosure policies interact with moral hazard incentives and borrowing conditions in ways that affect default risk and financing costs (Fu and Trigilia, 2024). In this study, moral hazards are conceptualized as insurer-relevant opportunism and incentive misalignment that can occur both externally and internally, including claim exaggeration

or fraud, misreporting of risk information, and agent or employee behaviors that prioritize private gains over policyholder welfare and organizational integrity, and the framework posits that innovation, technology adoption, employee moral competence, and organizational agility can reduce these hazards through better monitoring, faster detection and response, and stronger ethical norms, thus improving firm performance directly and indirectly alongside corporate reputation.

### **C. Innovation**

Innovation refers to an insurer's ability to renew products, services, and internal processes through novel combinations of resources and routines, which aligns with the resource-based view that treats valuable and hard-to-imitate capabilities as foundations of sustained advantage (Helfat et al., 2023). In dynamic capability terms, innovation is not only an output, but also a reconfiguration process in which attention control and problem-solving reshape ordinary capabilities over time (Schulze and Brusoni, 2022). Prior research also shows that product innovation can be consequential, yet uncertain, as its performance implications vary with context and can involve trade-offs between risk and return (Li and Vermeulen, 2021). Therefore, for insurers, innovation represents both a strategic renewal mechanism and a way to upgrade service standards in underwriting, claims, and customer experience.

This study links innovation to corporate reputation because reputational evaluations are shaped by stakeholder interpretations of firm quality and output, and firms actively manage both capability and character reputations when facing scrutiny (Bundy et al., 2021; Parker et al., 2020). Visible innovation in claims processing, service design, and risk assessment can signal operational competence and reliability, and strengthen the capability reputation. Innovation is also expected to reduce moral hazards, because process and service innovations can embed transparency, monitoring, and accountability mechanisms that constrain opportunism. Evidence from digital platform settings shows that technology-enabled monitoring and feedback designs can reduce moral hazard and improve service quality (Liu et al., 2021), whereas internal textual signals reflecting weak control environments predict future misconduct risk (Campbell and Shang, 2022), implying that innovative control and process redesign should suppress hazards. Accordingly, this study conceptualizes innovation as an insurer-level product and process renewal that elevates corporate reputation while lowering moral hazards in Indonesian insurance operations. Thus:

*H1a: Innovation is positively related to corporate reputation*

*H2a: Innovation is negatively related to moral hazards*

### **D. Technology Adoption**

Technology adoption denotes the extent to which an insurer assimilates and routinizes digital tools and infrastructure across core activities, such as underwriting, distribution, and claims. In information systems research, digital strategic initiatives are framed as identifiable competitive moves that depend on digital resources to create appropriate value, with digital resources characterized by modularity and programmatic interfaces that enable recombination (Piccoli et al., 2021). Technology adoption can, therefore, be

strategic rather than merely operational, and firms may pursue disruptive digitalization that rewires value chains or adaptive digitalization that augments existing ones, each with distinct performance trade-offs (Sting et al., 2024). Because such shifts require coordinated resource reconfiguration, adoption is tightly connected to the dynamic capability processes of attention control and problem-solving (Schulze and Brusoni, 2022).

Technology adoption is expected to strengthen corporate reputation because digitalization can reshape stakeholder performance expectations and make service quality and responsiveness more salient in competitive evaluations (Sting et al., 2024). When reputation is viewed as a strategically relevant judgment about firm quality and output (Parker et al., 2020), demonstrable digital competence should enhance capability reputation, particularly in insurance markets, where trust is reinforced by consistent service delivery and transparent processes. Technology adoption is also theorized to reduce moral hazards by expanding monitoring capacity, traceability, and low-cost feedback channels that constrain opportunistic behavior. Empirical evidence shows that platform-based monitoring and rating designs reduce moral hazard in service provision (Liu et al., 2021) and that analytics from employee-generated text can generate forward-looking measures of misconduct risk (Campbell and Shang, 2022), suggesting that insurers adopting advanced digital tools should better detect and deter fraud, mis-selling, and procedural manipulation. In this study, technology adoption is conceptualized as the breadth and depth of digital tool use by Indonesian insurers, which enhances corporate reputation while suppressing moral hazards. Therefore:

*H1b: Technology adoption is positively related to corporate reputation*

*H2b: Technology adoption is negatively related to moral hazards*

### **E. Employee Moral Competence**

Employee moral competence reflects the workforce's capacity to recognize moral issues, exercise ethical judgment, and regulate behavior under pressure, which positions it as a form of strategic human capital within the resource-based view (Helfat et al., 2023). A closely related stream of moral disengagement is defined as the cognitive tactics used to bypass moral self-regulation, and meta-analytic evidence shows that moral disengagement is positively associated with workplace misconduct and negatively associated with task performance and citizenship behaviors (Ogunfowora et al., 2022). This highlights that ethical capability is not peripheral, since the cognitive and motivational bases of employee decisions shape both the likelihood of misconduct and organizational functioning. Complementing this, evidence indicates that insider descriptions of weak control environments embedded in employee reviews can be used to predict future corporate misconduct risk (Campbell and Shang, 2022), reinforcing the idea that ethical competence and internal climate matter for hazard prevention.

Employees' moral competence should enhance corporate reputation because reputational judgments incorporate character assessments, and firms must defend capability and character reputations differently when violations occur (Bundy et al., 2021). Misconduct can become scandalized depending on prior reputation and the evolution of media attention (Han et al., 2024). Insurers that cultivate morally competent employees should experience fewer and less severe incidents that trigger reputational

damage. As reputation also depends on stakeholder recognition of consistent quality and integrity (Parker et al., 2020), moral competence becomes a reputational asset when it translates into fair selling, accurate underwriting decisions, and ethical claims handling. Moral competence is expected to reduce moral hazards directly by strengthening moral self-regulation and counteracting the disengagement processes that enable wrongdoing (Ogunfowora et al., 2022). This study conceptualizes employee moral competence as an insurer-level ethical capability embedded in employee cognition and behavior in Indonesian insurance activities, which strengthens corporate reputation and reduces moral hazard. Thus:

*H1c: Employee moral competence is positively related to corporate reputation*

*H2c: Employee moral competence is negatively related to moral hazards*

## **F. Organization Agility**

Organizational agility is the capability to sense environmental changes, decide quickly, and reconfigure resources and routines to maintain fit, which corresponds to dynamic capability processes that modify ordinary capabilities through structured attention control and problem-solving (Schulze and Brusoni, 2022). From a renewed resource-based perspective, such adaptive capacity is crucial in new contexts where competitive advantage increasingly depends on how firms mobilize and redeploy resources rather than simply owning them (Helfat et al., 2023). In digitally turbulent environments, firms face strategic choices between disruption and adaptation, with nuanced trade-offs between relative and absolute performance gains (Sting et al., 2024), making agility a central capability for insurers to navigate regulatory change, shifting customer expectations, and emerging risk patterns.

