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Digital Public Relations in Indonesia in the Age of AI and Big Data: Theoretical and Practical Insights from a Five-Dimensional Framework

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ABSTRACT

The rapid development of digital technology and artificial intelligence (AI) has significantly influenced public relations practices. This study examines how digital public relations (DPR) dimensions interact to shape DPR practices in Indonesia across public, private, and non-governmental sectors. The study aims to identify structural and practical gaps in digital PR implementation and propose a model to enhance strategic communication effectiveness. A descriptive qualitative approach was employed, using focus group discussions (FGDs) with communication professionals and digital media experts. Data were analysed using NVivo to ensure thematic accuracy and analytical depth. All participants provided informed consent, and the research adhered to ethical standards regarding confidentiality, voluntary participation, and data privacy. The findings indicate that senior-level professionals leverage AI for strategic use, while junior practitioners are confined to operational roles. Barriers such as digital skill gaps, infrastructure inequality, and regulatory issues, particularly the Electronic Information and Transactions Law (UU ITE) remain significant. Ethical concerns, especially related to misinformation and data protection, highlight the urgency for transparent digital governance. To address these challenges, the study proposes a five-dimensional digital PR model: human skill and capacity, technology accessibility, political system, law and regulations, and ethics. Theoretically, the research extends Structuration and Institutional Theory by showing how institutional environments shape PR practice. Practically, it offers a framework for capacity building, regulatory alignment, and ethical reinforcement in digital PR strategies within developing country contexts.

Keywords: *AI integration, digital public relations, digital literacy gap, ethical challenges, human capacity building.*

INTRODUCTION

The advancement in digital technologies has significantly changed the field of public relations (Wylde et al., 2023) over the last decade. PR has transformed from conventional PR to digital PR (DPR). Now, DPR has become crucial, utilizing digital platforms and tools to improve communication, reputation management, and stakeholder involvement (Zhan & Zhao, 2023). DPR differs from conventional PR approaches by emphasizing real-time engagement, data-informed decision-making, and adaptability to evolving trends (Barbosa, 2024).

These innovations have become essential for organizations seeking to remain relevant and cultivate trust in an increasingly digital environment (Bencsik et al., 2022). DPR has evolved across different regions as organizations adapt to technological advancements and socio-political contexts. In the United States, DPR has recently integrated artificial intelligence (AI) and big data as essential components of its communication strategy (Osei-Mensah et al.,

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2023; Zhou et al., 2024). Cheng et al. (2024) illustrated the increasing use of AI-driven tools such as chatbots and sentiment analysis to enhance stakeholder engagement and crisis response. Their study emphasized the significance of big data analytics in enabling organizations to anticipate public sentiment and manage risk proactively.

Lehtimäki (2024) explored ethical concerns, including algorithmic bias and data privacy, reinforcing the need for transparency and accountability in digital communications. In Europe, AI and big data have also been widely adopted in DPR practices with a focus on ethical and regulatory compliance (Wirtz et al., 2023). Some studies reported that the adoption of AI has been a very beneficial tool for some European companies in creating content, understanding the audience, and monitoring media (Markin et al., 2024; Valeur & Liekis, 2023). These developments demonstrate Europe's commitment to balancing innovation and public trust in the digital era.

Research conducted by Suciati et al. (2021) shows that artificial intelligence has been a tool for public relations, especially in developing press releases. The study found that for PR practitioners the machine learning, which is called PR Bot, is beneficial for them in their daily tasks, like creating news releases automatically. However, Alzubi (2024) argues that journalists face some challenges in applying AI, such as ChatGPT, in their work, like information inaccuracy, lack of responsibility and accountability, and some ethical problems.

In East and Southeast Asia, DPR adoption has accelerated with advances in digital infrastructure and high internet penetration. Vykhodets (2022) examined the use of AI in China for social media monitoring and influencer marketing, which improved audience segmentation. Additionally, Lee-Geiller and Lee (2022) explored AI's contribution to real-time crisis engagement in South Korea, resulting in increased institutional resilience. However, challenges related to unequal digital literacy, which limit the full realization of big data's potential in practice, remain (Dhar et al., 2023; Farahani & Ghasemi, 2024).

In terms of crisis communication, Pinariya et al. (2024) show the application of big data analysis by the crisis communication team in measuring the effectiveness of the vaccine campaign during COVID-19 in Indonesia. Mancanagara and Risdayani (2024) highlight that media intelligence monitoring tools were very critical in identifying the golden time in responding to a communication crisis in the Lampung provincial government. The study also contends that the intelligence tool brings some advantages to the PR professionals in analysing data and developing communication strategies to manage the crisis.

AI's ability to automate routine processes and generate strategic insights has been recognized as a critical asset in improving public relations outcomes. Indonesia, with its large and digitally active population, offers a compelling case for examining the practical and theoretical dynamics of DPR. The widespread use of smartphones and social media platforms has made Indonesia one of the world's largest digital markets. Wulandari (2023a) argues that Indonesian PR professionals are increasingly integrating big data analytics, AI, and digital tools into campaign design and stakeholder engagement.

Despite these gains, persistent challenges remain in the implementation of DPR across the country. Some studies show that issues such as digital literacy gaps (Wulandari, 2023b) and infrastructural inequality hinder widespread access to advanced technologies and training (Wachid et al., 2024a). Enormous data benefits in mapping public sentiment, identifying communication trends, and enabling targeted outreach (Rivera & González, 2022).

AI enhances these functions by providing automated content, predictive insights, and personalization capabilities to improve performance (Arora & Thota, 2024).

