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ASSESSING THE READINESS OF THE INDONESIAN OMBUDSMAN FOR IMPLEMENTING DATA-DRIVEN DECISION MAKING

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Abstract

The Ombudsman of the Republic of Indonesia increasingly faces demands to base judgments on reliable evidence, yet many remain constrained by fragmented information systems and uneven analytical practices. This study addresses the practical problem of how prepared the Ombudsman of the Republic of Indonesia is to adopt data-driven decision making (DDDM), and the conceptual problem of limited understanding of how DDDM manifests within external complaint-handling bodies. The research employs the DECAS framework, which conceptualizes DDDM across five dimensions (Decision-Making Process, Decision Maker, Decision, Data, and Analytics) to assess organizational readiness. A qualitative exploratory design was used, drawing on nine semi-structured interviews with senior leaders, technical units, and regional representatives. Directed content analysis was applied to evaluate routines, data governance, and analytical capabilities. Findings show that although data increasingly support operational monitoring, leadership-level decisions still rely heavily on intuition due to descriptive, inconsistent, and siloed information. Analytical fluency varies across organizational tiers, and workflows for preparing and synthesizing data remain manual. Despite managing extensive datasets and expanding its digital infrastructure, the institution has not yet reached maturity for systematic DDDM. The study concludes that strengthened protocols, improved data governance, and more integrated analytical capacity are essential for enabling consistent evidence-based oversight.

Keywords: Ombudsman; public sector; data-driven decision making; DECAS framework; data analytics; organizational readiness; Indonesia

INTRODUCTION

As an independent oversight body, the Ombudsman of the Republic of Indonesia (Ombudsman) holds institutional characteristics distinct from policy-implementing agencies. While administrative bodies focus on efficiency and output, the Ombudsman performs evaluative and corrective functions across national and regional public services (Hasjimzoem, 2014; Ishak, 2022). As a *magistrature of influence*, its authority derives not from coercive sanctions but from recommendations grounded in evidence, fairness, and legal reasoning (Sujata & Surachman, 2011; Taqwa et al., 2023). Studies likewise show that ombuds institutions derive effectiveness from fact-based and objective scrutiny rather than legal coercion (Glušac, 2020). Public expectations reinforce this non-coercive role, emphasizing impartial investigation, clarification of administrative processes, and the rebalancing of power relations between citizens and the state (Creutzfeldt, 2016). Accordingly, the Ombudsman's effectiveness depends on its ability to assess service performance objectively and articulate systemic improvements through credible analysis (Imbaruddin et al., 2021; Mansur et al., 2018), situating it within the broader "integrity branch of government" alongside audit, anti-corruption, and judicial oversight bodies.

In this context, adopting data-driven decision making (DDDM) becomes a strategic necessity to transform the Ombudsman's extensive administrative information into actionable insights supporting evidence-based recommendations (Elgendy et al., 2022; Elragal & Elgendy, 2024; Provost & Fawcett, 2013). The growth of digital governance and increasing complexity of public-service interactions make analytical capability a key determinant of institutional effectiveness. Empirical studies show that DDDM enhances decision quality, operational efficiency, and alignment with development objectives (Alsuhaimi, 2025), while digital maturity (encompassing data governance, analytical resources, and technological infrastructure) enables its institutionalization (Wahdaniyah et al., 2025).

The Ombudsman manages diverse data sources with significant potential for identifying maladministration patterns and supporting preventive interventions. These include complaint-handling data such as the Sistem Informasi Manajemen Penyelesaian Laporan (SIMPeL), preventive datasets like the Ombudsman Opinion assessment, and administrative datasets covering document management, human resources, assets, and finance. External sources include media monitoring, clarifications to public agencies, collaborative research, and civil-society inputs (Ishak, 2022; Sibyan et al., 2021). When effectively utilized, these ecosystems can shift the Ombudsman from reactive complaint processing toward a proactive contributor to public-service reform and national learning (Bang, 2025; Brynjolfsson & McElheran, 2016; Hanisch et al., 2023).

However, structural fragmentation, uneven digital capacity, and persistent service delays across the Indonesian public sector (Mujahidin & Kusuma, 2025) highlight the need for stronger analytical readiness within oversight institutions. Although the Ombudsman is recognized for promoting fairness and accountability, scholarly attention to its readiness for DDDM remains limited. Existing studies focus primarily on legal mandates and procedural mechanisms, leaving unexamined the analytical capacities required to transform complaint data into systemic insights amid rising complaint volumes and expanding digital governance demands. Broader public-sector literature reflects similar gaps. Keyword-network analyses show that digital capability, e-government readiness, and DDDM remain underexplored globally, especially within oversight bodies (Wahdaniyah et al., 2025). Cross-national comparisons indicate that Indonesia and Malaysia lag behind OECD countries in digital-service adoption, suggesting potential readiness constraints in leveraging data for oversight (Alsuhaimi, 2025). No prior study has systematically assessed the Ombudsman's readiness for DDDM using a structured analytical model, representing a key gap in the literature.

To address this gap, this study examines the Ombudsman's readiness to implement DDDM through the DECAS framework, which conceptualizes decision-making capability across five interconnected dimensions: Decision, Decision Maker, Decision-Making Process, Data, and Analytics (Elgendy et al., 2022). Assessing how these dimensions operate within the Ombudsman enables the identification of key enablers and constraints shaping its transition toward data-driven governance. Academically, this study contributes to the discourse on modernizing oversight institutions in developing democracies by offering one of the first framework-based empirical assessments of DDDM readiness within an Ombudsman institution. Practically, the findings provide actionable insights for strengthening analytical capability, improving data governance, and informing strategic planning for institutional transformation.