Organizational agility is predicted to strengthen corporate reputation because reputational trajectories depend on how firms respond to stakeholder expectations and violations and because response effectiveness varies by reputational judgment type and violation nature (Bundy et al., 2021). Moreover, media scandalization processes show that reputational standing can shape how misconduct events escalate in public attention (Han et al., 2024). Agile insurers that respond swiftly and coherently to incidents can reduce escalation risk and preserve stakeholder trust. Agility is also expected to reduce moral hazards by enabling rapid detection, containment, and remediation of opportunistic behaviors such as fraud, collusion, or misselling through fast redeployment of controls and cross-unit coordination. Since employee-generated text can reveal control weaknesses that predict future misconduct risk (Campbell and Shang, 2022), agile organizations that continuously learn and adjust processes should be better positioned to close control gaps before they translate into realized hazards. This study conceptualizes organizational agility as Indonesian insurers' capability to rapidly realign structures, processes, and decision routines to market and risk changes, thereby enhancing corporate reputation and suppressing moral hazards. Therefore:

*H1d: Organization agility is positively related to corporate reputation*

*H2d: Organization agility is negatively related to moral hazards*

### **G. Firm Performance**

Firm performance represents the extent to which an insurance firm achieves superior outcomes from deploying its resources and controlling its risk exposures, typically reflected in profitability, premium growth, operational efficiency, and the ability to sustain results over time despite uncertainty. In this study, firm performance is conceptualized as the Indonesian insurer's overall performance outcomes that matter to both internal decision makers and external stakeholders, including financial outcomes such as profitability and growth, and operational outcomes such as efficiency and service reliability, because these outcomes are directly influenced by trust-based market demand and by the cost structure of claims, compliance, and service delivery. This conceptualization aligns with the logic that performance in insurance is not only a function of product and pricing choices, but also a function of how well the firm converts intangible assets and routines into stable economic results while limiting value leakage from opportunism and control failures.

Prior research treats corporate reputation as a strategic intangible asset that can produce persistent advantages, with evidence that firms with stronger reputations are more likely to sustain superior financial performance over time (Roberts and Dowling, 2002). Reputation can also shape access to critical external resources, as research shows that reputation alters how venture capital firms mobilize resources under different opportunity conditions, indicating that a favorable reputation can improve a firm's ability to attract and deploy capital that supports subsequent outcomes (DeSantola et al., 2024). At the same time, reputation can become fragile and even turn into a liability when failures occur because a high reputation can intensify stakeholder attention and negative reactions following adverse events (Rhee and Haunschild, 2006).

In contrast, moral hazards represent incentive-driven behaviors that increase losses and distort decision-making after coverage or delegation is in place. Recent evidence from private mortgage insurance shows that moral hazard can meaningfully shape risk outcomes and contribute to costly boom and bust dynamics (Bhutta and Keys, 2022). Contract design research on insurance also demonstrates that information asymmetry and moral hazard frictions affect contracting outcomes in ways that increase expected costs and complicate efficient insurance provision (Kao et al., 2022). Thus:

*H3: Corporate reputation is positively related to firm performance.*

*H4: Moral hazards are negatively related to firm performance.*

## **IV. METHOD**

### **A. Operationalization and Measures**

All constructs in the proposed framework in Figure 1 are operationalized as first-order reflective latent variables and measured using multi-item five-point Likert scales ranging from 1 strongly disagree to 5 strongly agree, administered through a self-completed questionnaire. The respondents were senior managers from Indonesian life insurance firms, including board members, general managers or vice presidents, and division managers, because they had comprehensive knowledge of firm-level capabilities, ethical conduct, reputational standing, and performance outcomes. This design follows the

guidance that firm-level phenomena should be measured with theoretically grounded multidimensional indicators and assessed through knowledgeable informants when the constructs are strategic and behavioral in nature (Richard et al., 2009; Hamann et al., 2013). The measurement items were adapted from established scales and refined to fit the life insurance context in Indonesia.

Organizational agility is measured using items that capture four key facets: responsiveness, radicalness, proactiveness, and adaptiveness, all of which are specified to load on a single organizational agility construct rather than being modeled as separate dimensions or a higher-level factor (Lee et al., 2015; Teece et al., 2016; Walter, 2021). Innovation is measured using items that reflect product, process, marketing, and organizational innovation. The full set of indicators is specified as an innovation construct consistent with capability-oriented views that treat innovation as a firm-level capacity manifested through multiple forms of renewal (Rousseau et al., 2016; Feng et al., 2020; Katebi et al., 2024). Technology adoption is operationalized with items reflecting digital transformation across processes, products, and services, capturing the extent to which digital tools are embedded into core insurance activities, and all indicators load on a single technology adoption construct (Gao et al., 2020; Deng et al., 2021; Nucci et al., 2023). Employee moral competence is assessed as a multidimensional ethical capability reflected in moral awareness, ethical decision making, and fostering an ethical environment, measured with eight items that together form one employee moral competence construct (Huhtala et al., 2021; Mesdaghinia et al., 2022; Presti et al., 2023). Corporate reputation was measured using four items capturing perceived industry standing, trust, social responsibility engagement, and customer orientation, aligned with customer- and stakeholder-based reputation approaches (Fombrun and Shanley, 1990; Roberts and Dowling, 2002; Rindova et al., 2005). Finally, firm performance is evaluated using subjective multidimensional indicators, including premium and policy growth, profit stability, operational efficiency, customer satisfaction, market share growth, and sales target achievement, consistent with recommendations for capturing both financial and nonfinancial outcomes for firm performance measurement (Richard et al., 2009; Hamann and Schiemann, 2021).

## **B. Sampling and Data Collection**

A purposive sampling approach is employed to collect data from the Indonesian life insurance industry. The sampling frame comprised life insurance companies licensed by the Financial Services Authority and registered as members of the Indonesian Life Insurance Association, all of which had operated for at least three consecutive years to enable a meaningful assessment of dynamic capabilities, reputation formation, and performance outcomes. Within each firm, senior informants, such as board members, general managers, vice presidents, and division heads, were targeted because they are most able to evaluate innovation, technology adoption, agility, ethical conduct, and firm performance at the organizational level. Data collection was conducted over three months using a structured survey distributed through online links and company email invitations, complemented by paper questionnaires administered during industry meetings and firm visits. The questionnaire was translated into Bahasa Indonesia, back-translated, and then refined through expert review and pilot testing with insurance managers to strengthen clarity and contextual fit. The responses were screened for eligibility and quality, and

incomplete or duplicate entries were removed. The final dataset consisted of 227 valid firm-level responses, which were adequate for estimating the proposed model using PLS SEM, given the number of constructs and structural paths.

### **C. Analysis Technique**

To test the hypotheses and estimate the model in Figure 1, Partial Least Squares Structural Equation Modeling was used because it is suitable for prediction-oriented models with multiple reflective constructs, and is commonly applied when firm-level survey data may not meet strict distributional assumptions (Hair et al., 2014; Henseler et al., 2016; Hair et al., 2017). Reflective measurement models were evaluated using indicator loadings, internal consistency reliability, and convergent validity, and discriminant validity was assessed using established criteria. Common method bias was mitigated through procedural remedies such as anonymity, section separation, and item counterbalancing, complemented by statistical checks such as the Harman single-factor assessment and collinearity diagnostics (Podsakoff et al., 2003; Kock, 2015). The structural model was assessed using bootstrapping with 10,000 subsamples, examining path significance, explained variance, effect sizes, and predictive relevance. Predictive performance was further evaluated using prediction-focused procedures consistent with PLS SEM practice (Henseler et al., 2016; Shmueli et al., 2019).