Indonesia's diverse geography, socio-political complexity, and infrastructural imbalance present both opportunities and constraints for DPR development. Some studies reported that Indonesian practitioners in urban areas tend to benefit from better connectivity and access to digital tools, while those in rural or underdeveloped regions face ongoing obstacles (Silitonga, 2023; Wulandari, 2023b). Addressing these disparities is vital to ensure that DPR strategies reach all stakeholder segments effectively and equitably. This context underscores the importance of examining DPR in Indonesia through a multifaceted lens.

This research tackles that significant deficiency. This research utilizes Structuration Theory and Institutional Theory to provide a five-dimensional framework for the analysis and improvement of DPR procedures in Indonesia. Firstly, human skills and capacities that pertain to digital competencies, strategic capabilities, and training requirements among public relations practitioners. Secondly, technology accessibility includes inequalities in infrastructure and digital preparedness between urban and rural areas. Thirdly, the political framework encompasses political impartiality, content structuring, and responsiveness to governmental narratives. Fourthly, legislation and regulations, especially concerning digital governance, data protection, and adherence to legal frameworks such as the UU ITE. Finally, ethics encompasses the challenges related to misinformation, data utilization, openness, and professional accountability.

This framework aims to delineate the present condition of DPR in Indonesia while providing a model for intervention. This study's urgency arises from Indonesia's existing status at the crossroads of swift digital development and institutional inadequacy. In the absence of a cohesive framework, DPR practices may exacerbate existing disparities, subject organizations to reputational and legal liabilities, and erode public confidence in institutions. Hence, this study offers a diagnostic assessment of the DPR ecosystem in Indonesia and functions as a strategic framework for improving digital preparedness, ethical robustness, and regulatory coherence.

This study addresses a substantial theoretical and practical gap in the examination of DPR in developing nations. It emphasizes the necessity for a cohesive, ethically founded, and institutionally endorsed strategy for digital public relations capable of addressing the distinct socio-political, infrastructural, and regulatory issues present in Indonesia and analogous environments. By analysing how DPR dimensions interact to shape DPR practices in Indonesia across public, private, and non-governmental sectors, the study aims to examine structural and practical gaps in digital PR implementation and propose a model to enhance strategic communication effectiveness.

LITERATURE REVIEW

Structuration Theory

Structuration theory, developed by Giddens (1984), focuses on the relationship between structure and agency. Structures such as laws and technologies shape behaviour, while individuals exercise agency to act within and transform these structures. The duality of structure means that rules guide action but are also reshaped through human activity. This framework is helpful for analysing the fluid and adaptive nature of DPR.

In DPR practices, communication professionals use their skills to navigate and influence organizational and technical environments. Their actions, such as tailoring content or analysing audience data, demonstrate agency within structural boundaries. These interactions reshape norms and strategies while reinforcing broader institutional systems (Seo et al., 2023). The result is a continuous evolution of practice influenced by both constraint and creativity.

Technological access illustrates this duality. Practitioners in urban areas benefit from strong infrastructure and advanced tools, while others must innovate with limited resources. Such disparities shape the ways professionals operate and adapt across contexts (Dhar et al., 2023). The structure of access shapes agency, and in turn, professionals influence how technologies are applied in PR.

Political systems also reflect the interaction of structure and agency. In freer environments, communication is more open, while in restrictive regimes, strategies must be adjusted for compliance. Practitioners work within these frameworks while influencing public discourse and perceptions (You et al., 2024). Political context shapes practice, but practitioners also reshape the communication landscape through adaptation.

Ethical considerations further illustrate the dynamic between structure and agency. While professionals operate under codes of conduct, their daily practices also shape evolving ethical norms. In managing misinformation or algorithmic bias, DPR professionals influence standards for accountability and fairness (Grigorescu & Baiasu, 2023). Structuration theory helps explain this co-development of ethics and communication practice.

Institutional Theory

Institutional theory, originating from organizational sociology, explains how norms, rules, and cultural expectations shape organizational behaviour (Meyer & Rowan, 1977). Organizations adapt to institutional environments to gain legitimacy and maintain survival (Nitschke, 2024). In Digital Public Relations (DPR), professionals align their strategies with legal mandates, professional standards, and societal norms. Institutions influence practices through coercive, mimetic, and normative pressures.

Coercive isomorphism arises from regulatory structures that compel organizations to follow legal expectations. For example, the General Data Protection Regulation (GDPR) has forced global organizations to restructure their PR practices for compliance. In Indonesia, similar pressures are emerging with data protection laws guiding DPR tools and communication strategies (Wachid et al., 2024b). These legal structures serve both as constraints and as frameworks for action.

Mimetic isomorphism occurs when organizations imitate successful peers to navigate uncertainty and remain competitive. In DPR, this is reflected in the adoption of AI, analytics, and digital platforms modelled after global leaders. Even with limited resources, organizations mirror these practices to appear modern and credible (Dua, 2022; Osakwe & Ikhide, 2022). Such imitation leads to the standardization of practices despite varying technological capacities.

Normative isomorphism stems from professional norms promoted by associations and academic institutions. Ethical standards in crisis response, transparency, and accountability shape both individual conduct and organizational reputation. Compliance with

these norms strengthens legitimacy in the eyes of stakeholders. These shared values influence how practitioners define appropriate DPR practices.

Institutional theory also highlights tensions when professionals face conflicting logics. PR practitioners often balance ethical norms with organizational objectives, especially when dealing with political content or misinformation. Navigating such dilemmas requires both compliance with institutional rules and adaptability. Institutional theory thus explains how DPR evolves in response to external constraints and internal needs.