LITERATURE REVIEW

1.1. Previous Studies on DDDM in the Public Sector

Research on DDDM in the public sector has expanded as governments increasingly rely on data to enhance responsiveness, efficiency, and accountability. Early work emphasized managerial and technological dimensions of evidence-based governance (Mandinach et al., 2006), while more recent studies highlight institutional capability, data governance, and organizational culture as determinants of data-driven practices (Dingelstad et al., 2022; Hanisch et al., 2023). However, research on oversight bodies remains limited. Existing studies on Ombudsman institutions focus largely on legal mandates and complaint-handling procedures, offering minimal analysis of how these bodies convert complaint data into systemic insights (Imbaruddin et al., 2021). Globally, DDDM adoption varies significantly. OECD countries tend to demonstrate more mature readiness, whereas developing democracies continue to face constraints related to digital infrastructure, fragmented data systems, and limited analytical expertise (Alsuhaimi, 2025; Hanisch et al., 2023). Expanding the scope of DDDM, Bae et al. (2023), using 37,655 public complaints in South Korea, show how citizens' emotional tone influences government response speed, demonstrating the analytical value of incorporating unstructured data such as sentiment.

Indonesia faces similar obstacles. Sayogo et al. (2024) identify persistent challenges in cross-agency coordination, data quality, and uneven analytical literacy, although their analyses focus primarily on implementing agencies rather than oversight institutions. Yet no existing study has examined how the Indonesian Ombudsman develops DDDM readiness or navigates institutional constraints that shape its analytical capability, an increasingly significant gap amid rising complaint volumes and the national push for digital governance. Although prior research recognizes the growing importance of data-driven capability, it provides limited clarity on how DDDM functions as a socio-technical system or how organizational conditions shape evidence use. These foundations are necessary for understanding variation in DDDM adoption.

1.2. Conceptual Foundations of Data-Driven Decision Making

DDDM broadly refers to decisions informed and refined through the systematic use of data. Provost & Fawcett (2013) characterize it as the extraction of useful knowledge to improve decision quality, while earlier work describes DDDM as an iterative cycle of collecting, preparing, analyzing, and interpreting data embedded in recurring decision processes (Mandinach et al., 2006). More recent scholarship frames DDDM as a socio-technical capability shaped by interactions among digital infrastructure, analytical tools, human judgment, and institutional culture (Berkhout et al., 2024; Luna-Reyes, 2017; Zaitsava et al., 2022).

Several characteristics underpin effective DDDM:

1. Structured decision cycles. Effective DDDM requires recurring routines for data acquisition, integration, analysis, interpretation, and feedback, reflecting the iterative cycles emphasized by Mandinach et al. (2006).
2. Robust data infrastructure. Reliable, interoperable, and well-governed data systems are essential to ensure consistent information flows (Bang, 2025; OECD, 2019).
3. Data culture and literacy. Organizational norms that prioritize evidence, together with the analytical competence of decision makers, determine the depth of DDDM adoption (Dingelstad et al., 2022).
4. Transparency and accountability. Clear linkages between decisions and underlying data strengthen institutional legitimacy and oversight credibility (Berkhout et al., 2024).
5. Complementarity of data and intuition. Data informs expert judgment, but professional experience remains indispensable in contexts of uncertainty (Brynjolfsson & McElheran, 2016; Carramiñana et al., 2024)
6. Awareness of bias and ethical risks. Data-driven practices must address representational bias, measurement error, privacy concerns, and distributive impacts (OECD, 2019; Zaitsava et al., 2022).

Taken together, these characteristics show that DDDM functions as a socio-technical system requiring alignment among people, processes, technologies, and governance. Because conceptual clarity alone cannot explain how these elements interact in organizations, a structured analytical model is needed to assess readiness.

1.3. The DECAS Framework for Data-Driven Decision Making

The DECAS framework (encompassing Decision-making process, dEcision maker, deCision, datA, and analyticS) offers a comprehensive and theoretically grounded model for evaluating an organization's readiness for DDDM. Developed by Elgendy et al. (2022), DECAS integrates core elements of classical decision-making theory, such as problem structuring, decision logic, and the role of judgment, with modern developments in data governance and analytical technologies. Because it simultaneously captures human, procedural, and technological dimensions, DECAS is particularly well suited for evaluating institutions like the Ombudsman, where decisions depend not only on data availability but also on interpretation, coordination, and analytical capability.

By combining these theoretical foundations, DECAS conceptualizes DDDM as a socio-technical system in which decisions, actors, processes, data, and analytics interact to shape institutional behavior. This aligns with Bang's (2025) view that effective data-driven governance requires coherence between data flows, analytical routines, and organizational decision structures. Accordingly, DECAS provides both conceptual clarity and operational guidance, enabling researchers to systematically diagnose the enablers and constraints of DDDM readiness across its five interconnected dimensions.