## **V. RESULT**

### **A. Sample Profile**

The final sample comprised 227 usable responses from senior managers in Indonesian life insurance firms, with 74.7% female and 25.3% male. Most participants were aged 31–40 years (41.4 percent), followed by those aged 41–50 years (30.0 percent), 20–30 years (20.3 percent), and > 51 years (8.4 percent). Regarding education, the majority held a bachelor's degree (72.2 percent), 17.7 percent had a diploma, and 10.1 percent held a master's degree. Most respondents occupied the division manager level (90.3 percent), with smaller proportions serving as general managers, vice presidents, or heads of division (6.3 percent), and board level directors (3.4 percent). Respondents came from diverse functional areas, led by marketing and sales (19.4 percent), risk management and compliance (16.0 percent), and operations and services (15.6 percent). The remaining roles were distributed across human resources and general affairs, underwriting, finance and investment, claims, actuarial and product, technology and digital, and other executive roles. Industry tenure was substantial, with 33.3 percent reporting 5–10 years, 29.5 percent less than 5 years, 24.1 percent 11–15 years, and 13.1 percent more than 15 years of experience in the life insurance industry, while tenure in the current company was strongest at more than 10 years (42.6 percent). Finally, most respondents worked in national life insurance companies (59.1 percent), followed by multinational life insurers (35.9 percent), and Sharia business units (5.1 percent).

## **B. Common Method Variance**

Because the data were collected using a single survey instrument from senior managers, common method variance was assessed using complementary statistical diagnostics. First, Harman's single-factor procedure was applied to evaluate whether a single latent factor dominated the covariance among the measurement items. The results indicate that the first unrotated factor accounted for only a modest share of the total variance, and no single factor emerged as overwhelmingly dominant, suggesting that common method variance is unlikely to be a serious threat to the validity of the measures. Second, common method variance was examined using the full collinearity approach by assessing variance inflation factors across the latent constructs. The collinearity diagnostics show that the VIF values remain within conservative ranges commonly recommended for evaluating common method bias in variance-based structural models, indicating that the estimates are not substantially inflated by the same-source measurement artifacts.

## **C. Validity and Reliability Assessment**

Convergent validity and internal consistency reliability were first assessed for all the reflective constructs. As shown in Table 2, the outer loadings for all indicators ranged from 0.756 to 0.892, exceeding the recommended threshold of 0.70 and indicating that each indicator loads strongly on its intended construct. Cronbach's alpha values ranged from 0.889 to 0.930, while  $\rho_a$  ranged from 0.892 to 0.947, and composite reliability  $\rho_c$  ranged from 0.923 to 0.942, all above the 0.70 cutoff and demonstrating strong internal consistency. Average variance extracted values range from 0.638 to 0.751, surpassing the 0.50 criterion and confirming that each construct explains more than half of the variance in its indicators (Hair et al., 2017). Overall, these results provide strong support for convergent validity and reliability across corporate reputation, employee moral competence, employee moral hazards, firm performance, innovation, organizational agility, and technology adoption.

Discriminant validity was evaluated using the Fornell–Larcker criterion, HTMT ratios, and cross-loadings. In Table 3, the square roots of AVE on the diagonal, ranging from 0.799 to 0.867, are consistently higher than the corresponding interconstruct correlations, satisfying the Fornell–Larcker requirement (Fornell and Larcker, 1981). The HTMT values shown in Table 3 range from 0.203 to 0.774 and remain below the conservative 0.85 threshold, indicating that the constructs are empirically distinct (Henseler et al., 2015). Finally, the cross-loadings in Table 4 further corroborate discriminant validity, as each indicator loads the highest on its associated construct relative to all other constructs.

**Table 2**  
Convergent Validity and Reliability

| Constructs                | OL            | CA    | rho a | rho c | AVE   |
|---------------------------|---------------|-------|-------|-------|-------|
| Corporate Reputation      | 0.850 - 0.892 | 0.889 | 0.892 | 0.923 | 0.751 |
| Employee Moral Competence | 0.761 - 0.855 | 0.919 | 0.920 | 0.934 | 0.638 |
| Employee Moral Hazards    | 0.791 - 0.868 | 0.930 | 0.947 | 0.942 | 0.669 |
| Firm Performance          | 0.793 - 0.832 | 0.926 | 0.927 | 0.939 | 0.659 |
| Innovation                | 0.770 - 0.824 | 0.922 | 0.923 | 0.936 | 0.647 |
| Organization Agility      | 0.756 - 0.872 | 0.925 | 0.930 | 0.939 | 0.657 |
| Technology Adoption       | 0.791 - 0.840 | 0.902 | 0.906 | 0.924 | 0.670 |

Notes: OL, Outer Loadings > 0.70; CA, Cronbach's Alpha > 0.70; AVE, Average Variance Extracted > 0.50; Composite Reliability > 0.70; rho\_a and rho\_c > 0.70.

**Table 3**  
Discriminant Validity Fornell-Larcker Criterion and HTMT

|     | CA           | EMC          | EMH          | FP           | IN           | OA           | TA           |
|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| CA  | <b>0.867</b> | 0.699        | 0.206        | 0.774        | 0.669        | 0.553        | 0.645        |
| EMC | 0.636        | <b>0.799</b> | 0.307        | 0.751        | 0.619        | 0.626        | 0.591        |
| EMH | 0.19         | 0.294        | <b>0.818</b> | 0.263        | 0.203        | 0.391        | 0.271        |
| FP  | 0.708        | 0.698        | 0.258        | <b>0.812</b> | 0.674        | 0.619        | 0.615        |
| IN  | 0.608        | 0.572        | 0.194        | 0.626        | <b>0.804</b> | 0.494        | 0.64         |
| OA  | 0.506        | 0.58         | 0.378        | 0.576        | 0.458        | <b>0.811</b> | 0.493        |
| TA  | 0.584        | 0.54         | 0.252        | 0.568        | 0.587        | 0.45         | <b>0.818</b> |

Notes: CA: Corporate Reputation; EMC: Employee Moral Competence; EMH: Employee Moral Hazards; FP: Firm Performance; IN: Innovation; OA: Organization Agility; TA: Technology Adoption.

