



Review Article

Artificial intelligence in ASEAN public relations: A scoping review of adoption, governance, and professional transformation

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ABSTRACT

This scoping review maps the adoption of Artificial Intelligence (AI) in public relations (PR) practice across the Association of Southeast Asian Nations (ASEAN). Guided by the Diffusion of Innovations (DOI) theory and the Technology Acceptance Model (TAM) as complementary analytical lenses, the review examines how AI is integrated into PR practice, how regional policy frameworks shape its trajectory, and what professional challenges accompany this transformation. Following the PRISMA extension for Scoping Reviews (PRISMA-ScR), 78 sources comprising peer-reviewed articles, ASEAN policy documents, and industry reports published between 2017 and 2025 were identified through Scopus, Web of Science, and Google Scholar, and analyzed through deductive thematic synthesis anchored in the two frameworks. Findings reveal that AI adoption in ASEAN PR is driven by efficiency gains, data-informed insight, and strategic agility, yet constrained by ethical concerns over authenticity and bias, data privacy challenges, and uneven digital skills across member states. Regional governance instruments such as the ASEAN Guide on AI Governance and Ethics (2024) and the ASEAN Responsible AI Roadmap (2025-2030) provide directional guidance but remain voluntary. Three trends emerge: individual AI adoption outpaces organizational governance, ethical standards remain unevenly enforced, and digital competency gaps persist as the most critical constraint. The study contributes to PR scholarship by contextualizing established adoption theories within ASEAN realities, identifying a governance-practice gap, and proposing a triadic framework of technological competence, ethical awareness, and cultural sensitivity for responsible AI integration.

1. Introduction

Artificial Intelligence (AI) is reshaping professional practice across industries worldwide, and the field of public relations (PR) is no exception. From automated content generation and predictive analytics to sentiment monitoring and stakeholder profiling, AI tools are increasingly embedded in the workflows of communication professionals (Galloway & Swiatek, 2018; Guzman & Lewis, 2024; Panda et al., 2019). The emergence of generative AI systems, particularly large language models such as ChatGPT, has further accelerated this transformation, introducing both unprecedented opportunities and complex ethical challenges (Dong & van den Berg, 2025; Salzano & Ashby-King, 2025) (see Tables 1 and 2).

Within the ASEAN region, these developments intersect with a dynamic and rapidly evolving digital economy. Southeast Asia hosts over 700 million people and is one of the world's fastest-growing internet user bases, with projections suggesting that AI could contribute between 10 and 18 percent of the region's GDP by 2030 (Chua & Dobberstein, 2020; Putra, 2024). ASEAN member states have responded with governance instruments, including the ASEAN Guide on AI Governance and Ethics (ASEAN, 2024a), the Expanded ASEAN Guide on Generative AI (ASEAN, 2025), and the ASEAN Responsible AI Roadmap for 2025 to 2030 (ASEAN, 2024b). These frameworks signal the region's commitment to balancing innovation with ethical oversight, yet the pace at which policies translate into professional practice remains insufficiently understood.

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Table 1
Key ASEAN policies and their implications for public relations practice.

Document	Year	Key AI Objectives	Implications for PR
ASEAN Guide on AI Governance and Ethics	2024	Promote responsible AI with ethical oversight	Transparency, accountability, responsible data handling
Expanded ASEAN Guide on Generative AI	2025	Address generative AI risks: misinformation, authenticity	Disclosure of AI-generated content; safeguards against manipulation
ASEAN Responsible AI Roadmap	2025-2030	Operationalize responsible AI across tiered readiness levels	Upskilling PR professionals; embedding ethical risk communication
Digital Economy Framework Agreement (DEFA)	Under negotiation	Foster cross-border digital interoperability	Compliance with harmonized privacy standards in cross-border PR
ASEAN, 2020	2021-2025	Build digital infrastructure and human capital	Foundation for AI-based media and communication development

Note. Compiled from ASEAN policy documents (ASEAN, 2024a; 2024b; 2024c, 2025).

Table 2
Synthesis of AI adoption trends among PR professionals in ASEAN.

Country/Region	Data Source	Key Finding	Implication for PR
ASEAN (General)	AEC Dialogue Survey (2024)	85% of organizations use AI; 47% expressed more concern than excitement	PR must promote ethical use and develop internal AI governance clarity
Singapore	IPRS (2023)	61% of PR professionals use generative AI; only 28% aware of organizational AI policy	Urgent need for institutional AI guidelines and professional education
Asia-Pacific	BCG Report (2025)	Region ranks second globally in generative AI adoption	PR teams should align with organizational digital transformation
Indonesia	Wulandari (2023); Wachid et al. (2024)	Practitioners recognize AI value but lack practical data analytics skills	Systematic upskilling and digital literacy programs needed
Philippines	PRSP (Pineda, 2025)	Strong focus on ethics and data privacy compliance	Integration of AI ethics and regulatory understanding in PR education

Note. Compiled from reviewed sources.

The scholarly landscape on AI in PR has grown, yet it remains fragmented across disciplines and geographically concentrated. Much of the existing research originates from Western contexts (Ger minder & Capizzo, 2025; Z erfass et al., 2020) or the Middle East (Aguer berebe et al., 2025; Al Saeedi, 2023; Khalil & Al-Ali, 2026), while ASEAN has received comparatively limited attention. Existing studies tend to focus on individual countries or specific aspects of digital transformation (Hanif et al., 2025; Wulandari, 2023), without providing a comprehensive synthesis that integrates theoretical perspectives, policy analysis, and professional practice assessment across the region.