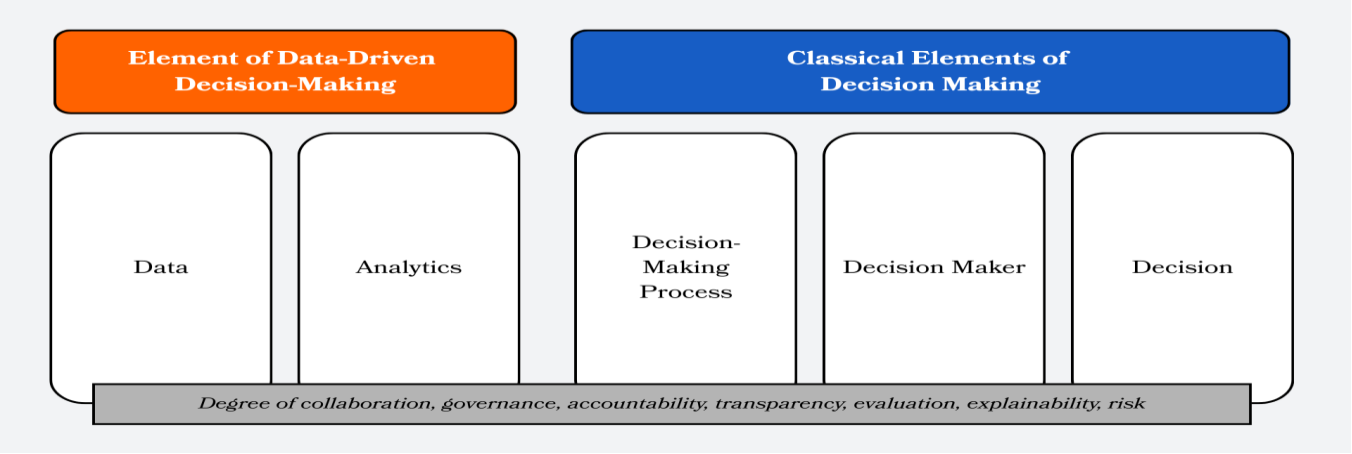

Figure 1. The Elements of Data-Driven Decision Making (DECAS Framework)
Source: Elgendy et al. (2022)

Table 1. DECAS Dimensions, Descriptions, and Key Indicators

Decision	This dimension examines what decisions are made, their strategic or operational nature, and how they connect to organizational goals.	a. Types and levels of decisions (strategic, tactical, operational). b. Clarity of problem framing and decision criteria. c. Consistency and transparency of decision logic. d. Extent to which evidence informs decisions versus intuition. e. Alignment between available data and decision needs.
Decision Maker	This dimension focuses on the actors involved in decision making, emphasizing their competencies, roles, authority, and data literacy.	a. Analytical literacy and capacity to interpret data. b. Confidence (self-efficacy) in using evidence for judgment. c. Variation in competencies across hierarchical levels. d. Clarity of decision authority and roles. e. Willingness to engage with data in deliberative processes.
Decision-Making Process	This dimension concerns the procedural routines and workflows through which decisions are produced.	a. Existence of standardized decision workflows or protocols. b. Mechanisms for preparing, synthesizing, and escalating evidence. c. Cross-unit coordination and communication patterns. d. Use of routines, templates, or structured steps for decision making. e. Reproducibility, transparency, and traceability of the process.
Data	This dimension assesses the foundational data assets that support evidence-based decision making.	a. Data completeness, accuracy, timeliness, and consistency. b. Standardization of classification and data-entry practices. c. Interoperability and integration across systems and units. d. Strength and enforcement of data governance practices. e. Accessibility of data for decision-relevant users.
Analytics	This dimension evaluates the methods, tools, and competencies used to convert raw data into meaningful insights.	a. Types of analysis used (descriptive, diagnostic, predictive). b. Availability and capability of analytical tools and dashboards. c. Human-resource capacity for analytical work. d. Integration of analytical results into decision processes. e. Ability of analytical outputs to support strategic and operational needs.

Taken together, these dimensions demonstrate that DDDM maturity requires alignment among people, processes, data resources, and analytical capabilities. Their coherence reflects the integrated logic of the DECAS

model, making it an appropriate framework for diagnosing readiness within oversight institutions such as the Ombudsman. Beyond these core dimensions, DECAS incorporates principles such as collaboration, governance, accountability, transparency, explainability, evaluation, and risk management, principles that help ensure fairness, traceability, and legitimacy in data-driven practices, values that are central to public-sector institutions. Bang (2025) further emphasizes that analytical routines should be embedded in daily administrative work rather than conducted episodically. For oversight institutions such as the Ombudsman, DECAS is especially relevant because supervisory judgments rely on the ability to synthesize heterogeneous administrative information into credible institutional findings. The framework's emphasis on the coherence of decision structures, data practices, and interpretive routines enables a focused assessment of whether the Ombudsman can translate operational data into systemic insights and actionable recommendations.

METHOD

This study employed a qualitative exploratory design to assess the Ombudsman's readiness for implementing DDDM. A qualitative approach was selected because organizational readiness is embedded in routines, interpretive processes, and decision-making interactions that cannot be fully captured through quantitative indicators. The research followed a constructivist worldview, which assumes that organizational meaning emerges through participants' interpretations and is subsequently reconstructed through the researcher's analytical lens (Creswell & Creswell, 2023; Leavy, 2017). The DECAS framework developed by Elgendy et al. (2022) served as the analytical foundation and guided both the development of the interview protocol and the coding strategy used in this study. This approach is consistent with interpretive case-study traditions in which conceptual models structure analysis while still allowing empirical nuance to surface (Elragal & Elgendy, 2024). A purposive sampling strategy was used to select participants occupying key roles in governance, decision making, and data management. Nine informants were interviewed: two Ombudsman Members, two Heads of Assistant Units, two Heads of Representative Offices, two Bureau Chiefs, and one Bureau Chief of Public Relations and Information Technology serving as IT Manager. This composition ensured coverage across hierarchical levels and functional domains relevant to the study. Sample adequacy was demonstrated through thematic saturation, indicated by the recurrence of core patterns across interviews.