**Table 4**  
Cross-Loadings Matrix

|      | CA    | EMC   | EMH   | FP    | IN    | OA    | TA    |
|------|-------|-------|-------|-------|-------|-------|-------|
| CR1  | 0.867 | 0.562 | 0.122 | 0.626 | 0.535 | 0.438 | 0.528 |
| CR2  | 0.850 | 0.485 | 0.181 | 0.558 | 0.511 | 0.387 | 0.494 |
| CR3  | 0.892 | 0.588 | 0.148 | 0.687 | 0.530 | 0.488 | 0.484 |
| CR4  | 0.856 | 0.563 | 0.214 | 0.574 | 0.531 | 0.435 | 0.522 |
| EMC1 | 0.562 | 0.773 | 0.209 | 0.564 | 0.460 | 0.491 | 0.444 |
| EMC2 | 0.476 | 0.761 | 0.180 | 0.497 | 0.426 | 0.443 | 0.387 |
| EMC3 | 0.482 | 0.795 | 0.244 | 0.497 | 0.460 | 0.458 | 0.364 |
| EMC4 | 0.472 | 0.796 | 0.240 | 0.537 | 0.491 | 0.484 | 0.473 |
| EMC5 | 0.468 | 0.798 | 0.222 | 0.519 | 0.440 | 0.407 | 0.402 |
| EMC6 | 0.524 | 0.855 | 0.272 | 0.620 | 0.457 | 0.473 | 0.460 |
| EMC7 | 0.517 | 0.789 | 0.262 | 0.618 | 0.467 | 0.487 | 0.446 |
| EMC8 | 0.549 | 0.820 | 0.245 | 0.589 | 0.451 | 0.459 | 0.464 |
| FP1  | 0.580 | 0.557 | 0.135 | 0.810 | 0.480 | 0.451 | 0.478 |
| FP2  | 0.622 | 0.592 | 0.228 | 0.812 | 0.547 | 0.465 | 0.510 |
| FP3  | 0.513 | 0.517 | 0.111 | 0.831 | 0.482 | 0.417 | 0.414 |

|      | CA    | EMC   | EMH          | FP           | IN           | OA           | TA           |
|------|-------|-------|--------------|--------------|--------------|--------------|--------------|
| FP4  | 0.578 | 0.547 | <i>0.224</i> | 0.793        | 0.515        | 0.429        | 0.402        |
| FP5  | 0.545 | 0.540 | <i>0.249</i> | 0.799        | 0.469        | 0.539        | 0.449        |
| FP6  | 0.551 | 0.566 | <i>0.228</i> | 0.813        | 0.479        | 0.475        | 0.445        |
| FP7  | 0.590 | 0.598 | <i>0.243</i> | 0.804        | 0.587        | 0.516        | 0.512        |
| FP8  | 0.604 | 0.602 | <i>0.241</i> | 0.832        | 0.497        | 0.447        | 0.464        |
| INN1 | 0.487 | 0.504 | 0.189        | <i>0.550</i> | 0.821        | 0.428        | 0.466        |
| INN2 | 0.433 | 0.449 | 0.156        | <i>0.490</i> | 0.787        | 0.360        | 0.439        |
| INN3 | 0.498 | 0.459 | 0.173        | <i>0.517</i> | 0.798        | 0.425        | 0.482        |
| INN4 | 0.466 | 0.403 | 0.054        | <i>0.450</i> | 0.824        | 0.298        | 0.462        |
| INN5 | 0.479 | 0.510 | 0.211        | <i>0.494</i> | 0.811        | 0.421        | 0.492        |
| INN6 | 0.543 | 0.490 | 0.157        | <i>0.532</i> | 0.797        | 0.408        | 0.494        |
| INN7 | 0.515 | 0.421 | 0.156        | <i>0.492</i> | 0.824        | 0.316        | 0.450        |
| INN8 | 0.473 | 0.429 | 0.136        | <i>0.494</i> | 0.770        | 0.276        | 0.485        |
| MHM1 | 0.127 | 0.124 | 0.795        | 0.132        | <i>0.059</i> | 0.227        | 0.155        |
| MHM2 | 0.149 | 0.239 | 0.791        | 0.183        | <i>0.192</i> | 0.264        | 0.199        |
| MHM3 | 0.128 | 0.238 | 0.810        | 0.201        | <i>0.107</i> | 0.266        | 0.191        |
| MHM4 | 0.178 | 0.222 | 0.796        | 0.213        | <i>0.151</i> | 0.298        | 0.174        |
| MHM5 | 0.163 | 0.222 | 0.812        | 0.209        | <i>0.154</i> | 0.329        | 0.171        |
| MHM6 | 0.145 | 0.276 | 0.806        | 0.205        | <i>0.198</i> | 0.265        | 0.244        |
| MHM7 | 0.127 | 0.222 | 0.868        | 0.158        | <i>0.161</i> | 0.315        | 0.219        |
| MHM8 | 0.201 | 0.320 | 0.860        | 0.316        | <i>0.203</i> | 0.431        | 0.263        |
| OA1  | 0.394 | 0.433 | 0.326        | 0.469        | 0.321        | <i>0.813</i> | 0.330        |
| OA2  | 0.416 | 0.471 | 0.266        | 0.458        | 0.419        | <i>0.805</i> | 0.407        |
| OA3  | 0.470 | 0.517 | 0.341        | 0.507        | 0.381        | <i>0.872</i> | 0.399        |
| OA4  | 0.429 | 0.472 | 0.317        | 0.492        | 0.413        | <i>0.802</i> | 0.360        |
| OA5  | 0.438 | 0.522 | 0.375        | 0.527        | 0.388        | <i>0.841</i> | 0.394        |
| OA6  | 0.406 | 0.513 | 0.250        | 0.481        | 0.393        | <i>0.810</i> | 0.330        |
| OA7  | 0.370 | 0.417 | 0.301        | 0.396        | 0.290        | <i>0.780</i> | 0.344        |
| OA8  | 0.339 | 0.401 | 0.255        | 0.387        | 0.367        | <i>0.756</i> | 0.348        |
| TA1  | 0.446 | 0.457 | 0.226        | 0.426        | 0.472        | 0.449        | <i>0.801</i> |
| TA2  | 0.418 | 0.465 | 0.218        | 0.452        | 0.465        | 0.339        | <i>0.791</i> |
| TA3  | 0.394 | 0.423 | 0.209        | 0.449        | 0.465        | 0.395        | <i>0.840</i> |
| TA4  | 0.478 | 0.382 | 0.237        | 0.406        | 0.450        | 0.301        | <i>0.808</i> |
| TA5  | 0.515 | 0.454 | 0.193        | 0.507        | 0.466        | 0.366        | <i>0.838</i> |
| TA6  | 0.583 | 0.468 | 0.163        | 0.533        | 0.552        | 0.368        | <i>0.832</i> |

Notes: Italicized values represent outer loadings.

#### D. Model Robustness

Model robustness was first evaluated using the explanatory power of the endogenous constructs and overall model fit. The R square values indicate that the model explains a substantial proportion of the variance in Corporate Reputation, with  $R^2$  equal to 0.534, and in Firm Performance, with  $R^2$  equal to 0.517, while the explained variance for Employee Moral Hazards is lower at  $R^2$  equal to 0.157. Using an average  $R^2$  of 0.403 and average AVE of 0.670, the global goodness of fit computed as the square root of the product of average  $R^2$  and average AVE yields a GoF value of 0.519, indicating that the model captures a meaningful share of variance at both the indicator and construct levels. Fit diagnostics further support model adequacy, with an SRMR of 0.053, which falls below the commonly used 0.08 threshold for approximate fit in PLS SEM, alongside  $d\_ULS$  of 3.568 and  $d\_G$  of 1.773. The chi-square value is 2199.800, and the NFI is

[https://doi.org/10.55802/IJB.030\(3\).003](https://doi.org/10.55802/IJB.030(3).003)

0.778, which together suggest an acceptable global fit for a prediction-oriented structural model of this complexity.

$$\text{GoF} = \sqrt{\text{AVE}} \times \sqrt{R^2} = \sqrt{0.443} \times \sqrt{0.746} = 0.575 \quad \text{eq. 1}$$

Predictive validity was assessed using PLS-predict, as shown in Table 5, which provides evidence of out-of-sample predictive relevance. All endogenous constructs exhibit positive  $Q^2$  prediction values, namely 0.507 for corporate reputation, 0.117 for employee moral hazards, and 0.533 for firm performance, indicating that the model generates predictions that outperform a naïve benchmark. Prediction errors are also within an acceptable range for five-point Likert scale data, with RMSE values between 0.691 and 0.950 and MAE values between 0.519 and 0.748, implying a reasonably low prediction error across the key outcomes. Overall, the combination of moderate to substantial explained variance in reputation and performance, strong GoF, acceptable approximate fit indices, and positive predictive relevance supports the robustness of the proposed model in explaining performance differences in Indonesian life insurance firms.