This gap matters for several reasons. First, existing studies on AI in PR are scattered across communication studies, information systems, digital governance, and management, making integrative synthesis necessary. Second, AI use in PR within ASEAN has reached a level of practical adoption that warrants consolidation: a 2023 survey by the Institute of Public Relations of Singapore found that 61 percent of PR professionals were using generative AI tools, while a 2024 AEC Dialogue survey reported that 85 percent of ASEAN organizations had

incorporated AI into their operations (ASEAN, 2024c; IPRS, 2023). Third, ASEAN policy frameworks are advancing more rapidly than academic synthesis in communication studies. Fourth, Western-centric and Middle Eastern studies cannot be readily generalized to ASEAN due to the region's cultural, linguistic, infrastructural, and regulatory diversity, comprising ten member states with political systems ranging from constitutional monarchies to socialist republics (Putra, 2024).

Against this backdrop, the present study conducts a scoping review to map, synthesize, and critically analyze the current state of knowledge on AI adoption in ASEAN public relations. The review is guided by three research questions:

RQ1: How is AI being adopted and integrated into public relations practice across the ASEAN region?

RQ2: What roles do ASEAN-level governance frameworks play in shaping the ethical and professional dimensions of AI adoption in PR?

RQ3: What are the key opportunities, challenges, and future directions for AI-augmented public relations in ASEAN?

The study employs two complementary theoretical frameworks. Rogers' (2003) Diffusion of Innovations theory provides a macro-level lens for understanding how AI technologies spread across ASEAN's heterogeneous social systems, while Davis's (1989) Technology Acceptance Model supplies a micro-level perspective on how individual practitioners' perceptions of usefulness and ease of use shape their intention to adopt AI tools. Together, these frameworks enable a multi-level analysis that connects individual adoption behavior with systemic diffusion patterns.

This review makes three specific contributions. First, it offers a theory-informed synthesis of AI adoption in PR that integrates individual, organizational, and regional levels of analysis. Second, it provides a structured mapping of ASEAN governance frameworks to communication practice, bridging policy studies and professional communication scholarship. Third, it identifies professional readiness gaps and ethical leadership needs that can inform future empirical research, curriculum development, and capacity building.

The article is organized as follows. Section 2 presents the literature review, tracing the historical evolution of technology in PR, the theoretical frameworks, and global and regional perspectives. Section 3 details the scoping review methodology. Section 4 presents the findings. Section 5 offers a discussion that integrates findings with the frameworks and outlines future scenarios. Section 6 concludes with implications for scholarship, practice, and policy.

2. Literature review

2.1. The historical evolution of technology in public relations

The relationship between public relations and technology has evolved through several discernible phases, each fundamentally altering how communication professionals engage with publics. Understanding this trajectory is essential for situating AI as part of a longer evolution rather than an isolated disruption.

In the pre-digital era, public relations was predominantly a relationship-centered practice built on personal networks, media contacts, and face-to-face communication. Practitioners relied on manual processes for media monitoring, press release distribution, and stakeholder engagement (Grunig & Hunt, 1984). The professionalization of the field established core principles of reputation management, ethical communication, and public trust that remain foundational to contemporary practice.

The advent of Web 2.0 and social media in the early 2000s marked the first major digital transformation. Platforms such as Facebook, Twitter, and YouTube enabled direct, two-way communication between organizations and publics, shifting PR from a broadcast model to a

dialogue-centered paradigm (Kent & Taylor, 2002; Phillips & Young, 2009). Practitioners adopted digital tools for media relations, stakeholder engagement, and crisis communication, while confronting new challenges related to information overload and reputation volatility.

The subsequent rise of big data and analytics-driven PR represented a third phase. Social listening tools, sentiment analysis platforms, and audience profiling systems enabled practitioners to move from intuition-based to data-informed decision-making (Wiencierz & Röttger, 2019). This period also witnessed the early integration of basic AI capabilities, including automated media monitoring, chatbot-based stakeholder engagement (Brandtzaeg & Følstad, 2017), and predictive analytics for campaign optimization.

The current phase, marked by the widespread diffusion of generative AI since late 2022, represents a qualitative shift. Unlike earlier applications that primarily automated routine tasks, generative AI systems such as large language models can produce human-like text, images, and strategic recommendations (Guzman & Lewis, 2024). This shift raises fundamental questions about authorship, authenticity, professional identity, and the boundary between human and machine-generated communication (Dong & van den Berg, 2025; Salzano & Ashby-King, 2025). The Institute for Public Relations (2024) reported that communication executives increasingly view generative AI as a catalyst for rethinking strategic communication workflows, though they emphasize that it remains a tool rather than a strategy.

2.2. Theoretical frameworks for AI adoption in strategic communication

2.2.1. Diffusion of innovations theory

Rogers' (2003) Diffusion of Innovations (DOI) theory posits that adoption of an innovation occurs through a process comprising five stages: knowledge, persuasion, decision, implementation, and confirmation, within a social system. The rate of adoption is influenced by five perceived characteristics: relative advantage, compatibility, complexity, trialability, and observability.