In conclusion, this study presents a five-dimensional conceptual model to overcome deficiencies in the existing literature and offer a systematic framework for assessing Digital Public Relations (DPR) in Indonesia. The model comprises human skill and ability, technological accessibility, political system, laws and regulations, and ethics, each serving as a critical institutional component affecting DPR activities. Rooted in Structuration Theory and Institutional Theory, the model encapsulates the dynamic interplay between practitioner agency and structural pressures. It elucidates how DPR professionals' manoeuvre between advancing technologies, political limitations, legal uncertainties, and ethical dilemmas while concurrently influencing organizational communication standards.

This model provides a holistic framework for assessing DPR preparedness and resilience, in contrast to previous research that concentrates on specific factors or platforms. It offers both theoretical and practical contributions by establishing a foundation for policy formulation, capacity-building activities, and the strategic alignment of DPR efforts across several sectors.

METHODOLOGY

This study employs a qualitative descriptive approach to examine the five key dimensions of Digital Public Relations in Indonesia. A qualitative descriptive method is especially appropriate for research focused on achieving an in-depth understanding of certain occurrences in real-world settings (Mwita, 2022). This approach enables the acquisition of comprehensive, nuanced data that encapsulates the experiences, views, and practices of communication professionals in the adoption of Big Data and AI. This approach is relevant for obtaining nuanced insights about the intersection of multiple dimensions, which are human resources, accessibility, political systems, laws and regulations, and code of ethics.

The data collection method encompasses Focus Group Discussions (FGDs) executed in two rounds. Focus group discussions (FGDs) are acknowledged as excellent instruments for qualitative research, especially when investigating intricate and diverse subjects such as technology adoption in professional environments (Denny & Weckesser, 2022). The two-round FGD classifies participants into five groups, consisting of senior management professionals and entry-level communication professionals. This segmentation ensures that the study encompasses diverse perspectives across hierarchical and experiential levels. Participants originate from several sectors, such as NGOs, government entities, businesses, educational institutions, and communication agencies, to provide a comprehensive perspective on Indonesian Digital Public Relations practices.

The data is analysed with NVivo, qualitative data analysis software that facilitates systematic organizing, coding, and interpretation of textual information. NVivo is highly efficient at managing extensive qualitative data, allowing researchers to discern patterns, themes, and linkages accurately (Allsop et al., 2022). The software improves the accuracy of

qualitative analysis by offering capabilities for precise coding, visualization, and data cross-referencing, rendering it ideal for investigating intricate phenomena in this study.

RESULTS AND DISCUSSION

This chapter presents the findings of the study based on two rounds of Focus Group Discussions (FGDs) involving communication professionals across sectors in Indonesia, including government, NGOs, private enterprises, education, and startups. Using a five-dimensional analytical framework that includes human skill and capacity, technological accessibility, political system, laws and regulations, and ethical considerations, the results integrate insights from both managerial-level and entry-level participants to provide a comprehensive view of Digital Public Relations (DPR) practices. The analysis combines thematic synthesis with verbatim excerpts to highlight how professionals at different organizational levels experience and respond to the evolving demands of DPR in Indonesia's complex digital, political, and institutional landscape. Each dimension is discussed with reference to the challenges, competencies, and contextual factors shaping DPR strategies, with interpretation grounded in both Institutional Theory and Structuration Theory.

Human Skill and Capacity Dimension

The findings indicate that both managerial and entry-level communication professionals across sectors in Indonesia view digital competencies as central to effective public relations. These skills encompass not only technical proficiencies such as data analysis, content creation, and social media management but also strategic thinking, crisis preparedness, and ethical decision-making. Focus Group Discussions (FGDs) revealed a widespread recognition of the need to continually update professional skills to adapt to a rapidly evolving digital communication environment.

First, managerial-level participants emphasized the integration of ethical conduct with professional communication on digital platforms. A Marketing Communication Director in the tourism industry highlighted this point:

> "The essential digital communication skills for PR professionals in Indonesia include the ability to communicate wisely, politely, and appropriately, especially when responding to comments, direct messages, and audience inquiries across various digital platforms such as social media, WhatsApp, and websites." (Participant 1, Top Managerial Level)

From the aviation industry, a senior participant identified seven skill domains critical for PR professionals, reflecting the growing complexity of the digital environment:

> "First is social media crisis management, where communication with passengers must be precise, polite, and accurate. Second, the ability to create engaging visual content. Third, data analysis using tools like Google Analytics. Fourth, SEO for visibility. Fifth, building relationships with influencers. Sixth, using AI in design. Seventh, automation in PR communication, such as schedule change alerts." (Participant 2, Top Managerial Level)

NGO and education sector participants echoed the importance of foundational strategic skills. One participant stressed:

> "It is important to have a deep understanding of foundational knowledge related to the industry. This knowledge is essential for PR professionals to communicate accurate information to the public." (Participant 3, Top Managerial Level)

A communication professional in the education sector added:

> "PR in this field must be able to manage various complex service demands, including maintaining a strong presence on social media, which has become an integral part of daily life." (Participant 4, Top Managerial Level)

A government PR manager underlined the need for adaptability in the face of bureaucracy and crises:

> "It is essential to have data analysis and public issue monitoring skills, particularly in managing crises and advising leadership. The courage to challenge bureaucratic obstacles within the government is also necessary." (Participant 5, Top Managerial Level)