**Table 5**  
PLS-predict LV

| Constructs             | $Q^2$ predict | RMSE  | MAE   |
|------------------------|---------------|-------|-------|
| Corporate Reputation   | 0.507         | 0.708 | 0.519 |
| Employee Moral Hazards | 0.117         | 0.950 | 0.748 |
| Firm Performance       | 0.533         | 0.691 | 0.558 |

### E. Hypothesis Testing

The structural path results in Table 6 provide strong support for the central role of corporate reputation in explaining firm performance. Corporate reputation has a very large positive effect on firm performance ( $H_3$ ,  $\beta = 0.684$ ,  $t$ -value = 17.328,  $f^2 = 0.934$ ), and the 97.5 percent bootstrap confidence interval stays well above zero, confirming a stable positive relationship. The antecedents of corporate reputation were also supported. Innovation ( $H_{1a}$ ,  $\beta = 0.251$ ,  $t$ -value = 3.874,  $f^2 = 0.075$ ), technology adoption ( $H_{1b}$ ,  $\beta = 0.220$ ,  $t$ -value = 4.227,  $f^2 = 0.060$ ), and employee moral competence ( $H_{1c}$ ,  $\beta = 0.308$ ,  $t$ -value = 5.832,  $f^2 = 0.106$ ) have significant positive effects on corporate reputation, indicating that capability building and ethical competence contribute meaningfully to stakeholders' evaluations of life insurers. Organizational agility also contributes positively to corporate reputation ( $H_{1d}$ ,  $\beta = 0.113$ ,  $t$ -value = 1.973,  $f^2 = 0.017$ ), although this effect is comparatively small and close to the threshold for significance, suggesting a more incremental reputational contribution relative to the other antecedents.

The results on employees' moral hazards were more selective. Innovation ( $H_{2a}$ ), technology adoption ( $H_{2b}$ ), and employee moral competence ( $H_{2c}$ ) do not show statistically significant effects on employee moral hazards because their coefficients are small, their  $t$ -values fall below conventional significance levels, and their bootstrap confidence intervals include zero. In contrast, organizational agility shows a significant negative relationship with employee moral hazards ( $H_{2d}$ ,  $\beta = -0.304$ ,  $t$ -value = 3.871,  $f^2 = 0.069$ ), indicating that more agile insurers tend to report lower levels of moral hazard issues. Finally, employee moral hazards have a positive effect on firm performance ( $H_4$ ,

$\beta = 0.128$ ,  $t\text{-value} = 2.099$ ,  $f^2 = 0.033$ ), and the confidence interval remains above zero, supporting the hypothesized relationship, although the effect size is weak compared with the reputation pathway. Overall, the findings indicate that the strongest performance gains operate through corporate reputation, whereas organizational agility is the only antecedent that consistently reduces employee moral hazards in this model.

**Table 6**  
Hypothesis Testing

| Hypothesis                 | $\beta$   | $f^2$ | t-value | Bootstrapping<br>CI = 97.5%,<br>N = 10,000 |       | Decision    |
|----------------------------|-----------|-------|---------|--|-------|-------------|
|                            |           |       |         | min  | max   |             |
| H1a. IN $\rightarrow$ CR   | 0.251***  | 0.075 | 3.874   | 0.119                                      | 0.375 | Supported   |
| H1b. TA $\rightarrow$ CR   | 0.220***  | 0.06  | 4.227   | 0.115                                      | 0.321 | Supported   |
| H1c. EMC $\rightarrow$ CR  | 0.308***  | 0.106 | 5.832   | 0.205                                      | 0.413 | Supported   |
| H1d. OA $\rightarrow$ CR   | 0.113*    | 0.017 | 1.973   | -0.004                                     | 0.218 | Supported   |
| H2a. IN $\rightarrow$ EMH  | -0.059    | 0.002 | 0.662   | -0.237                                     | 0.118 | Unsupported |
| H2b. TA $\rightarrow$ EMH  | 0.096     | 0.006 | 1.139   | -0.067                                     | 0.263 | Unsupported |
| H2c. EMC $\rightarrow$ EMH | 0.100     | 0.006 | 1.083   | -0.083                                     | 0.272 | Unsupported |
| H2d. OA $\rightarrow$ EMH  | -0.304*** | 0.069 | 3.871   | -0.141                                     | 0.449 | Supported   |
| H3. CR $\rightarrow$ FP    | 0.684***  | 0.934 | 17.328  | 0.604                                      | 0.759 | Supported   |
| H4. EMH $\rightarrow$ FP   | 0.128*    | 0.033 | 2.099   | 0.011                                      | 0.251 | Supported   |

Notes: IN, Innovation; CR, Corporate Reputation; TA, Technology Adoption; EMC, Employee Moral Competence; EMH, Employee Moral Hazards; FP, Firm Performance. Significance level of  $p < 0.001$ . Effect sizes:  $f^2 > 0.02$  (weak),  $f^2 > 0.15$  (moderate),  $f^2 > 0.35$  (strong)

## VI. DISCUSSION

This study aimed to address the limited insurance and Indonesian-specific evidence by testing an integrated framework in which innovation, technology adoption, employee moral competence, and organizational agility shape firm performance through corporate reputation and moral hazards. The results indicate that this objective was largely achieved because the structural model explains substantial variance in the two central outcomes, corporate reputation with an R value of 0.534 and firm performance with an R value of 0.517, which shows positive  $Q^2$  prediction values for corporate reputation, employee moral hazards, and firm performance. In addition, hypothesis testing shows a coherent pattern in which capability and ethics variables strongly build corporate reputation, which, in turn, becomes the dominant driver of firm performance. A practical interpretation of these findings is that performance differences among Indonesian life insurers are explained less by any single operational initiative and more by whether managers can translate internal capabilities into stakeholder confidence and continuing support, consistent with the resource-based view of emphasis on value creation through intangible resources and capability orchestration (Schulze and Brusoni, 2022; Helfat et al., 2023).

The strongest supporting mechanisms appeared in the reputation pathway. Innovation, technology adoption, and employee moral competence show significant positive effects on corporate reputation, and organizational agility shows a smaller positive effect, suggesting that stakeholders reward insurers that innovate, digitize service /ation is a stakeholder judgment about both capability and character and that firms

protect multiple reputations depending on the type of expectations at stake (Parker et al., 2020; Bundy et al., 2021). This is also consistent with research on digital strategic initiatives that treat digital resources as a basis for competitive moves that can strengthen stakeholder perceptions when they improve service and reliability (Piccoli et al., 2022), and with evidence that digital disruption shapes competitive performance when firms align digital choices with strategic intent (Sting et al., 2024). The relatively stronger effect of employee moral competence on reputation can be interpreted through the lens that ethical failures are especially salient in financial services because misconduct can quickly escalate into public scandalization and reputational loss (Han et al., 2024), whereas the weaker effect of agility may reflect that agility is often more internally experienced and less directly visible to external audiences unless it is translated into noticeable improvements, such as faster claims resolution or better complaint handling.