Data were collected through semi-structured interviews designed to elicit participants' experiences with data use, decision routines, and organizational constraints. The interview guide was informed by the DECAS framework while maintaining flexibility for probing and elaboration. All interviews were conducted with informed consent, audio-recorded, and transcribed verbatim. Data analysis followed a directed content analysis approach. Initial coding categories were deductively derived from the DECAS framework and refined inductively as new themes emerged. This hybrid strategy ensured analytical alignment with the study's conceptual foundation while remaining grounded in participants' accounts. Coding focused on identifying readiness conditions, decision processes, data governance patterns, and analytical competencies across units. Trustworthiness was strengthened through systematic coding, reflexive memoing, and cross-case comparison to enhance analytic consistency and transparency. All participants provided informed consent, and identifying information was anonymized in accordance with qualitative research ethics.

RESULTS AND DISCUSSION

This section presents the study's findings and interprets them through the five DECAS dimensions, synthesizing insights from interviews across organizational levels. The analysis outlines the Ombudsman's readiness for data-driven decision making and highlights key institutional gaps shaping its capability to adopt DDDM.

Organizational Structure of the Ombudsman

The Ombudsman led by nine Ombudsman Members, including a Chairperson and Vice Chairperson, who determine strategic policies and oversee the fulfillment of the institution's mandate in supervising public services. To carry out these responsibilities, the Members are supported by several Assistant Units headed by Heads of Assistant Units, which perform core technical functions such as receiving and verifying complaints, conducting investigations, resolving and monitoring cases, preventing maladministration, and ensuring quality assurance.

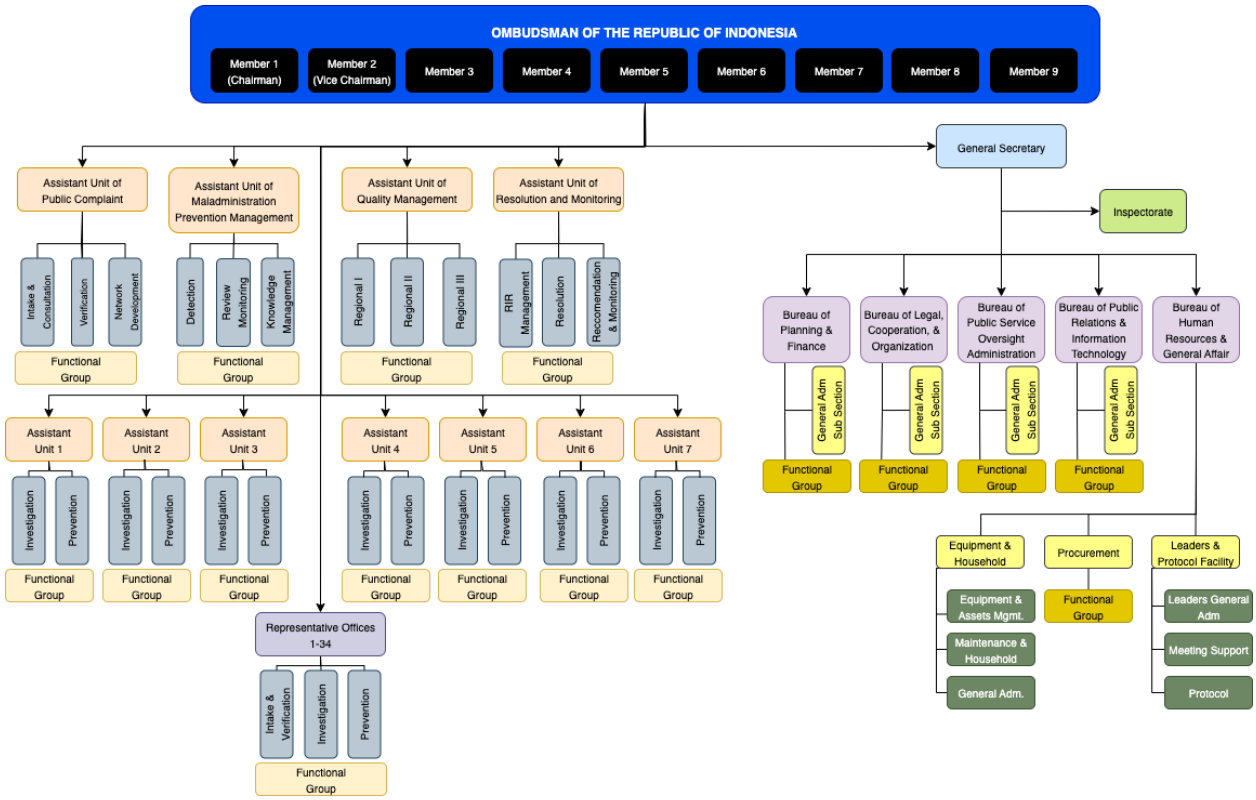

Figure 2. Organizational Structure of the Ombudsman
Source: Ombudsman Republik Indonesia (2025)

In addition to the Central Office, the Ombudsman operates 34 Regional Representative Offices led by Heads of Representative Offices. These offices carry out oversight functions equivalent to those of the Central Office *(mutatis mutandis)*, with the exception of issuing Recommendations, as the *ultimum remedium*, a function reserved for the Central Office and requiring the Chairperson's signature. Administrative and managerial support is provided by the Secretariat General, headed by a Secretary-General, which oversees several Bureaus responsible for planning and finance, human resources and general affairs, public relations and information technology, public service oversight administration, and legal affairs, organizational development, and cooperation. This multi-layered organizational structure underscores the Ombudsman's institutional complexity and provides the necessary context for assessing its readiness to implement DDDM across decision-making, data governance, and analytical functions.