Furthermore, training initiatives were highlighted as a crucial strategy to build these capacities. Participants described a combination of internal workshops, external collaborations, and formal programs tailored to managerial or technical needs, as stated by several participants at the managerial level:

> "In our organization, we recruit PR or communication graduates as operators, and train managerial staff through internal sessions or external workshops, especially for those dealing with stakeholders." (Participant FGD 1, Top Managerial Level)

> "We conduct quarterly training based on real cases from domestic and international airlines and also attend seminars from the Ministry of Transportation and PERHUMAS." (Participant FGD 2, Top Managerial Level)

> "Given budget constraints, we train our PR team to use free design applications for social media content creation." (Participant FGD 5, Top Managerial Level)

At the entry level, technical PR professionals emphasized hands-on skills in content creation, stakeholder engagement, and media monitoring. Several participants from the entry level shared their perspectives as below:

> "Key needs include video production and design, which are considered essential in digital PR practices to enhance effectiveness on social media." (Participant 1, Entry Level)

> "We use Brand24 and Hootsuite to track public sentiment. Also, understanding preferences of Gen Z and Millennials is crucial." (Participant 3, Entry Level)

Meanwhile, in startups and digital agencies, stakeholder engagement was seen as a core competency:

> "We engage in government events to elevate our startup's position and align with policy support." (Participant 2, Entry Level)

Training also played a central role at the entry level, with a focus on practical tools, SEO, analytics, and crisis preparation, as stated by two participants below:

> "At our university, training includes social media crisis management and copywriting for effective communication." (Participant 1, Entry Level)

> "We're trained in data analytics, digital transformation, and digital marketing. Many of us already understand content marketing well." (Participant 5, Entry Level)

Furthermore, Operational training also emphasized adaptability in remote settings:

> "Our program focuses on managing digital collaboration across multiple cities, using online tools to manage projects." (Participant 2, Entry Level)

In government institutions, external training was complemented by centralized technical guidance:

> "Training from Kemenkominfo and regional agencies helps us stay updated on SEO, content creation, and AI." (Participant 3, Entry Level)

Despite these efforts, both managerial and entry-level participants identified persistent challenges. These include inconsistent training quality, and generational gaps in digital literacy. Some participants emphasized the need for continuous development tailored to evolving platforms and audience expectations:

> "There remains a significant disparity between practitioners in urban centers, who generally have better access to training and digital infrastructure, and those in rural areas, who often operate with limited resources and outdated tools." (Participant 2, Top Managerial Level)

> "We attend training, but most of it feels too general or outdated. It rarely addresses the real digital skills we need in the field." (Participant 4, Entry Level)

> "Many employees over 45, including some directors, lack familiarity with digital tools, which hinders adaptation and strategic decision-making." (Participant 1, Top Managerial Level)

In summary, digital communication professionals in Indonesia require a blend of ethical, strategic, and technical competencies. As digital PR grows more complex, capacity building must evolve through structured training, intergenerational collaboration, and cross-sector partnerships. This dimension reveals that human capacity is not only a skillset but a strategic asset in digital communication.

Technological Accessibility Dimension

Technological accessibility remains a significant challenge in implementing effective Digital Public Relations (DPR) strategies across Indonesia. Focus Group Discussions (FGDs) with communication professionals revealed key barriers, including unequal infrastructure, generational digital gaps, and inconsistent access to tools. These challenges affect both strategic planning and day-to-day operations, highlighting the need for adaptive approaches across sectors and organizational levels.

At the managerial level, professionals identified internal digital literacy gaps and external infrastructural disparities as significant concerns. A Marketing Communication Director in the tourism sector noted:

> "Many employees, especially those over the age of 45, are not familiar with digital tools, even at the director level. This impacts how quickly we adapt to digital strategies." (Participant 1, Managerial Level)

A PR leader from the aviation industry highlighted how uneven internet access shapes campaign effectiveness:

> "The digital divide affects campaign reach, especially in rural areas. We have to adjust platforms based on regional connectivity." (Participant 2, Managerial Level)

In the NGO and education sectors, challenges included selecting the right platform for audience targeting. A communication officer at an NGO explained:

> "Sometimes we use Instagram or LinkedIn, but these platforms don't always resonate with our intended audience. Infrastructure issues make it harder to choose effective tools." (Participant 3, Managerial Level)

A government professional emphasized disparities between central and regional institutions. As one regional PR manager described:

> "Some agencies have active websites and social media, but others have none. This limits our ability to distribute information consistently." (Participant 5, Managerial Level)

Entry-level professionals echoed these concerns, especially regarding tool availability and adaptability. A PR officer at a university shared:

> "We still rely on manual processes because we lack access to tools like Brand24 or Hootsuite. This makes our work slower and less efficient." (Participant 1, Entry Level)

A government staff member noted how younger interns are often assigned digital tasks due to generational gaps:

> "Interns handle most of the digital content because older staff struggle with the technology." (Participant 3, Entry Level)

Furthermore, a professional working in remote areas emphasized the need for offline methods and stakeholder collaboration:

> "In underdeveloped regions, we rely on offline training and community partnerships because internet access is limited." (Participant 4, Entry Level)

Across sectors, participants highlighted the importance of training and internal innovation to overcome limitations. While managerial-level professionals focused on long-term digital transformation, entry-level staff called for more access to tools, peer learning, and flexible systems. Bridging these accessibility gaps is critical for improving inclusivity and effectiveness in digital communication. In summary, technological accessibility continues to shape how DPR is practiced across Indonesia. Addressing this dimension requires coordinated efforts to invest in infrastructure, provide targeted training, and develop adaptive communication strategies that reflect local contexts and resource constraints.