By contrast, the moral hazard pathway is only partially supported, revealing important boundary conditions. Organizational agility significantly reduces employee moral hazards, whereas innovation, technology adoption, and employee moral competence do not show significant effects. One interpretation is that agility represents the operational ability to sense issues early and reconfigure controls quickly, which is aligned with dynamic capability arguments that attention control and problem solving enable the rapid reconfiguration of ordinary routines under uncertainty (Schulze and Brusoni, 2022). The non-significant effects of innovation and technology adoption can be viewed as a caution that capability building does not automatically translate into opportunism reduction, particularly in settings where information asymmetry is structural and incentive problems persist, as shown in contract design research, where moral hazard frictions remain central to insurance outcomes (Kao et al., 2022). This pattern also contrasts with the evidence that digital monitoring architectures can reduce moral hazard in platform settings (Liu et al., 2021), suggesting that the technology adoption captured in this study may be more oriented toward digitizing processes and customer interfaces than toward redesigning incentives and enforcement. Similarly, meta-analytic evidence on moral disengagement indicates that ethical cognition relates strongly to misconduct (Ogunfowora et al., 2022); the lack of a direct effect of employee moral competence on moral hazards may reflect the need for complementary governance, incentive alignment, and monitoring for ethical capacity to translate into lower hazards at the firm level.

Finally, the consequences on firm performance highlight the asymmetric influence of the two mediators. Corporate reputation has a very large positive effect on firm performance, reinforcing that trust and perceived reliability are decisive performance levers in insurance markets, where customers purchase promises and evaluate credibility over time. This finding aligns with work showing that reputation affects access to resources and stakeholder support, thereby shaping performance opportunities and growth capacity (DeSantola et al., 2024). This is consistent with the view that reputational dynamics influence how stakeholders interpret firm actions and respond to potential failures (Bundy et al., 2021). A surprising result is the positive relationship between employees' moral hazards and firm performance. Because the performance construct includes growth and target achievement indicators, this association may reflect short-term gains from opportunism or aggressive practices that increase sales or premiums, even though such behavior can elevate downstream risk. This interpretation is consistent with evidence that moral hazard can materially change behavior and generate economically meaningful distortions (Landais et al., 2021; Annan, 2022), and research

has also shown that moral hazard dynamics contribute to expansionary booms that later impose severe costs, implying that any short-run performance gains can coexist with longer-run fragility (Bhutta and Keys, 2022).

## VII. IMPLICATIONS

### A. Implication for Theory

This study advances this theory by integrating a capability-based view of competitive advantage with a market-facing reputation mechanism in a trust-intensive financial service setting. Prior work often examines capabilities such as innovation and digital initiatives as direct sources of value creation, yet recent theorizing emphasizes that the relevance and payoffs of resources depend on context and how firms orchestrate and redeploy them (Schulze and Brusoni, 2022; Helfat et al., 2023). Consistent with calls for sharper conceptual clarity about reputation and its role in strategy, the findings posit that corporate reputation is a central translation mechanism that converts internal capability investments into observable stakeholder evaluations, which then drive performance outcomes (Parker et al., 2020). The results also extend reputation scholarship that highlights the coexistence of capability and character judgments, and the dynamic defense of multiple reputations by showing that innovation, technology adoption, ethical competence, and agility are theoretically distinct capability inputs that accumulate into a stronger corporate reputation in Indonesian life insurance (Bundy et al., 2021). In doing so, the study connects digital strategy and competitive positioning research to reputational theory by demonstrating that digital initiatives and disruption-related choices are not only operational or strategic moves, but also signals that influence stakeholder assessments and, ultimately, firm performance (Piccoli et al., 2022; Sting et al., 2024).

This study advances this theory by integrating a capability-based view of competitive advantage with a market-facing reputation mechanism in a trust-intensive financial service setting. Prior work often examines capabilities such as innovation and digital initiatives as direct sources of value creation, yet recent theorizing emphasizes that the relevance and payoffs of resources depend on context and how firms orchestrate and redeploy them (Schulze and Brusoni, 2022; Helfat et al., 2023). Consistent with calls for sharper conceptual clarity about reputation and its role in strategy, the findings posit that corporate reputation is a central translation mechanism that converts internal capability investments into observable stakeholder evaluations, which then drive performance outcomes (Parker et al., 2020). The results also extend reputation scholarship that highlights the coexistence of capability and character judgments, and the dynamic defense of multiple reputations by showing that innovation, technology adoption, ethical competence, and agility are theoretically distinct capability inputs that accumulate into a stronger corporate reputation in Indonesian life insurance (Bundy et al., 2021). In doing so, the study connects digital strategy and competitive positioning research to reputational theory by demonstrating that digital initiatives and disruption-related choices are not only operational or strategic moves, but also signals that influence stakeholder assessments and, ultimately, firm performance (Piccoli et al., 2022; Sting et al., 2024).

## **B. Implication for Practice**

The findings show that corporate reputation is the most influential pathway to firm performance in Indonesian life insurance firms, given its large positive effect on performance and the substantial variance explained in both constructs. In practice, this implies that senior leaders should manage reputation as a strategic asset built through consistent service delivery and credible conduct, not as a communication outcome alone. Because reputation reflects both capability and character judgments, insurers need governance that aligns what the firm promises with what it delivers, particularly during complaint handling, claims disputes, or service failures, when stakeholder evaluations can shift rapidly (Parker et al., 2020; Bundy et al., 2021). A concrete example is to implement a reputation dashboard that tracks claims cycle time, complaint resolution speed, fairness indicators, and customer sentiment and review it routinely at executive risk and performance meetings so that operational issues are corrected before they become reputation-damaging events (DeSantola et al., 2024; Han et al., 2024).

Because innovation, technology adoption, and employee moral competence significantly strengthen corporate reputation, insurers should prioritize capability investments that stakeholders can clearly experience and recognize. Innovation and digital projects should therefore be selected and designed not only for internal efficiency but also for customers facing reliability, transparency, and responsiveness, because these attributes shape how stakeholders interpret competence in insurance. Digital strategy research emphasizes that digital strategic initiatives depend on digital resources that enable coherent competitive moves, which supports the adoption of technology as an integrated program rather than isolated system upgrades (Piccoli et al., 2022). In environments shaped by digital disruption, performance consequences also depend on strategic alignment and sequencing, reinforcing the need to connect digital transformation to a clear service and trust proposition (Sting et al., 2024). For example, an insurer can roll out an end-to-end claims submission and tracking application paired with proactive notifications and clear service-level commitments, which signals operational competence and improves reputation through better customer experience.