In the context of ASEAN public relations, DOI theory illuminates several dynamics. The region's member states can be conceptualized as occupying uneven positions along the adoption curve. Singapore and Malaysia, with their advanced digital infrastructure and proactive AI governance frameworks, exhibit characteristics of early adopters, while countries such as Cambodia, Laos, and Myanmar align with later adopter categories (Hanif et al., 2025; Putra, 2024). The ASEAN Responsible AI Roadmap operationalizes this concept by classifying member states into Emerging, Promising, and Advanced tiers (ASEAN, 2024b).

Furthermore, DOI's emphasis on the social system is particularly relevant to ASEAN. The region's distinctive norm of consensual decision-making, commonly termed the ASEAN Way, shapes how AI governance policies are negotiated and implemented across diverse political systems (Putra, 2024). Professional associations, universities, and regional bodies function as change agents and opinion leaders in Rogers' framework, actively promoting AI literacy and ethical standards.

2.2.2. Technology acceptance model

The Technology Acceptance Model (TAM), developed by Davis (1989), posits that an individual's intention to adopt a new technology is primarily determined by two factors: perceived usefulness (PU) and perceived ease of use (PEOU). External variables such as training, organizational support, and social influence mediate these perceptions (Venkatesh & Davis, 2000).

TAM has been extensively validated across diverse contexts and has been extended through TAM2 (Venkatesh & Davis, 2000), UTAUT (Venkatesh et al., 2003), and field-specific adaptations for communication practitioners (Al Saeedi, 2023; Khalil & Al-Ali, 2026). In the ASEAN context, TAM is especially useful for understanding the gap observed between practitioners who perceive clear productivity benefits from AI and those who are deterred by complexity, lack of training, or ethical uncertainty. Wulandari (2023) found that Indonesian PR

practitioners recognized the value of AI tools but lacked practical skills in data analytics and content automation, suggesting that perceived ease of use remains a significant barrier.

Importantly, the predictive utility of both frameworks depends on contextual sensitivity. In ASEAN, perceived ease of use may be constrained by limited training resources, language barriers, and uneven institutional support, while perceived usefulness may be shaped not only by productivity gains but also by socio-cultural values such as collective well-being and social cohesion (Zahid & Mukhtar, 2024). Together, DOI and TAM provide a multi-level analytical framework employed deductively in the thematic analysis.

2.3. Global and regional perspectives on AI in public relations

Research on AI adoption in public relations has expanded since 2020, though it remains geographically uneven. In the Western context, the European Communication Monitor has tracked growing AI use among European communication professionals, reporting increasing adoption of automated tools for media monitoring, audience analytics, and content creation (Zerfass et al., 2020). Recent studies have examined how communication leaders are integrating generative AI into organizational workflows, finding that the technology is primarily used for idea generation, content drafting, and workflow efficiency, though concerns about security, misinformation, and ethical use persist (Germinder & Capizzo, 2025; IPR, 2024).

Scholarship on AI and PR ethics has intensified following the widespread diffusion of large language models. Salzano and Ashby-King (2025) conducted a critical thematic analysis of instructional guidance for PR practitioners on using generative AI, finding that the examined texts primarily emphasized efficiency gains while paying limited attention to ethical implications. Dong and van den Berg (2025) revisited PR professionalism and ethics in the generative AI era, highlighting practitioner concerns about authenticity, transparency, and the boundary between human judgment and machine output. Oh and Ki (2024) examined whether AI-mediated communication could sustain organization-public relationships.

In the Middle East, Al Saeedi (2023) employed TAM to study AI adoption among communication professionals in the United Arab Emirates, identifying perceived ease of use and productivity benefits as key adoption drivers, alongside barriers related to the absence of ethical guidelines and professional training. Khalil and Al-Ali (2026) extended this work by examining AI adoption in UAE government public relations through the complementary lenses of TAM and the Theory of Reasoned Action, finding that multi-level leadership support is critical for sustainable adoption.

Cultural context significantly shapes AI adoption patterns. Zahid and Mukhtar (2024) conducted a cross-cultural comparison between the United States and Pakistan, finding that societies scoring high on uncertainty avoidance exhibit greater caution toward AI adoption. Jeong and Park (2023) examined AI's influence on public relations through the Organization-Situation-Public-Communication model, demonstrating that cultural dimensions shape individual attitudes toward AI adoption.

Within ASEAN, the evidence base, while growing, remains limited and concentrated in a few countries. Wulandari (2023) found that Indonesian PR practitioners often overestimated their digital competencies, with significant gaps in data analytics. Wachid et al. (2024) documented the evolving human resource dimension in Indonesia's digital PR landscape. Hanif et al. (2025) analyzed digital development trajectories among the top five ASEAN countries, revealing both convergence and divergence patterns. Putra (2024), published in *Frontiers in Artificial Intelligence*, examined AI governance challenges through the lens of ASEAN's unique political norms. Despite this growing body of work, no comprehensive review exists that integrates theoretical perspectives on technology adoption, policy analysis of ASEAN governance frameworks, and assessment of professional practice

readiness across the region. This scoping review addresses that integrative gap.

3. Method

3.1. Study design and rationale

This study employs a scoping review methodology, following the framework developed by Arksey and O'Malley (2005), refined by Levac et al. (2010), and the JBI Manual for Evidence Synthesis (Peters et al., 2020). Scoping reviews are particularly suited to mapping the breadth of evidence on emerging topics, identifying key concepts and knowledge gaps, and clarifying conceptual boundaries (Tricco et al., 2018). Given that AI adoption in ASEAN public relations is an emerging, interdisciplinary field where research is scattered across communication studies, information systems, digital governance, and regional studies, a scoping review is more appropriate than a systematic review (Munn et al., 2018). The review adheres to the PRISMA extension for Scoping Reviews (PRISMA-ScR) reporting guidelines (Tricco et al., 2018) to ensure transparency and reproducibility.