Political System Dimension

The political system in Indonesia significantly shapes the practice of Digital Public Relations (DPR), influencing content, tone, and strategy across both managerial and operational levels. Focus Group Discussion (FGD) participants consistently emphasized the importance of political sensitivity, neutrality, and alignment with government policy, particularly during politically charged periods such as elections. At the managerial level, professionals stressed that political neutrality is a strict organizational policy. A Marketing Communication Director in the tourism sector shared:

> "In our organization, employees are not allowed to engage in political activities. If they do, they must choose between the company and their political involvement." (Participant 1, Managerial Level)

Additionally, this policy is also enforced in education-related institutions:

> "At our university, participation in political activities is strictly prohibited at all staff levels to maintain neutrality." (Participant 4, Managerial Level)

From the aviation sector, concerns arose about the misinterpretation of branding elements:

> "During elections, we have to be careful with colors and phrases used in campaigns. A simple design choice could be misread as political support." (Participant 2, Managerial Level)

NGO and private sector professionals noted that political alignment is sometimes necessary when agendas intersect:

> "During the COVID-19 pandemic, we supported government health campaigns because they aligned with our mission and values." (Participant 3, Managerial Level)

Additionally, government PR professionals described how local agencies must follow central government directives:

> "In our city, we incorporate national programs into local campaigns as required by the central government." (Participant 5, Managerial Level)

At the entry level, professionals are deeply involved in the operational application of political neutrality. They often manage content with strict oversight regarding language, imagery, and public messaging. A PR staff member at a university explained:

> "During election periods, we are very cautious with words, images, and colors. Everything must be politically neutral to avoid public backlash." (Participant 1, Entry Level)

Furthermore, a government PR officer emphasized the importance of careful use of language:

> "We avoid terms that may carry political meaning, especially in regions with strong local affiliations." (Participant 3, Entry Level)

In the startup sector, the concern shifts to information transparency while protecting internal interests:

> "We aim to share accurate data publicly, but must be careful not to expose sensitive internal information, especially in politically sensitive situations." (Participant 2, Entry Level)

Overall, the findings reveal that Indonesia's political system significantly shapes digital PR practices across sectors. Communication professionals at both managerial and entry levels adopt a cautious and policy-conscious approach to ensure alignment with institutional expectations. This strategy helps safeguard organizational credibility, mitigate reputational risks, and maintain neutrality in politically sensitive contexts.

Laws and Regulations Dimension

Legal and regulatory frameworks play a crucial role in shaping Digital Public Relations (DPR) practices in Indonesia. Participants from both managerial and entry levels consistently emphasized challenges related to unclear laws, rapid regulatory changes, and compliance with data protection standards. The dynamic nature of these regulations often creates uncertainty, compelling communication professionals to adopt cautious, adaptive, and legally informed strategies in digital environments.

At the managerial level, professionals expressed concerns about the complexity and ambiguity of existing laws, particularly the Electronic Information and Transactions Law (known as UU ITE). First, a Marketing Communication Director in the tourism industry shared:

> "The rapid changes in regulations often make it difficult for us to adapt, especially concerning the UU ITE. We are forced to adjust to constantly changing rules, which are often unfavourable for those of us working in the fast-moving digital industry." (Participant 1, Managerial Level)

Other participants highlighted gaps between legal frameworks and digital realities, especially in the use of Big Data and Artificial Intelligence:

> "Regulations on data use and privacy are confusing. They do not always consider how far digital technology has advanced, making us extra cautious when handling audience data." (Participant 2, Managerial Level)

> "Many parts of the UU ITE do not directly address digital PR. The absence of clear guidelines makes it difficult for companies to design secure and compliant communication policies." (Participant 3, Managerial Level)

In response to these challenges, organizations are increasingly integrating legal risk management into DPR strategic planning:

> "We collaborate closely with legal teams to ensure every digital campaign complies with regulations. Even when the law is vague, we follow strict internal guidelines to reduce risk." (Participant 4, Managerial Level)

At the entry level, communication professionals expressed confusion about legal responsibilities, particularly regarding data protection and copyright:

> "I often feel unsure whether our use of audience data complies with privacy laws. There is not much training on this, and we depend on managers for legal direction." (Participant 1, Entry Level)

Lastly, another participant highlighted concerns about using external content in the DPR practices:

> "Sometimes I worry about copyright issues when using third-party materials in campaigns. We need clearer guidance on what is allowed." (Participant 2, Entry Level)

Across sectors, participants agreed that legal compliance is essential for protecting organizational integrity and public trust. They emphasized the need for clearer, more practical regulations and stronger internal policies to guide ethical data use and digital communication. As legal frameworks evolve, adaptive, collaborative approaches are critical to managing risks while enabling innovation in DPR.

Ethical Considerations Dimension

Lastly, ethical considerations are a fundamental element of Digital Public Relations (DPR) in Indonesia. Across both managerial and entry-level communication professionals, participants consistently stressed the importance of transparency, data privacy, and ethical judgment during crisis management. These ethics-driven practices are essential for maintaining public trust, protecting organizational reputation, and aligning communication strategies with societal values and legal standards.