Overview of Ombudsman Data Assets

The Ombudsman of the Republic of Indonesia manages a diverse set of data assets that support its core functions in handling public complaints and preventing maladministration. For complaint-handling activities, the institution uses the Sistem Informasi Manajemen Penyelesaian Laporan (SIMPeL), an integrated case management system that records data across the entire workflow, from intake, verification, and investigation to resolution and monitoring. The Ombudsman also operates operational and managerial dashboards that provide real-time information on performance indicators, target achievement, follow-up status, and emerging complaint trends.

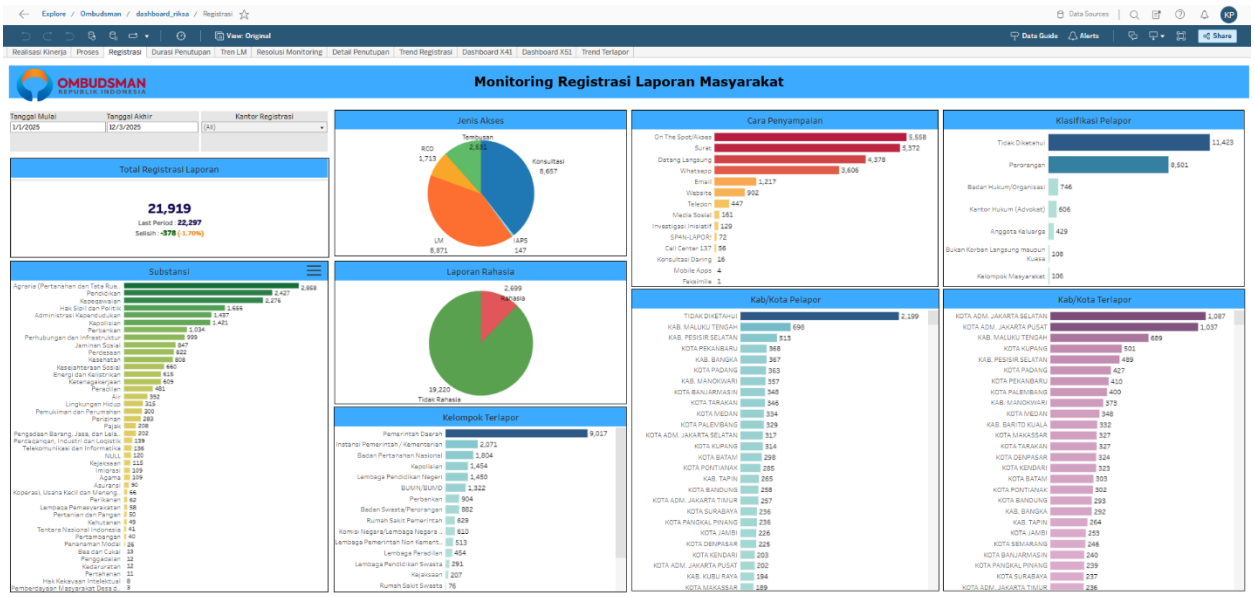

Figure 3. Dashboard of Public Complaint Registration Monitoring at the Ombudsman of the Republic of Indonesia (As of 3 December 2025).
Source: Ombudsman Republik Indonesia. (n.d.). *Dashboard Monitoring Registrasi Laporan Masyarakat*. Retrieved December 3, 2025, from https://dashboard.ombudsman.go.id

Beyond complaint-handling data, the Ombudsman maintains datasets related to maladministration prevention, including the annual Compliance Survey assessing adherence to public service standards across ministries, agencies, and local governments. Beginning in 2025, this survey will transition into the Ombudsman Opinion on public service delivery. Preventive data also include systemic review reports produced by both central and regional units, which identify structural vulnerabilities and emerging maladministration risks. For administrative support functions under the Secretariat General, the Ombudsman holds datasets covering budgeting and finance, human resources, legal and regulatory frameworks, internal grievances, whistle-blowing mechanisms, and other organizational processes. Collectively, these datasets form a critical foundation for institutional governance and provide essential inputs for advancing DDDM within the organization.

Decision

The findings show notable variation in decision-making capacities across organizational levels within the Ombudsman. Ombudsman Members hold the highest authority and routinely receive concise weekly summaries from all Assistant Units and Bureaus, yet differ in how they interpret and weigh these data in strategic deliberations. These differences stem not from a lack of information but from the descriptive and retrospective nature of available data, which provide limited explanatory insight. As a result, Members often rely on intuition and professional judgment when facing ambiguous cases or when operational data do not fully capture the complexities of policy-level decisions. By contrast, Heads of Assistant Units and Heads of Representative Offices make more regular and practical use of data for monitoring performance, managing workloads, and responding to emerging issues. Their decisions are guided by SIMPeL statistics, trend observations, and qualitative assessments from daily operations. Bureau Chiefs also use data for planning, budgeting, and administrative coordination, though their influence is often secondary to leadership preferences. Existing information systems, including SIMPeL and internal dashboards, have strengthened data accessibility but remain limited to descriptive functions and do not yet provide the analytical depth needed for strategic decision-making at higher levels.

From a theoretical perspective, these practices reflect an early stage of institutional data use. The DECAS framework emphasizes that effective decisions depend on clearly framed problems and analytically derived insights (Elgendy et al., 2022; Elragal & Elgendy, 2024), yet leadership continues to treat routinely supplied data as complementary rather than determinative inputs. This pattern aligns with Zaitsava et al. (2022), who observe that professional intuition tends to dominate where information is largely descriptive or backward-looking. It also echoes insights from Berkhout et al. (2024) and Provost & Fawcett (2013), who argue that data-driven decision making requires aligned leadership preferences, clear analytical pathways, and reproducible routines, capabilities that remain uneven across the institution.