The study also indicates that organizational agility is the only antecedent that significantly reduces employee moral hazards, suggesting that hazard control depends on a firm's ability to detect issues early and reconfigure controls quickly. This points to a practical shift from static compliance routines to adaptive control systems that can respond to fraud patterns, agent behaviors, and customer tactics. Dynamic capability research explains that attention control and disciplined problem-solving enable firms to change ordinary routines, which in practice translates into fast cross-functional coordination and rapid implementation of new safeguards (Schulze and Brusoni, 2022). Insurance operations also face persistent information asymmetry and hidden action frictions; therefore, monitoring and contract design improvements must be ongoing rather than one-time initiatives (Kao et al., 2022). A practical example is standing fraud and conducting response cells that meet frequently, review anomaly alerts, update investigation thresholds, and quickly revise agent sales scripts and approval rules when mis-selling risks increase, supported by monitoring designs that reduce opportunism (Liu et al., 2021; Campbell and Shang, 2022).

Finally, the positive relationship between moral hazards and firm performance suggests that some hazard-related behaviors may coincide with short-term gains in

premium growth or target achievement, even if they increase long-term fragility. Managers should, therefore, avoid interpreting short-term performance improvements as unequivocal success when conduct and control indicators weaken. Empirical evidence shows that moral hazard can generate large behavioral distortions and costs that may emerge later and that expansionary periods can hide underlying weaknesses until losses accumulate (Landais et al., 2021; Annan, 2022; Bhutta and Keys, 2022). Workplace research also shows that moral disengagement is reliably associated with misconduct, which can undermine sustainable performance and trust (Ogunfowora et al., 2022). Accordingly, insurers should recalibrate incentives and performance dashboards so that growth metrics are balanced with leading indicators of conduct quality and control strength, with escalation rules triggered early when moral hazard signals rise, reducing the likelihood that short-term gains will evolve into scandalization and reputational backlash (Han et al., 2024).

### **VIII. CONCLUSION, LIMITATION, AND FUTURE RESEARCH**

This study developed and tested an integrated capability and ethics framework for Indonesian life insurance firms and found that the model explains meaningful variance in corporate reputation and firm performance, with corporate reputation emerging as the dominant pathway to superior performance. Innovation, technology adoption, employee moral competence, and organizational agility strengthen corporate reputation, whereas organizational agility is the only antecedent that significantly reduces employee moral hazards, indicating that adaptive execution and rapid reconfiguration are central to hazard control in practice. The study also reveals a positive association between employee moral hazards and firm performance, which may reflect short-term outcome gains within the subjective performance indicators used while potentially masking longer-term fragility and reputational exposure. The main limitations include the cross-sectional design, which restricts causal inference and the ability to observe how reputation and moral hazards evolve; reliance on self-reported firm-level perceptions that may be affected by common method variance despite diagnostic checks; and an industry and country focus that may limit generalizability to other financial service segments or institutional environments. Future research can extend these findings by using longitudinal designs to test temporal sequencing and lagged effects; incorporating objective performance; conducting risk data such as claims ratios, complaint records, fraud incidents, and regulatory sanctions; and examining boundary conditions such as firm size, ownership structure, market turbulence, governance quality, or crisis periods that may moderate how digital capability building and ethical competence translate into reputation, moral hazards, and sustained performance.

### **CONFLICT OF INTEREST STATEMENT**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

### ETHICAL STATEMENT

Ethical review and approval were not required for the study on human participants in accordance with the local legislation and institutional requirements

### REFERENCES

- Anderson, R. W., and Nyborg, K. G., 2011, "Financing and Corporate Growth under Repeated Moral Hazard," *Journal of Financial Intermediation*, 20, 1-24.
- Annan, F., 2022, "Moral Hazard in Insurance: Theory and Evidence from a Credit Reform in Ghana," *Journal of Public Economics*, 209, 104633.
- Barney, J. B., 2021, "The Emergence of Resource-Based Theory: A Personal Journey," *Journal of Management*, 47, 1663-1676.
- Barney, J. B., Ketchen, D. J., Jr., and Wright, M., 2021, "Resource-Based Theory and the Value Creation Framework," *Journal of Management*, 47, 1936-1955.
- Bhutta, N., and Keys, B. J., 2022, "Moral Hazard during the Housing Boom: Evidence from Private Mortgage Insurance," *Review of Financial Studies*, 35, 771-813.
- Blagoeva, R. R., Kavusan, K., and Jansen, J. J., 2020, "Who Violates Expectations When? How Firms' Growth and Dividend Reputations Affect Investors' Reactions to Acquisitions," *Strategic Management Journal*, 41, 1712-1742.
- Bundy, J., Iqbal, F., and Pfarrer, M. D., 2021, "Reputations in Flux: How a Firm Defends Its Multiple Reputations in Response to Different Violations," *Strategic Management Journal*, 42, 1109-1138.
- Campbell, D. W., and Shang, R., 2022, "Tone at the Bottom: Measuring Corporate Misconduct Risk from the Text of Employee Reviews," *Management Science*, 68, 7034-7053.
- Cegarra-Navarro, J. G., Soto-Acosta, P., and Wensley, A. K., 2016, "Structured Knowledge Processes and Firm Performance: The Role of Organizational Agility," *Journal of Business Research*, 69, 1544-1549.
- Chod, J., Trichakis, N., and Yang, S. A., 2022, "Platform Tokenization: Financing, Governance, and Moral Hazard," *Management Science*, 68, 6411-6433.
- Deng, Z., Liesch, P. W., and Wang, Z., 2021, "Deceptive Signaling on Globalized Digital Platforms: Institutional Hypnosis and Firm Internationalization," *Journal of International Business Studies*, 52, 1096-1120.
- DeSantola, A., Zhelyazkov, P. I., and Hallen, B. L., 2024, "Windows versus Waves of Opportunity: How Reputation Alters Venture Capital Firms' Resource Mobilization," *Strategic Management Journal*, 45, 301-332.
- Durán, W. F., and Aguado, D., 2022, "CEOs' Managerial Cognition and Dynamic Capabilities: A Meta-Analytical Study from the Microfoundations Approach," *Journal of Management & Organization*, 28, 451-479.
- Feng, C., Ma, R., and Jiang, L., 2021, "The Impact of Service Innovation on Firm Performance: A Meta-Analysis," *Journal of Service Management*, 32, 289-314.
- Fombrun, C., and Shanley, M., 1990, "What's in a Name? Reputation Building and Corporate Strategy," *Academy of Management Journal*, 33, 233-258.
- Fornell, C., and Larcker, D. F., 1981, "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18, 39-50.