3.2. Search strategy

The literature search was conducted between January and April 2025 across three academic databases: Scopus, Web of Science, and Google Scholar. These databases were selected for their comprehensive coverage of peer-reviewed literature in the social sciences, communication studies, and information systems. Targeted searches were also conducted on the ASEAN Secretariat website, institutional repositories of professional associations (the Institute of Public Relations of Singapore, the Public Relations Society of the Philippines, and the Global Alliance for Public Relations and Communication Management), and relevant policy archives.

The search employed the following keyword combinations using Boolean operators: (a) "artificial intelligence" OR "AI" OR "generative AI" OR "machine learning" AND "public relations" OR "strategic communication" OR "corporate communication"; (b) "artificial intelligence" OR "AI" AND "ASEAN" OR "Southeast Asia" OR individual country names; (c) "AI governance" OR "AI ethics" OR "responsible AI" AND "ASEAN"; and (d) "technology adoption" OR "diffusion of innovations" OR "technology acceptance model" AND "public relations" AND "AI". The search was limited to sources published between 2017 and 2025, capturing the period of accelerated AI development and the subsequent emergence of generative AI.

3.3. Inclusion and exclusion criteria

Sources were included if they met all of the following criteria: (a) they addressed AI adoption, use, or governance in public relations, strategic communication, or a closely related communication discipline; (b) they focused on or were applicable to the ASEAN region, or provided global or theoretical perspectives directly relevant to understanding ASEAN's context; (c) they were published in peer-reviewed journals, as chapters in edited volumes, or as official policy and governance documents from recognized institutions; and (d) they were published between 2017 and 2025. Sources were excluded if they addressed AI in unrelated sectors without connection to communication practice, were opinion pieces without institutional affiliation, were duplicates across databases, or were not available in full text.

3.4. Screening and selection process

The screening followed a two-stage approach. In the first stage, titles and abstracts of identified records were screened against the inclusion criteria. In the second stage, full texts of potentially relevant sources were reviewed for eligibility. The lead author conducted the primary

screening, with discrepancies resolved through discussion among the research team. A total of 247 records were initially identified across databases. After removing 43 duplicates, 204 records underwent title and abstract screening, of which 112 were excluded for not meeting inclusion criteria. Full-text assessment of the remaining 92 sources resulted in the exclusion of 14 sources (7 were opinion pieces without scholarly grounding, 4 addressed AI in sectors unrelated to communication, and 3 were unavailable in full text). The final review included 78 sources: 48 peer-reviewed journal articles and book chapters, 15 official ASEAN and national policy documents, and 15 institutional reports. Fig. 1 presents the PRISMA-ScR flow diagram for this review process.

3.5. Data extraction

Data from each included source were extracted into a standardized template capturing: author(s) and year, source type (peer-reviewed article, policy document, industry report), study focus (AI adoption, governance, ethics, professional competency), geographic context, theoretical or conceptual framework employed, methodology, and key findings relevant to the research questions.

3.6. Thematic analysis

The extracted data were analyzed through a deductive thematic synthesis approach (Braun & Clarke, 2006). Initial coding was guided by the two theoretical frameworks: DOI categories (relative advantage, compatibility, complexity, trialability, observability, adopter categories, social system factors) and TAM constructs (perceived usefulness, perceived ease of use, external variables). Codes were subsequently refined through inductive analysis, allowing themes to emerge from the data that were not anticipated by the frameworks. This iterative process resulted in four thematic clusters: (1) ASEAN AI governance and policy architecture, (2) patterns and drivers of AI adoption in PR, (3) professional readiness and capacity building, and (4) ethical challenges and opportunities.

3.7. Methodological limitations and potential biases

Several limitations should be acknowledged. First, as a scoping review conducted primarily by a single researcher, the study may be subject to selection and interpretation biases, which were mitigated through adherence to the PRISMA-ScR protocol and team-based discussion of coding decisions. Second, the review is weighted toward English-language sources, which may underrepresent scholarship published in Southeast Asian languages. Third, given ASEAN's heterogeneity, evidence is unevenly distributed across member states, with Singapore, Indonesia, and Malaysia disproportionately represented. Fourth, the inclusion of policy documents and industry reports alongside peer-reviewed literature introduces variation in analytical rigor; these sources were treated as contextual complements rather than substitutes for peer-reviewed evidence. Finally, the rapidly evolving nature of generative AI means that some findings may be overtaken by developments occurring after the review period.

4. Findings

The findings are organized into four thematic sections corresponding to the clusters identified through thematic analysis. Each section integrates evidence from the reviewed sources and is interpreted through the DOI and TAM frameworks.