At the managerial level, ethical decision-making was often discussed in the context of managing sensitive or potentially damaging information. A participant from the tourism sector described a recurring dilemma in balancing transparency and reputational risk:

> "In our organization, the main dilemma is whether to disclose all information or withhold some to protect the company's reputation. We strive to adhere to honesty, but sometimes the pressure to protect our image creates ethical tension." (Participant 1, Managerial Level)

Furthermore, crisis management emerged as a core ethical concern, particularly in sectors with frequent public engagement, such as aviation. A PR director explained the pressures of public demand for immediacy:

> "We often face dilemmas in determining when and how to respond to social media crises. Acting too quickly without verification risks spreading misinformation, but waiting too long may worsen the situation. Our code of ethics guides us always to prioritize fact-checking over speed." (Participant 2, Managerial Level)

Additionally, ethical responsibility extends to how audience data is collected and used. A manager in an NGO explained their commitment to data integrity:

> "We make sure that the data we collect from audiences is used strictly within the bounds of consent. We never use data for unrelated campaigns, and that's a line we do not cross." (Participant 3, Managerial Level)

A PR manager from an educational institution also highlighted how ethics guide content publication and public messaging:

> "One of our main challenges is addressing misinformation. Our code of ethics requires a thorough review of any information before publication to ensure accuracy and educational value." (Participant 4, Managerial Level)

From the government sector, ethical concerns often centred around maintaining neutrality in politically sensitive communications:

> "In our office, we sometimes face pressure to promote political narratives, but our internal guidelines emphasize neutrality. We must always ensure our messages remain transparent and unbiased." (Participant 5, Managerial Level)

Entry-level professionals described ethics as embedded in daily routines, particularly in how they interact with the public on digital platforms. A PR staff member described the discipline involved in responding to online inquiries:

> "We're trained to respond politely and factually, even when the comments are negative. It's tempting to be reactive, but our ethics training reminds us to stay professional no matter what." (Participant 1, Entry Level)

Additionally, crisis management procedures were also a central focus among entry-level professionals, especially those responsible for moderating social media content:

> "Sometimes we get overwhelmed with complaints, especially during service interruptions. But we are trained to respond using templates that reflect the organization's voice and avoid escalating conflicts." (Participant 2, Entry Level)

Data privacy was another central area of concern. Entry-level staff handling audience information expressed anxiety over unintentionally violating legal or ethical boundaries:

> "I handle a lot of personal data for segmentation, and I worry about whether I'm using it correctly. We don't always get formal training on data privacy, so I try to follow whatever internal rules are in place." (Participant 3, Entry Level)

A participant from the education sector noted that misinformation was particularly challenging to manage when it involved institutional reputation:

> "When false information about the university circulates, we have to act quickly but responsibly. We cannot just post a denial; we must provide verified facts and avoid sounding defensive." (Participant 4, Entry Level)

A government sector staff member also reported dealing with ethical pressure, especially when their content could be interpreted as political propaganda:

> "During political events, we are extra cautious with language and visuals. Our code of ethics tells us to focus on public service and information, not party alignment." (Participant 5, Entry Level)

Additionally, training and internal oversight were cited as critical tools for reinforcing ethical practices. Participants mentioned regular evaluations, case-based workshops, and feedback mechanisms that help correct ethical missteps:

> "We have weekly review meetings where the legal and PR teams evaluate our content. If something is flagged as unethical or risky, we fix it immediately." (Participant 3, Entry Level)

Lastly, some organizations have developed internal audits and peer-review systems to monitor ethical compliance proactively:

> "We do internal audits every quarter. If a team is found breaching our code of conduct, they're given feedback and retraining. It's part of our culture." (Participant 2, Managerial Level)

Across all sectors and organizational levels, communication professionals agreed that ethical integrity is not only about avoiding legal violations but also about safeguarding long-term credibility. Ethical communication in the digital space involves balancing speed and accuracy, as well as respecting data boundaries. Lastly, ensuring transparency in the face of complex stakeholder expectations. In conclusion, DPR professionals in Indonesia encounter ethical challenges that require continuous negotiation between openness, protection of privacy, and institutional loyalty. Ethics in digital PR is not static; it must evolve alongside technologies, audience behaviour, and regulatory changes. Through regular training, internal audits, and clear ethical frameworks, organizations aim to support professionals in making responsible communication decisions that preserve public trust and institutional integrity.



Figure 1: Proposed model of five key features of digital public relations practices in Indonesia

This study proposes a comprehensive model for understanding digital public relations (DPR) practices in Indonesia, identifying five key dimensions: human skill and capacity, technological accessibility, political system, laws and regulations, and ethical considerations. By employing Structuration Theory and Institutional Theory, this study interprets how DPR actors in Indonesia navigate and shape institutional and technological contexts, while simultaneously being shaped by them. The proposed model demonstrates the complex interdependence between agency, institutional pressures, and structural constraints in the evolving digital communication landscape, as shown in Figure 1.

The first dimension of the model emphasizes human skill and capacity as the cornerstone of effective DPR practices. Structuration Theory offers a valuable lens to interpret how individuals, particularly public relations practitioners, adapt their competencies in response to organizational structures, while at the same time influencing those structures through strategic and operational activities (Seo et al., 2023). The findings demonstrate a clear divide between managerial-level professionals, who are equipped with strategic decision-making skills such as data analytics and crisis management, and entry-level professionals, who are predominantly responsible for routine digital functions, including social media content development and platform monitoring.

Institutional Theory highlights how normative pressures influence skill development within DPR. The lack of standardized training programs, nationally recognized certifications, and formalized curricula exacerbates skill disparities across organizational levels. Previous studies have shown that gaps in PR training contribute to a fragmented professional identity and inconsistencies in competency standards (Wachid et al., 2024a; Wulandari, 2023b). In response, this study suggests that academic institutions and professional associations must collaborate to establish coherent, industry-aligned curricula that prioritize both technical and strategic competencies. Additionally, mentorship initiatives can bridge the experience gap between junior and senior practitioners, fostering a culture of continuous learning and knowledge transfer.