These dynamics are reinforced by broader characteristics of Indonesian administrative culture. Sayogo et al. (2024) note that hierarchical norms and deference to senior authority often weaken the epistemic authority of data, even when information is readily available. Dingelstad et al. (2022) similarly highlight that analytical, digital, and domain competencies tend to operate in silos, limiting the formation of integrated decision-making capabilities. These perspectives help explain why decisions within the Ombudsman are increasingly informed by data but not yet consistently driven by it. Taken together, these findings indicate that the Ombudsman's readiness within the Decision dimension can be categorized as "emerging." Leadership regularly receives structured data from Assistant Units and Bureaus, yet these inputs have not attained sufficient influence to shape strategic judgments consistently. Instead, data often function as confirmatory inputs that supplement rather than guide deliberations, allowing intuition and experience to remain dominant in complex or high-stakes decisions. This gap between the presence of data and its practical weight mirrors broader public-sector tendencies toward hierarchical decision norms. As a result, while the Ombudsman values data at operational tiers, evidence has not yet become a consistent anchor for strategic decision-making across the institution. If these gaps persist, strategic decisions may continue to rely more on intuition than on systematically interpreted evidence, creating variability in judgment and limiting the institution's capacity for organizational learning. Strengthening decision routines, such as requiring key data points, guiding questions, and brief justification notes in leadership meetings, would help clarify how evidence should be weighed, enhance consistency across decisions, and gradually establish a more reliable institutional record for future learning.

Decision Maker

The findings show clear variation in data-use and evidence-interpretation competencies across organizational levels within the Ombudsman. At the leadership tier, Ombudsman Members differ markedly in how they understand and weigh the information presented to them. While some Members engage confidently with operational summaries, others rely more heavily on intuition and professional judgment, reflecting differing levels of comfort in interpreting descriptive or incomplete information required for strategic deliberations. In contrast, Heads of Assistant Units and Heads of Representative Offices demonstrate more routine engagement with data due to their frequent interaction with SIMPeL statistics, performance trends, and complaint patterns. This operational exposure strengthens their interpretive familiarity, although deeper analytical capability remains limited. Bureau Chiefs show functional data literacy for planning, budgeting, and administrative coordination, yet their ability to translate information into strategic insight is shaped by leadership expectations and the absence of dedicated analytical support. Institutional tools such as SIMPeL, data standards, and internal dashboards provide an enabling environment for data use but do not substantially enhance interpretive depth.

From a theoretical standpoint, these disparities align with patterns widely identified in the public-sector DDDM literature. The DECAS framework emphasizes that effective decision makers require sufficient analytical fluency to interpret available information and integrate it into judgment (Elgendy et al., 2022; Elragal & Elgendy, 2024). When such fluency is uneven, individuals tend to fall back on intuition, particularly when information is descriptive or incomplete, as noted by Zaitsava et al. (2022). Similar dynamics appear when analytical, digital, and domain expertise are distributed unevenly across organizational tiers (Dingelstad et al., 2022). In the Indonesian context, hierarchical norms and varying levels of confidence in interpreting evidence reinforce these differences (Sayogo et al., 2024). Schmidt et al. (2023) further highlights that analytical skill and data self-efficacy shape leaders' ability to interpret and act on information, while Szukits & Móricz (2024) show that weak analytical culture and low confidence in data quality prompt leaders to rely on intuition, patterns mirrored within the Ombudsman.

Taken together, these findings indicate that the Ombudsman's readiness in the Decision Maker dimension can be categorized as "emerging." Operational units show relatively strong familiarity with data, technocratic units demonstrate functional but limited analytical competence, and leadership-level interpretation remains uneven due to differences in perspective and confidence in the value of evidence. While data use is expanding across the institution, the ability of decision makers to consistently translate information into coherent organizational judgment is still developing. If these disparities persist, the institution risks maintaining inconsistent interpretive standards across organizational tiers, reducing institutional learning and limiting the translation of operational insights into strategic considerations. Strengthening data literacy through targeted, role-specific capacity building and introducing simple interpretive guides to help assess patterns, uncertainties, and implications in the data would foster a more consistent understanding of evidence. Such measures do not require advanced analytics but can reduce overreliance on intuition and support a more coherent institutional approach to interpreting information across levels.

Decision-Making Process

The findings show that the Ombudsman's decision-making processes are not yet supported by a unified institutional workflow. Procedures vary across units, with decisions shaped more by local practices and deliberative dynamics than by a standardized protocol outlining how data should be prepared, analyzed, and escalated for institutional judgment. As a result, Member's plenary discussions rely heavily on interpretive discretion, even when technical units have prepared supporting evidence. At operational levels, Heads of Assistant Units and Heads of Representative Offices apply more routine processes. They monitor performance trends, adjust workloads, and identify bottlenecks, but these routines remain largely descriptive and manual, relying on spreadsheets, simple comparisons, and verification of raw inputs. Constraints related to data completeness and timeliness further limit analytical depth, creating a gap between information collection and meaningful synthesis.

At the administrative support level, Bureau Chiefs conduct planning, budgeting, and oversight functions, yet their analytical workflows are often misaligned with the pathways used in plenary decision-making. Information systems such as SIMPeL dashboards and standardized formats improve visibility but do not structure or automate the analytical stages of decision-making. These tools enhance monitoring but do not link data preparation, analysis, deliberation, and decision into a coherent workflow. From a theoretical perspective, these challenges reflect an early stage of institutionalization. The DECAS framework emphasizes the need for formal mechanisms connecting data preparation, analysis, interpretation, and action (Elgendy et al., 2022; Elragal & Elgendy, 2024). Fragmented routines and reliance on informal coordination mirror findings by Berkhout et al. (2024) and Provost & Fawcett (2013), who note that weak coordination structures impede reproducible analytical processes. Similar observations appear in studies of public-sector digital governance, where inconsistent data quality and limited synthesis protocols hinder the standardization of workflows (Dingelstad et al., 2022; Luna-Reyes, 2017). In the Indonesian context, cross-unit coordination often depends on interpersonal practices rather than formal procedures (Sayogo et al., 2024), reinforcing discussion-driven rather than workflow-driven decision pathways.