4.1. ASEAN AI governance and policy architecture

ASEAN's approach to AI governance rests on a network of interconnected policy frameworks that balance economic opportunity with ethical oversight. The foundational document is the ASEAN Guide on AI

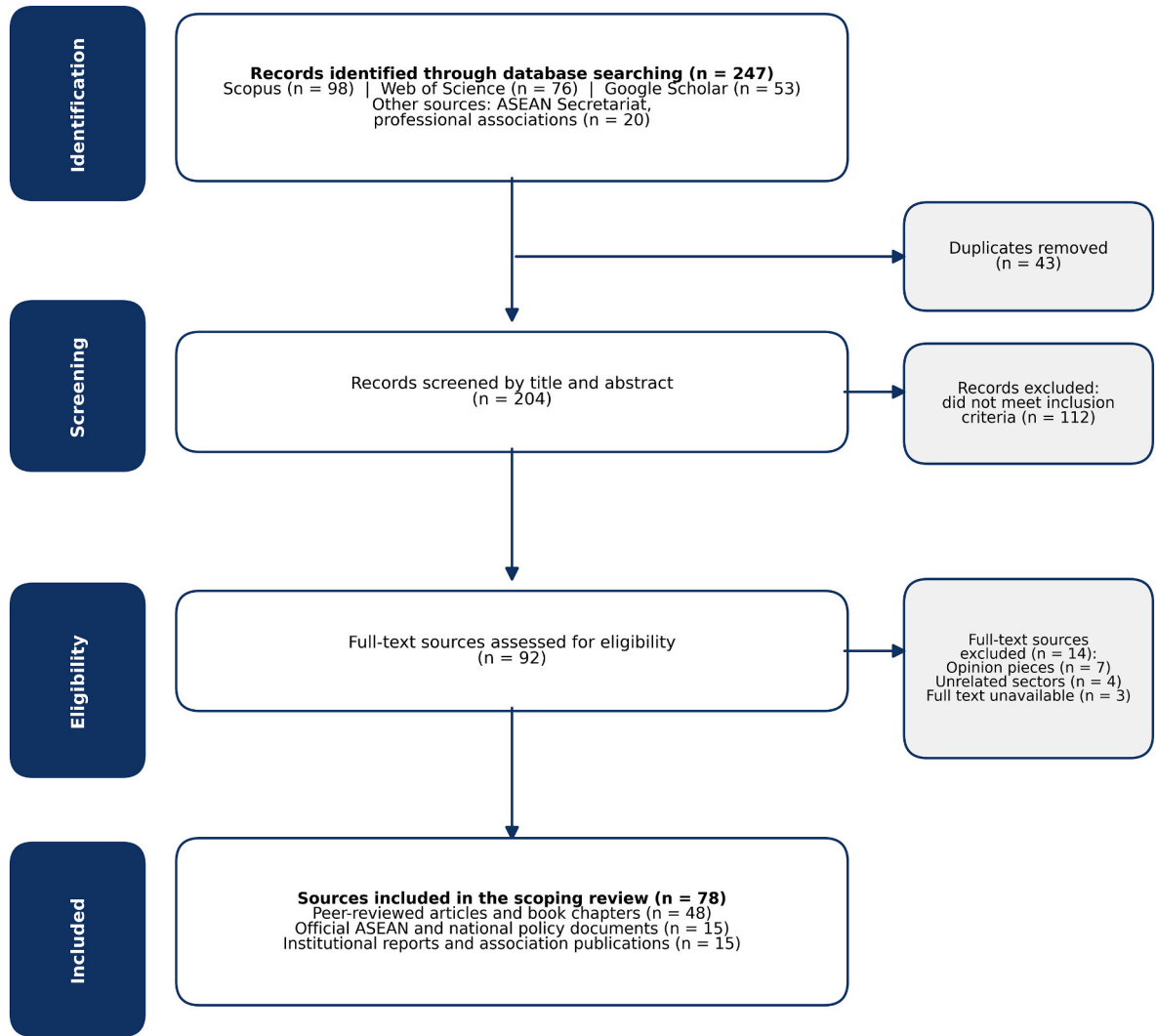


Fig. 1. PRISMA-ScR flow diagram for the scoping review Process
Note. Adapted from PRISMA-ScR (Tricco et al., 2018).

Governance and Ethics, endorsed at the Fourth ASEAN Digital Ministers Meeting in February 2024. This guide articulates seven core principles: transparency, fairness and equity, security and safety, reliability and robustness, privacy and data governance, accountability, and human-centricity (ASEAN, 2024a). Importantly, the guide adopts a voluntary, principles-based approach rather than binding regulation, reflecting ASEAN's norm of non-interference and consensus-based decision-making (Putra, 2024). This approach provides flexibility for member states at various stages of AI readiness but also raises concerns about enforcement and implementation consistency.

Complementing this foundational guide, the Expanded ASEAN Guide on AI Governance and Ethics for Generative AI (ASEAN, 2025) addresses the specific risks and opportunities associated with generative models, highlighting concerns about misinformation, content authenticity, and accountability within complex AI value chains. For communication professionals, these guidelines underscore the importance of disclosing AI-generated content, safeguarding against manipulation, and maintaining human oversight in automated communication processes.

The ASEAN Responsible AI Roadmap (2025 to 2030) translates these principles into an actionable framework by classifying member states into three tiers of readiness: Emerging, Promising, and Advanced (ASEAN, 2024b). Each tier receives tailored guidance across three pillars: strengthening institutional governance, fostering human capital for AI-augmented decision-making, and developing accountability

mechanisms. Through the lens of DOI theory, this tiered approach acknowledges that the rate of AI diffusion varies systematically across the region's social systems, with advanced economies such as Singapore functioning as innovation leaders.