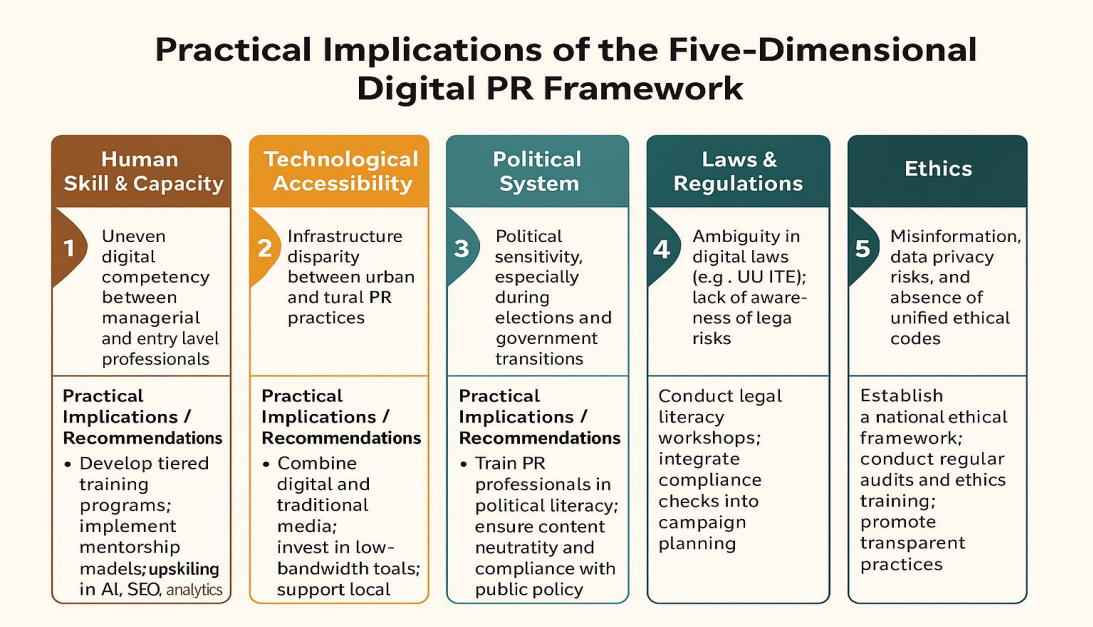


Figure 2: Practical implications of the five-dimensional digital PR framework

Figure 2 shows that skill-building strategies should also be inclusive of new technological competencies and leadership development. Entry-level staff require exposure to analytical tools and digital campaign management, while senior professionals must remain abreast of global communication trends, platform innovations, and algorithmic developments. Several studies highlight the necessity of equipping professionals with adaptable capabilities in order to navigate complex, data-driven environments (Ferreira et al., 2025; Strukova, 2024). This study asserts that hybrid training models that combine operational simulations with strategic planning modules may offer a scalable and sector-sensitive approach to holistic capacity development.

The study also identifies the absence of formal career pathways in Indonesian DPR practice as a significant institutional shortfall. Mimetic isomorphism, as articulated in Institutional Theory, can serve as a guiding principle for adopting structured career development frameworks across the industry (Nitschke, 2024). When leading organizations institutionalize effective career ladders, other entities are likely to replicate these models to remain competitive and legitimate. Hence, joint efforts between governmental bodies, private firms, and academic stakeholders could lead to the codification of career standards, thereby elevating professional recognition and facilitating upward mobility within the field.

The second key dimension, technological accessibility, reveals disparities in the infrastructure and digital readiness of communication professionals across geographic and organizational contexts. Structuration Theory conceptualizes technology as both enabling and constraining human agency (Seo et al., 2023). While urban-based professionals benefit from sophisticated digital tools and connectivity, rural practitioners face infrastructural deficiencies and limitations in digital literacy. This asymmetry undermines the inclusivity and reach of public relations campaigns and reflects a broader structural inequality embedded in Indonesia's digital development agenda.

Institutional Theory further contextualizes this issue through the lens of coercive isomorphism. Variations in digital infrastructure are often the result of uneven governmental investments and regulatory enforcement, which manifest as institutional pressures that shape the operational capabilities of organizations (Henningsson & Eaton, 2023). The Public Relations division in underserved regions is often compelled to mimic urban practices without access to the requisite tools or bandwidth, resulting in diminished campaign quality and scope.

In response to these challenges, the study proposes hybrid communication strategies that integrate digital and traditional media to ensure broader outreach, as illustrated in Figure 2. Community radio, printed publications, and televised announcements can complement social media initiatives, especially in regions with limited internet access. Several studies emphasize the importance of localized and culturally relevant digital inclusion efforts in ensuring effective communication in marginalized settings (Choudhary & Bansal, 2022; Wang & Si, 2024). Furthermore, training initiatives focused on foundational digital tools, platform adaptability, and analytics should be prioritized for entry-level practitioners operating in infrastructure-constrained environments.

This study also contends that technological evolution demands constant recalibration of professional skill sets. Structuration Theory explains how ongoing interaction with digital platforms redefines not only communication routines but also institutional expectations. As technologies such as artificial intelligence, predictive analytics, and real-time monitoring systems continue to evolve, organizations must invest in lifelong learning frameworks to

maintain competitiveness. This study proposes that workshops, certification programs, and digital transformation coaching should be integrated into HR development plans to ensure readiness across roles.