Taken together, the Ombudsman's readiness in the Decision-Making Process dimension can be categorized as "emerging." Operational units demonstrate increasing process discipline, but workflows remain descriptive and manual. At cross-unit and strategic levels, processes are shaped by informal coordination and fragmented preparatory routines, with no standardized analytical pathway linking data preparation, synthesis, and deliberation. As a result, evidence is incorporated inconsistently across organizational tiers. If these gaps persist, the Ombudsman may continue to experience inconsistent decision pathways and limited translation of operational insights into strategic deliberations. Introducing a simple standardized workflow outlining minimum analytical steps, such as data validation, trend summarization, and issue framing, would help ensure that evidence is prepared and escalated consistently. Such a protocol would strengthen decision coherence across organizational levels without requiring new technological systems.

Data

The findings show that the Ombudsman manages a broad set of datasets, including SIMPeL records, financial information, quality assurance data, and monitoring outputs, yet data quality varies significantly across units and regional offices. Informants consistently reported delayed entries, incomplete records, and inconsistent classification, which create discrepancies between system data and field conditions. These issues require additional verification and limit the reliability of information for timely decision-making. Although data governance structures formally exist through Satu Data regulations and internal SOPs, implementation remains uneven. Units continue to apply different approaches to data collection and categorization, reducing comparability across regions and necessitating manual validation and reconciliation. The absence of a systematic mechanism to ensure accuracy and standardization at the point of entry reinforces variability in how similar information is recorded.

Data integration also remains limited. Substantive, financial, and public-information datasets operate in parallel systems with minimal interoperability, while dashboards provide largely descriptive and lagging indicators rather than analytical or predictive insights. Limited integration with external systems further restricts access to contextual information that could enrich analysis or support early detection of risks. From an IT perspective, SIMPeL continues to function primarily as a case-management tool and does not support advanced processing or automated validation. These system limitations are compounded by human-resource constraints, as the IT division has only a small number of staff with data-engineering or analytical expertise, and budget restrictions slow modernization efforts. Nonetheless, the IT division has begun improving data standards, enhancing validation rules, and expanding completeness and trend-monitoring features, although more advanced capabilities, such as predictive analytics or integrated risk mapping, remain beyond current development capacity.

Viewed through contemporary theoretical perspectives, these challenges align with patterns widely observed in public-sector DDDM. The DECAS framework underscores that standardized, interoperable, and high-quality data are prerequisites for analytical work (Elgendy et al., 2022; Elragal & Elgendy, 2024), yet the Ombudsman's datasets remain fragmented and unevenly structured. This condition reflects findings by Berkhout et al. (2024) and Provost & Fawcett (2013), who note that weak data governance and reliance on descriptive dashboards constrain the development of deeper analytical routines. Gaps in integrating domain, IT, and analytical expertise similarly limit organizational capacity to convert raw data into insight (Dingelstad et al., 2022). In the Indonesian context, inconsistent cross-unit coordination further undermines data consolidation and standardization (Sayogo et al., 2024).

Taken together, the Ombudsman's readiness in the Data dimension can be categorized as "emerging." Core elements for effective data use are present, but variability in accuracy, standardization, and interoperability continues to restrict the institution's ability to rely on data as a consistent foundation for evidence-based decision-making. If these limitations remain unresolved, the Ombudsman risks sustaining uneven evidence quality and prolonged verification burdens. Introducing a simple standardization protocol, specifying core fields, classification rules, and validation steps applied consistently before data are finalized, would strengthen accuracy and comparability without requiring major system changes. Such improvements would enhance the dependability of data feeding into analytical and decision-making processes.

Analytics

The findings show that analytical practices within the Ombudsman remain at an early stage, relying primarily on basic descriptive techniques such as counting, simple trend tracking, and manual spreadsheets. These outputs support routine monitoring but do not yet generate the diagnostic, comparative, or exploratory insights needed to detect underlying patterns or emerging risks. At the operational level, Heads of Assistant Units and Heads of Representative Offices use data most regularly, mainly for workload monitoring and identifying bottlenecks. Their analysis, however, is limited by the absence of structured frameworks and by the need to manually reconcile inconsistencies between system records and field conditions, restricting opportunities for deeper interpretation.

Administrative and supporting units employ data for planning and oversight, yet fragmented datasets and dashboards that mostly present lagging indicators constrain their ability to produce integrated analysis. Consequently, leaders receive information in isolated segments rather than through a cohesive analytical view. From an IT standpoint, the institution's analytical infrastructure remains modest. SIMPeL's case-management design restricts advanced processing or automated validation, and limited specialized personnel constrain further development beyond descriptive dashboards. While planned enhancements include multi-year trend views and stronger validation rules, more advanced capabilities, such as predictive analytics, automated comparisons, or integrated risk mapping, remain beyond current capacity.

Viewed through contemporary theoretical perspectives, these limitations mirror patterns commonly observed in public-sector DDDM. The DECAS framework emphasizes that mature analytics requires progression beyond descriptive outputs toward diagnostic, comparative, and predictive insight (Elgendy et al., 2022; Elragal & Elgendy, 2024). The Ombudsman's reliance on basic descriptive techniques reflects what Provost & Fawcett (2013) describe as data visibility without analytical value, where information exists but is not transformed into deeper models. Berkhout et al. (2024) likewise highlight that analytics becomes meaningful only when supported by integrated data structures and reproducible routines. Gaps in hybrid data competencies similarly limit organizational capacity to develop more advanced analytical practices (Dingelstad et al., 2022).