At the broader regional level, the Digital Economy Framework Agreement (DEFA), currently under negotiation, aims to integrate digital trade and facilitate cross-border data flows across ASEAN. DEFA's emphasis on interoperability and digital trust has tangible consequences for AI-enabled communication, particularly for PR practitioners managing cross-border campaigns where data mobility and privacy regulations vary across jurisdictions. Earlier masterplans, including the ASEAN ICT Masterplan (2020) and the ASEAN, 2020, built the foundational digital infrastructure upon which current AI governance efforts rest.

The intersection of these policies creates both opportunities and responsibilities for the PR profession. ASEAN provides a broad enabling framework for adopting AI-augmented communication, while the region's emphasis on ethical AI use means that practitioners must balance innovation with transparency, accountability, and respect for cultural diversity.

4.2. Patterns and drivers of AI adoption in PR

The reviewed evidence reveals that AI adoption in ASEAN public relations is proceeding unevenly but with growing momentum. Drawing

on TAM constructs, practitioners who perceive clear productivity benefits and encounter user-friendly tools are more likely to adopt AI. The [IPRS \(2023\)](#) survey found that 61 percent of PR and communication professionals in Singapore used generative AI tools for tasks such as drafting press releases, analyzing media sentiment, and managing social media content. However, only 28 percent reported awareness of their organization's AI policy, and merely 18 percent expressed confidence regarding the boundaries of permissible use. This disparity illustrates a governance gap, where the speed of individual technology adoption outpaces the development of institutional frameworks.

At the regional level, the AEC Dialogue survey of 2024 reported that 85 percent of ASEAN organizations were using some form of AI in their operations ([ASEAN, 2024c](#)). However, 47 percent of respondents expressed more concern than excitement regarding generative AI, citing data privacy, misinformation, and content authenticity as primary worries. This ambivalence is consistent with the paradox identified in global studies: organizations acknowledge AI's strategic value while harboring significant apprehension about its social and ethical consequences ([IPR, 2024](#)).

Across the region, practitioners are primarily deploying AI for media monitoring, real-time sentiment analysis, predictive stakeholder analytics, and content generation. The Boston Consulting Group reported that the Asia-Pacific region ranks second globally in generative AI adoption, trailing only North America ([de Laubier et al., 2025](#)). At the country level, adoption patterns reflect the differential readiness documented in the ASEAN Responsible AI Roadmap. Singapore and Malaysia, classified as Advanced, exhibit the highest levels of AI integration in communication practice. Indonesia and the Philippines occupy the Promising category, characterized by growing practitioner awareness but persistent gaps in technical skills and institutional governance.

Interpreting these patterns through DOI theory, the relative advantage of AI tools for PR is universally acknowledged across the region. However, complexity (perceived difficulty and skill requirements), compatibility (alignment with existing professional norms and cultural values), and observability (visibility of successful AI use cases) vary across member states. These variations explain the uneven adoption curve and suggest that diffusion will accelerate only as complexity barriers are reduced through training and as observability increases through dissemination of regional success stories.

4.3. Professional associations, education, and capacity building

Professional associations across ASEAN are emerging as critical intermediaries in the AI adoption process. Within DOI theory, these organizations function as change agents and opinion leaders, bridging the gap between global ethical standards and local professional practice. In Singapore, the Institute of Public Relations of Singapore (IPRS) published the AI Guidance for Public Relations and Communication Specialists in 2023, developed in collaboration with the consultancy Sandpiper. This document establishes principles of accountability, transparency, and capability enhancement ([IPRS, 2023](#)).

In the Philippines, the Public Relations Society of the Philippines (PRSP) has actively promoted AI literacy and ethics through its training programs. PRSP leadership has emphasized the need to integrate analytics, creativity, and compliance with the national Data Privacy Act of 2012, reflecting a context-specific approach to AI adoption that addresses both technical and regulatory dimensions ([Pineda, 2025](#)). In Malaysia, the Public Relations and Communications Association of Malaysia (PRCAM) featured AI prominently in the Global PR Festival 2025, scheduled as part of Malaysia's ASEAN chairmanship ([The Vibes, 2025](#)). At the regional level, the Global Alliance for Public Relations and Communication Management is collaborating with ASEAN-based associations to advocate for its Principles for Ethical and Responsible Use of Artificial Intelligence ([Green, 2025](#)). In Indonesia, the PERHUMAS framework for national communication competence has incorporated

digital literacy modules aimed at addressing the skills gaps identified by [Wulandari \(2023\)](#) and [Wachid et al. \(2024\)](#).

Despite these efforts, the evidence indicates that capacity building remains fragmented and insufficient. [Wulandari \(2023\)](#) documented that many Indonesian PR practitioners overestimated their digital competencies while demonstrating limited proficiency in data analytics. The gap between self-assessed and actual competency underscores the need for rigorous, standardized professional development programs. Universities in the region are beginning to respond; Chulalongkorn University in Thailand, for instance, has conducted seminars on AI applications in strategic PR planning in collaboration with the Global Alliance ([Global Alliance, 2024](#)). However, the integration of AI ethics and data literacy into formal PR curricula across ASEAN remains at an early stage.

4.4. Ethical challenges and opportunities

The integration of AI into ASEAN public relations presents a dual-edged dynamic: substantial opportunities for enhancing communication effectiveness alongside significant ethical challenges that require proactive governance. On the opportunity side, AI tools enable PR practitioners to process large-scale audience data, monitor sentiment across multilingual environments, generate targeted content for diverse cultural audiences, and predict reputational risks. In the ASEAN context, where over 1000 languages and dialects are spoken and digital economies are expanding rapidly, these capabilities have strategic value. Machine translation and speech recognition technologies have potential for enhancing public communication accessibility and fostering inclusivity across the region's linguistically diverse populations.