The third dimension, the political system, significantly shapes DPR strategies and content. Institutional Theory underscores the role of coercive forces in shaping organizational behaviour, particularly within public-sector and state-affiliated institutions. In Indonesia, the centralized governance structure often results in top-down messaging priorities that emphasize alignment with national policies. This limits the autonomy of regional offices and PR professionals to design audience-centric campaigns and adjust to local sensitivities.

Structuration Theory adds to this analysis by explaining how practitioners navigate the constraints imposed by political structures. While senior professionals negotiate regulatory frameworks and develop overarching strategies, operational-level staff must carefully craft neutral language, avoid politically charged symbolism, and maintain compliance with state messaging directives. Several argue that transparency and participatory communication are essential to building public trust, particularly in politically sensitive environments (Jiang & Shen, 2023; Osifo, 2023). This study suggests that political literacy and stakeholder analysis should be embedded in both formal education and internal training to prepare professionals for the dual responsibility of compliance and responsiveness, as shown in Figure 2.

Moreover, the influence of the political system transcends strategic decisions and directly shapes content production. Communication staff in local and national agencies are frequently responsible for translating central government initiatives into regionally relevant messaging. To mitigate potential conflicts between central directives and community needs, coordinated frameworks that allow for consultation and feedback mechanisms should be implemented. Such models would facilitate the balancing of national coherence with local resonance.

The fourth dimension, legal and regulatory frameworks, talents, both enabling and restrictive forces in DPR practices. The Information and Electronic Transactions Law typifies this paradox, seeking to regulate online communication while inadvertently creating ambiguity that complicates compliance. Institutional Theory identifies these legal mandates as coercive institutional forces that define organizational conduct and limit agency through enforced rules and penalties (Nitschke, 2024).

Structuration Theory helps explain the ways in which professionals interpret and operationalize legal requirements in daily practice (Seo et al., 2023). Senior professionals focus on aligning campaign strategy with current regulations, while junior staff implement data-handling protocols, content approvals, and publication checks. This bifurcation of responsibility underscores the need for cross-functional collaboration between legal and communication departments to harmonize operational practices and ensure legal protection.

To address the risks associated with legal non-compliance, the study recommends the use of digital compliance systems that integrate AI-driven monitoring tools. These technologies can help track legal updates, evaluate campaign risk, and ensure adherence to data privacy guidelines (Dhirani et al., 2023; Quach et al., 2022). Moreover, Figure 2 shows that institutions should provide recurring legal literacy workshops to reinforce professionals' understanding of regulatory expectations and digital ethics.

The final dimension, ethical considerations, captures the moral dilemmas encountered in digital communication, particularly in areas such as misinformation, personal data usage, and crisis response. Structuration Theory posits that individuals can reinforce or reshape ethical norms through practice. Meanwhile, Institutional Theory points to normative pressures from professional bodies and peer expectations as mechanisms for moral conformity (Nitschke, 2024).

In the context of DPR in Indonesia, the study finds that ethical standards are inconsistently applied and often underdeveloped. Entry-level practitioners face challenges in balancing speed and accuracy, especially during crisis events, while senior staff must ensure that strategy is informed by ethical foresight. Current frameworks lack a unified moral code for digital public relations, which leads to variation in how ethical principles such as transparency, accuracy, and respect for privacy are interpreted and enforced.

This deficiency becomes even more significant with the integration of AI and big data technologies, which introduce new risks related to algorithmic bias, automated content generation, and audience manipulation. In contrast to professions like law and medicine, public relations lack codified ethical standards that can guide behaviour in these complex domains. The absence of clear guidelines can lead to short-term decision-making, potentially damaging the organizational reputation and stakeholder trust.

This study argues for the formal development of a national DPR ethical framework, aligned with international standards such as those promoted by the Global Alliance for Public Relations and Communication Management. Collaborative networks involving academia, government, industry, and civil society can play a critical role in drafting and institutionalizing this code. Ethical audits, scenario-based training, and interorganizational benchmarking can further support ethical resilience across sectors, as shown in Figure 2. This study underscores the need for adaptive, inclusive, and ethical DPR practices that are responsive to both structural constraints and emerging opportunities in Indonesia's digital landscape. It advocates for multi-sectoral collaboration, integrated professional development, and the institutionalization of best practices to ensure that DPR remains robust, resilient, and relevant.

CONCLUSION

In conclusion, this study identifies key factors influencing digital public relations (DPR) practices in Indonesia: human skills and capacity, technological accessibility, political systems, laws and regulations, and ethical considerations. The findings highlight the differences in digital skills between managerial and entry-level professionals, emphasizing the urgent requirement for customized training programs to bridge these gaps. Technological challenges, legal ambiguities, and ethical dilemmas complicate the implementation of DPR, requiring adaptive and proactive strategies. This study is novel in its integration of a five-dimensional framework with empirical data, offering a comprehensive understanding of Digital Public Relations (DPR) in Indonesia, especially regarding the adoption of AI and Big Data. Nonetheless, the emphasis on a singular national context restricts the ability to generalize findings. Future research should investigate comparative analyses among countries to enhance both theoretical and practical implications.

This study enhances our understanding of DPR by integrating structuration and diffusion of innovation theories, providing insights into the relationship between agency, structure, and technological adoption. It advocates for comprehensive training for

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communication professionals, highlighting the importance of strategic and technical skills and adherence to ethical standards. Organizations should promote collaboration between public relations and legal teams, utilize artificial intelligence for predictive analytics, and guarantee equitable access to technology to enhance the impact of digital public relations and tackle systemic challenges.

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