- Fu, S., and Trigilia, G., 2024, "Voluntary Disclosure, Moral Hazard, and Default Risk," *Management Science*, 70, 3447-3469.
- Gao, S., Hakanen, E., and Rajala, R., 2020, "Digital Transformation: The Interplay of Explorative and Exploitative Capability Development," *Proceedings of the Annual Hawaii International Conference on System Sciences*, 4306-4315.
- Hair, J. F., 2014, "A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)," Sage.
- Hamann, P. M., Schiemann, F., Bellora, L., and Guenther, T. W., 2013, "Exploring the Dimensions of Organizational Performance: A Construct Validity Study," *Organizational Research Methods*, 16, 67-87.
- Han, J. H., Pollock, T. G., and Paruchuri, S., 2024, "Public Enemies? The Differential Effects of Reputation and Celebrity on Corporate Misconduct Scandalization," *Strategic Management Journal*, 45, 2727-2762.
- Heaton, S., Teece, D., and Agronin, E., 2023, "Dynamic Capabilities and Governance: An Empirical Investigation of Financial Performance of the Higher Education Sector," *Strategic Management Journal*, 44, 520-548.
- Helfat, C. E., Kaul, A., Ketchen, D. J., Jr., Barney, J. B., Chatain, O., and Singh, H., 2023, "Renewing the Resource-Based View: New Contexts, New Concepts, and New Methods," *Strategic Management Journal*, 44, 1357-1390.
- Henseler, J., Hubona, G., and Ray, P. A., 2016, "Using PLS Path Modeling in New Technology Research: Updated Guidelines," *Industrial Management & Data Systems*, 116, 2-20.
- Henseler, J., Ringle, C. M., and Sarstedt, M., 2015, "A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling," *Journal of the Academy of Marketing Science*, 43, 115-135.
- Huhtala, M., Fadjukoff, P., and Kroger, J., 2021, "Managers as Moral Leaders: Moral Identity Processes in the Context of Work," *Journal of Business Ethics*, 172, 639-652.
- Jeon, H. J. J., and Nolan, J., 2024, "Meta-Analytic Review of Firm Reputation and Firm Performance," *Corporate Reputation Review*, 27, 216-227.
- Jongwanich, J., and Kohpaiboon, A., 2025, "Digital Technology Adoption and the Financial Performance of SMEs: Evidence from Thailand," *Asian Economic Papers*, 24, 31-64.
- Kao, Y. M., Keskin, N. B., and Shang, K., 2022, "Impact of Information Asymmetry and Limited Production Capacity on Business Interruption Insurance," *Management Science*, 68, 2824-2841.
- Katebi, A., Eghdam, H. H., Baseri, H., and Salehi, A. M., 2024, "The Relationship between Innovation and Organizational Performance: A Meta-Analysis," *Journal of Management & Organization*, 30, 2474-2494.
- Kim, T. Y., and Kim, M., 2013, "Leaders' Moral Competence and Employee Outcomes: The Effects of Psychological Empowerment and Person-Supervisor Fit," *Journal of Business Ethics*, 112, 155-166.
- Kock, N., 2015, "Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach," *International Journal of e-Collaboration*, 11, 1-10.
- Krakowski, S., Luger, J., and Raisch, S., 2023, "Artificial Intelligence and the Changing Sources of Competitive Advantage," *Strategic Management Journal*, 44, 1425-1452.

- Landais, C., Nekoei, A., Nilsson, P., Seim, D., and Spinnewijn, J., 2021, "Risk-Based Selection in Unemployment Insurance: Evidence and Implications," *American Economic Review*, 111, 1315-1355.
- Lee, O. K., Sambamurthy, V., Lim, K. H., and Wei, K. K., 2015, "How Does IT Ambidexterity Impact Organizational Agility?," *Information Systems Research*, 26, 398-417.
- Li, X., and Vermeulen, F., 2021, "High Risk, Low Return (and Vice Versa): The Effect of Product Innovation on Firm Performance in a Transition Economy," *Academy of Management Journal*, 64, 1383-1418.
- Liu, M., Brynjolfsson, E., and Dowlatabadi, J., 2021, "Do Digital Platforms Reduce Moral Hazard? The Case of Uber and Taxis," *Management Science*, 67, 4665-4685.
- Mesdaghinia, S., Shapiro, D. L., and Eisenberger, R., 2022, "Prohibitive Voice as a Moral Act: The Role of Moral Identity, Leaders, and Workgroups," *Journal of Business Ethics*, 180, 297-311.
- Nucci, F., Puccioni, C., and Ricchi, O., 2023, "Digital Technologies and Productivity: A Firm-Level Investigation," *Economic Modelling*, 128, 106524.
- Ogunfowora, B. T., Nguyen, V. Q., Steel, P., and Hwang, C. C., 2022, "A Meta-Analytic Investigation of the Antecedents, Theoretical Correlates, and Consequences of Moral Disengagement at Work," *Journal of Applied Psychology*, 107, 746.
- Parker, O., Krause, R., and Devers, C., 2020, "Firm Reputation, Managerial Discretion, and Conceptual Clarity," *Academy of Management Review*, 45, 475-478.
- Piccoli, G., Rodriguez, J., and Grover, V., 2022, "Digital Strategic Initiatives and Digital Resources: Construct Definition and Future Research Directions," *MIS Quarterly*, 46, 2289-2316.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P., 2003, "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88, 879.
- Presti, A. L., Ambrosino, G., Barattucci, M., and Pagliaro, S., 2023, "Good Guys with Good Apples: The Moderating Role of Moral Competence on the Association between Moral Disengagement and Organizational Behaviours," *European Review of Applied Psychology*, 73, 100891.
- Randrianasolo, A., and Semenov, A. V., 2025, "Innovation Reputation, Firm Value, and Financial Performance: The Moderating Role of Industry," *Corporate Reputation Review*, 28, 130-145.
- Rhee, M., and Haunschild, P. R., 2006, "The Liability of Good Reputation: A Study of Product Recalls in the US Automobile Industry," *Organization Science*, 17, 101-117.
- Richard, P. J., Devinney, T. M., Yip, G. S., and Johnson, G., 2009, "Measuring Organizational Performance: Towards Methodological Best Practice," *Journal of Management*, 35, 718-804.
- Rindova, V. P., Williamson, I. O., Petkova, A. P., and Sever, J. M., 2005, "Being Good or Being Known: An Empirical Examination of the Dimensions, Antecedents, and Consequences of Organizational Reputation," *Academy of Management Journal*, 48, 1033-1049.
- Roberts, P. W., and Dowling, G. R., 2002, "Corporate Reputation and Sustained Superior Financial Performance," *Strategic Management Journal*, 23, 1077-1093.

- Rousseau, M. B., Mathias, B. D., Madden, L. T., and Crook, T. R., 2016, "Innovation, Firm Performance, and Appropriation: A Meta-Analysis," *International Journal of Innovation Management*, 20, 1650033.
- Schulze, A., and Brusoni, S., 2022, "How Dynamic Capabilities Change Ordinary Capabilities: Reconnecting Attention Control and Problem-Solving," *Strategic Management Journal*, 43, 2447-2477.
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., and Ringle, C. M., 2019, "Predictive Model Assessment in PLS-SEM: Guidelines for Using PLSpredict," *European Journal of Marketing*, 53, 2322-2347.
- Sting, F. J., Tarakci, M., and Recker, J., 2024, "Performance Implications of Digital Disruption in Strategic Competition," *MIS Quarterly*, 48, 1263-1278.
- Teece, D. J., 2020, "Hand in Glove: Open Innovation and the Dynamic Capabilities Framework," *Strategic Management Review*, 1, 233-253.
- Teece, D., Peteraf, M., and Leih, S., 2016, "Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy," *California Management Review*, 58, 13-35.
- Walter, A. T., 2021, "Organizational Agility: Ill-Defined and Somewhat Confusing? A Systematic Literature Review and Conceptualization," *Management Review Quarterly*, 71, 343-391.
- Yang, D., Chen, Z., and Sun, X., 2025, "Can Digital Technology Adoption Promote Sustainable Performance? Evidence from Listed Manufacturing Firms in China," *Operations Management Research*, 18, 1243-1256.