At the organizational level, AI is catalyzing a shift in the professional identity of PR practitioners. Roles are evolving from primarily tactical communication functions toward hybrid positions that combine strategic communication, data analysis, and ethical oversight ([Hanif et al., 2025](#)). This evolution aligns with the broader trend, documented in global PR scholarship, of the profession's increasing integration with organizational strategy and decision-making processes.

However, the ethical challenges are considerable. The most prominent concern involves authenticity. As generative AI tools become increasingly sophisticated, distinguishing between human-produced and machine-generated content becomes progressively more difficult. This blurring raises fundamental questions about attribution, trust, and the integrity of the communicator-public relationship. The ASEAN Guide on AI Governance and Ethics (2024a) cautions against the undisclosed application of AI in communication, reinforcing the principle that human oversight must remain central.

Bias and fairness represent another critical challenge. AI systems trained on unbalanced or culturally narrow datasets may produce outputs that perpetuate stereotypes, misrepresent local perspectives, or unfairly target certain population segments. In a region with such extraordinary cultural and linguistic diversity, these risks of algorithmic bias require more than technical audits; they demand ethical reflexivity among communication professionals and inclusive approaches to AI system design.

Data privacy and security constitute perennial concerns. AI tools require substantial data, often including sensitive personal information. Practitioners must navigate a patchwork of national privacy laws, including the Philippine Data Privacy Act of 2012 and Singapore's Personal Data Protection Act, alongside the evolving ASEAN frameworks on data governance. Non-compliance risks not only legal consequences but also erosion of public trust. Finally, the question of accountability in automated decision-making is becoming increasingly salient. When AI systems generate content or analyze stakeholders, determining responsibility for errors requires clear governance structures. The ASEAN Responsible AI Roadmap (2024b) calls for shared responsibility models, but operationalizing these models in the fast-moving context of daily PR practice remains a challenge.

5. Discussion

5.1. Integrating findings with theoretical frameworks

The findings of this scoping review, when interpreted through the dual lenses of DOI and TAM, reveal a complex and multi-layered picture of AI adoption in ASEAN public relations. At the systemic level, DOI theory illuminates how ASEAN's institutional architecture shapes diffusion patterns. The region's tiered readiness structure, as operationalized in the Responsible AI Roadmap, mirrors Rogers' (2003) adopter categories, with Singapore functioning as an innovator and early adopter, Malaysia and Thailand occupying the early majority position, and several CLMV countries positioned as late majority or laggards.

At the individual level, TAM helps explain the governance gap documented in the findings. Practitioners who perceive clear usefulness in AI tools are adopting them rapidly, often outpacing their organizations' capacity to establish governance frameworks. The low awareness of organizational AI policies reported in the *IPRS (2023)* survey (28 percent) suggests that perceived usefulness is driving adoption even in the absence of institutional guidance. However, perceived ease of use remains a barrier, particularly for practitioners lacking training in data analytics. The interplay between DOI and TAM also highlights the role of contextual variables often undertheorized in technology adoption research. In ASEAN, perceived usefulness is shaped not only by productivity gains but also by socio-cultural factors such as collective orientation, respect for hierarchy, and varying approaches to uncertainty avoidance (Zahid & Mukhtar, 2024). These contextual factors suggest that Western-developed technology adoption models require careful adaptation when applied to the ASEAN context.

5.2. The governance-practice gap

A central finding of this review is the existence of a governance-practice gap in ASEAN's AI-augmented PR sector. This gap manifests at three levels. At the policy level, ASEAN governance frameworks are principles-based and voluntary, providing directional guidance without binding enforcement. While this approach is consistent with ASEAN's consensual governance tradition, it creates ambiguity for practitioners seeking clear operational standards. At the organizational level, AI tools are being adopted by individual practitioners faster than organizations can develop policies, training programs, and accountability structures. At the professional level, ethical guidelines from associations such as *IPRS* and *PRSP* represent important first steps, but their reach remains limited and their integration into daily practice is uneven. Addressing this gap requires coordinated action across multiple levels: policy harmonization that translates voluntary principles into operational standards; organizational investment in AI governance structures, training, and ethical review processes; and professional development programs that build both technical competency and ethical reasoning capacity.

5.3. Future scenarios for AI in ASEAN public relations

Drawing on the reviewed evidence and the analytical frameworks employed, three plausible future scenarios for AI in ASEAN public relations can be identified.

Scenario 1: Responsible AI Integration. In this scenario, AI augments PR work under strong governance, where regional and national frameworks achieve meaningful harmonization, professional associations establish widely adopted ethical standards, and universities integrate AI ethics into PR curricula. Trust, transparency, and human oversight become defining features of ASEAN PR practice. This scenario requires sustained policy commitment, investment in education, and active collaboration among governments, industry, and professional bodies.

Scenario 2: Fragmented Adoption. In this scenario, individual practitioners and forward-looking organizations adopt AI rapidly, but governance, training, and ethical standards develop unevenly. Some countries and firms achieve sophisticated AI-augmented PR, while others experience ethical incidents, misinformation crises, or public trust deficits resulting from poorly governed AI use. This scenario reflects a continuation of current trends and is the most probable outcome absent deliberate intervention.