Taken together, the Ombudsman's analytical readiness can be categorized as "emerging." Descriptive monitoring is well established, but the institution has not yet developed the diagnostic, comparative, or predictive capabilities required for deeper institutional insight. Analytical routines remain manual and fragmented, and the absence of integrated data structures, structured frameworks, and specialized personnel limits the organization's ability to convert available information into higher-order analysis that can inform strategic decisions. Unless addressed, these gaps will cause the institution to continue relying on descriptive monitoring that identifes symptoms without uncovering underlying causes or emerging risks. Introducing a simple analytical framework, such as a standardized template for trend comparison, issue diagnosis, and cross-unit benchmarking, would help units progress beyond basic description without requiring advanced analytics. Strengthening these foundational routines would create a more coherent analytical pathway and prepare the institution for deeper capabilities as data quality, integration, and technical capacity improve.

Dimension	Key Indicators	Research Findings
Decision	a. Types and levels of decisions (strategic, tactical, operational). b. Clarity of problem framing and decision criteria. c. Consistency and transparency of decision logic. d. Extent to which evidence informs decisions versus intuition. e. Alignment between available data and decision needs.	• Available data remain largely descriptive and lagging; • leadership decisions still rely heavily on intuition; • routinely supplied data serve as complementary rather than determinative inputs; • evidence has not yet achieved sufficient epistemic authority; • information is available but not yet embedded as a decisive basis for deliberation; • data at operational tiers are valued but not consistently used at strategic levels.
Decision Maker	a. Analytical literacy and capacity to interpret data. b. Confidence (self-efficacy) in using evidence for judgment. c. Variation in competencies across hierarchical levels. d. Clarity of decision authority and roles. e. Willingness to engage with data in deliberative processes.	• Data-use and evidence-interpretation competencies vary notably across organizational levels; • leadership shows uneven ability to understand, assess, and assign weight to the data; some rely more heavily on intuition; • operational units demonstrate more routine and practical engagement with data; • Bureau Chiefs show functional data literacy; • analytical fluency is uneven, and individuals tend to fall back on intuition when data are descriptive or incomplete.
Decision-Making Process	a. Existence of standardized decision workflows or protocols. b. Mechanisms for preparing, synthesizing, and escalating evidence. c. Cross-unit coordination and communication patterns. d. Use of routines, templates, or structured steps. e. Reproducibility, transparency, and traceability of processes.	• Decision-making processes are not governed by a unified or standardized institutional mechanism; • workflows rely heavily on the practices and interpretations of individual units; • processes remain largely descriptive and manual; • analytical depth is limited by data completeness and timeliness; • cross-unit coordination is dependent on informal practices; • no coherent workflow links data preparation, analysis, deliberation, and decision.
Data	a. Data completeness, accuracy, timeliness, and consistency. b. Standardization of classifications and data-entry practices. c. Interoperability and integration across systems and units. d. Strength and enforcement of data governance. e. Accessibility of data for decision-relevant users.	• Data quality varies significantly across units and regional offices; • entries are delayed, records incomplete, and classifications inconsistent; • datasets operate in parallel systems with limited interoperability; • dashboards primarily provide descriptive and lagging indicators; • implementation of data governance is uneven; • data remain operationally functional but analytically underdeveloped; • accuracy and standardization have not yet been achieved for mature DDDM.

Analytics	a. Types of analyses used (descriptive, diagnostic, predictive). b. Availability and capability of analytical tools and dashboards. c. Human-resource capacity for analytical work. d. Integration of analytical results into decision processes. e. Adequacy of analytical outputs for decision needs.	• Analytical practices remain at an early stage, dominated by basic descriptive techniques such as counting, simple trend tracking, and manual spreadsheet summaries; • analyses are fragmented and not integrated; • dashboards lack diagnostic or comparative insights; • SIMPeL's design limits deeper analysis; • IT team has limited specialized personnel; • more advanced capabilities such as predictive analytics, automated comparative insights, and integrated risk mapping are beyond current development capacity.

Table 2. Summary of DECAS Indicators and Empirical Findings

CONCLUSION

This study concludes that the Ombudsman's readiness for data-driven decision making remains at an emerging level. Although data increasingly support operational monitoring, leadership decisions still rely heavily on intuition due to descriptive, inconsistent, and siloed information. Variations in analytical fluency and fragmented routines for preparing and synthesizing data further limit the institution's capacity to translate administrative information into coherent institutional insight. These findings clarify not only the Ombudsman's practical readiness gaps but also how DDDM manifests within external complaint-handling bodies, addressing the conceptual problem identified in this study. From a governance perspective, strengthening evidence-based oversight requires targeted institutional reforms. Standardized procedures for data preparation and synthesis would provide a uniform basis for decision-making. Improved data governance, with consistent quality controls and harmonized classifications, would enhance accuracy and reduce the verification burden. Developing an integrated analytical environment supported by adequate technical capacity would enable the interpretation of substantive, financial, and administrative data in a more holistic manner. Modernizing SIMPeL and dashboards to incorporate diagnostic and comparative insight would further support anticipatory oversight. Equally important is building shared interpretive norms and analytical literacy among decision makers so that evidence consistently informs evaluative judgment. Collectively, these measures form a coherent pathway for the Ombudsman to strengthen its role as an evidence-based oversight institution within the broader integrity system of government.

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