Scenario 3: Governance-Led Standardization. In this scenario, ASEAN-level frameworks, potentially reinforced through DEFA provisions, significantly shape PR practice and establish cross-border communication norms. Regional certification standards for AI literacy and ethics in communication emerge, creating a distinctive ASEAN model of responsible AI-augmented PR. This scenario requires stronger institutional mechanisms than currently exist but aligns with ASEAN's stated aspiration of becoming a resilient, inclusive, and people-centered digital community.

5.4. Toward a triadic framework for ethical AI integration

Based on the review's findings, a triadic framework for responsible AI integration in ASEAN PR practice is proposed, encompassing three interdependent components. The first component is **Technological Competence**, encompassing mastery of AI tools, understanding of data structures and algorithmic processes, and the ability to critically evaluate AI outputs for accuracy, bias, and appropriateness. This competence goes beyond tool proficiency to include data literacy and critical thinking about AI systems' capabilities and limitations.

The second component is **Ethical Awareness**, comprising the capacity for moral reasoning about AI-mediated communication, understanding of disclosure obligations, informed consent principles, and the professional responsibility to maintain human oversight. This awareness must be grounded in both global ethical standards and the specific cultural values and regulatory requirements of each ASEAN member state. The third component is **Cultural Sensitivity**, encompassing respect for the extraordinary linguistic, cultural, and political diversity of the ASEAN region. AI tools must be deployed with awareness of their potential for cultural bias, and communication strategies must be adapted to the norms, values, and communication preferences of diverse ASEAN publics. This triadic model aligns with ASEAN's articulated commitment to ethical and inclusive digital transformation and provides a practical framework for professional development, organizational governance, and educational curriculum design.

6. Conclusion

This scoping review has mapped the evolving landscape of AI adoption in ASEAN public relations, integrating theoretical, policy, and practice-level evidence. The findings indicate that AI integration in the region's PR sector is driven by clear productivity advantages and the strategic demands of ASEAN's rapidly growing digital economy. However, the adoption process is characterized by significant unevenness across member states, a persistent gap between individual technology use and organizational governance, and ethical challenges that require proactive attention.

The theoretical frameworks employed in this review, DOI and TAM, have demonstrated continued utility for understanding AI adoption in communication contexts, while also revealing the need for contextual adaptation when applied to the culturally and institutionally diverse ASEAN region. The region's governance architecture, anchored in the ASEAN Guide on AI Governance and Ethics (2024a) and the Responsible AI Roadmap (2025 to 2030), provides a promising foundation for responsible innovation, but its voluntary nature means that professional associations, educational institutions, and individual organizations must play active complementary roles.

Three priority areas for advancing responsible AI integration in

ASEAN PR emerge from this review. First, developing digital literacies and data competencies through systematic professional development and curricular reform that extends beyond tool proficiency to encompass critical data analysis, algorithmic awareness, and ethical reasoning. Second, establishing ethical norms through collaboration between professional associations, industry, and academia, with particular attention to standards for disclosure, authorship, and accountability that are adapted to ASEAN's diverse cultural contexts. Third, fostering cross-institutional collaboration that connects education, industry, and government to bridge both technological and knowledge gaps across the region.

This study has several limitations. As a scoping review, it maps the breadth of evidence rather than evaluating the quality of individual studies. The evidence base is unevenly distributed across ASEAN member states. The rapidly evolving nature of generative AI means that the landscape may shift significantly in the coming years. Future research should address these limitations through longitudinal empirical studies that track changes in AI governance awareness and adoption behavior over time, cross-national comparative studies that examine the influence of organizational culture and regulatory maturity, and action research that develops and evaluates training interventions for AI literacy in ASEAN PR education.

As ASEAN pursues its collective vision of a resilient, inclusive, and people-centered digital community, PR practitioners bear a distinctive responsibility to ensure that AI serves to reinforce trust, transparency, and mutual understanding between institutions and publics, rather than to replace the human empathy, judgment, and creativity that remain at the heart of effective communication.

CRediT authorship contribution statement

Past Novel Larasaty: Conceptualization, Methodology, Investigation, Formal Analysis, Data Curation, Writing – Original Draft, Writing – Review & Editing, Resources. **Budi Riyanto:** Conceptualization, Theoretical Framework Design, Methodology, Investigation, Formal Analysis, Validation, Writing – Original Draft, Writing – Review & Editing, Resources. **Dhita Widya Putri:** Conceptualization, Methodology, Investigation, Formal Analysis, Data Curation, Visualization, Project Administration, Resources, Supervision, Writing – Review & Editing. **Chen Hantang:** Conceptualization, Investigation, Formal Analysis, Validation, Visualization, Resources, Writing – Review & Editing. **Adrián Szilárd Nagy:** Conceptualization, Theoretical Framework Design, Methodology, Validation, Supervision, Resources, Writing – Review & Editing.

Data availability statement

All data analyzed in this scoping review are derived from publicly available peer-reviewed literature, institutional reports, and policy documents cited in the reference list. No new primary data were generated or analyzed in the conduct of this study.

Declaration of the use of AI assisted technologies

During the preparation of this work, the authors used Grammarly and ChatGPT in order to refine the language and improve readability. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication. All conceptual insights, theoretical interpretations, and arguments presented in this work are the original and independent contributions of the authors.

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Ethical statement

Ethical approval is not applicable for this manuscript.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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