

Digital Transformation of Victim Reporting Systems: Applying DEG Framework to Indonesia's SIMFONI PPA

Novalia¹, Nandang Alamsah Deliarnoor¹, Antik Bintari¹

¹Universitas Padjadjaran, West Java, Indonesia

Corresponding author e-mail: novalia24001@mail.unpad.ac.id

Article History: Received on 6 June 2026, Revised on 7 June 2026,
Published on 3 August 2026

Abstract: The digitalization of public services in the women and child protection sector faces challenges including institutional fragmentation, weak data integration, and limited regional capacity. This study analyzes the application of Digital Era Governance (DEG) in the Online Information System for Women and Child Protection (SIMFONI PPA), Indonesia's national system for recording and reporting violence victims. Using a qualitative case study design, data were collected through in-depth interviews (n = 15 key informants including ministry officials, regional UPTD heads, and service users), observations, and analysis of regulations, policy documents, and digital sources (2024-2026). Thematic coding based on DEG's three dimensions reintegration, needs-based holism, and digitalization revealed three main findings. First, SIMFONI PPA functions as a governance reintegration tool by unifying workflows and data across central and regional governments without formal institutional restructuring. Second, the system promotes a holistic, needs-based service orientation by facilitating continuous case handling and victim-centered data integration. Third, digitalization has not fully resulted in equitable governance transformation due to persistent disparities in human resource capacity, infrastructure, and cross-sector integration at local levels. The study contributes to digital governance literature by extending DEG framework application to gender-based violence recording systems. Limitations include single-country focus and limited cross-sectoral data integration analysis. Policy implications emphasize strengthening local capacity, expanding interoperability with health and legal systems, and balancing digital standardization with contextual service practices.

Keywords: Digital Era Governance, E-Government Development Index, Gender-Based Violence, SIMFONI PPA Service Dashboard

A. Introduction

E-government has become a key element in the transformation of public administration toward digital governance (Latupeirissa et al., 2024; Tiika et al., 2024). The increasing adoption of digital technology in the public sector reflects the growing need for more responsive, transparent, integrated, and citizen-oriented government services. In this context, e-government should not be understood merely as the

provision of administrative services through online platforms, but as part of a broader transformation in the way governments organize institutions, manage data, coordinate across sectors, and respond to public needs. According to the United Nations, e-government refers to the utilization of digital technology to support more open, accountable, and participatory governance (Nations, 2020). The development from e-government 1.0 to e-government 3.0 also marks a transformative journey in public service delivery. Initially, e-government 1.0 focused on electronic service provision, while e-government 2.0 introduced interactive elements through social media and Web 2.0 technology to increase citizen engagement. More recently, e-government 3.0 has emphasized the integration of advanced technologies, including artificial intelligence, to support more personalized, efficient, and democratic interactions between government and citizens (Vrabie, 2023).

The global development of e-government has shown significant progress. The global average value of the E-Government Development Index (EGDI) indicates an improvement in digital government development, with the proportion of the population lagging behind in e-government development decreasing from 45.0 percent in 2022 to 22.4 percent in 2024. This development shows that more countries are increasingly adopting digital systems to improve public service delivery, technological infrastructure, and human resource capacity in government institutions. Countries such as Denmark (Yasuoka et al., 2022), Estonia (Hubarieva et al., 2023), and South Korea (Tassabehji et al., 2019) are often identified as leading examples in digital government development, particularly in terms of digital service provision, institutional readiness, and technological infrastructure (Hubalovsky et al., 2019). However, despite this global progress, disparities remain. The average EGDI for African regions, least developed countries, and small island developing states remains below the global average, indicating that digital transformation is still unevenly distributed across countries and regions.

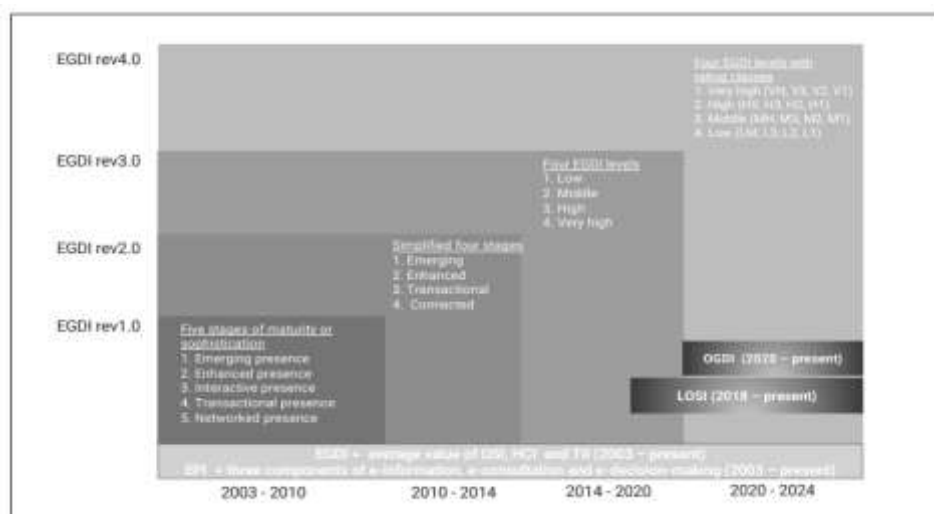


Figure 1. Evolusi EGD from 2003 to 2024
 Source: E-Government Survey 2024 Report, 2024

Although countries with high EGDI rankings have also developed e-participation and open data mechanisms, the digitalization of public services still faces important challenges. These challenges include limited involvement of vulnerable groups in digital services (Mergel, 2014; Zuiderwijk et al., 2019), data security and privacy risks (Nnenna et al., 2024; Scassa, 2014), and institutional capacity to ensure inclusive digital service delivery (Chorley, 2017; Martin, 2014). Therefore, digital transformation in government cannot be assessed only through the availability of digital platforms or the number of public services provided online. Digital transformation must also be assessed through its capacity to change government organizational structures, improve inter-agency coordination, strengthen data integration, and reorient public services toward the holistic needs of citizens (Brown & Potoski, 2006; Edelmann & Mergel, 2022; Indama, 2022; Liu, 2021; Margetts & Dunleavy, 2013; Sahur & Amiruddin, 2023).

The Digital Era Governance framework provides an important perspective for understanding this transformation. Digital Era Governance was introduced by Dunleavy, Margetts, Bastow, and Tinkler as a response to the limitations of the New Public Management paradigm, which tended to create fragmented, costly, and less accessible public services. According to Dunleavy et al. (2011), Digital Era Governance is not merely about moving government services into digital form, but about restructuring the relationship between technology, institutions, and citizens. This framework consists of three main dimensions. First, reintegration refers to the reunification of government functions, processes, responsibilities, and data systems that were previously fragmented. Second, needs-based holism refers to the design of public services based on the actual needs of citizens rather than the boundaries of bureaucratic organizations. Third, digitalization refers to the embedding of digital processes into the core operations of government, not simply the automation of administrative procedures (Dunleavy et al., 2011).

The relevance of Digital Era Governance becomes more significant in sensitive public services, particularly services related to the protection of women and children from violence. The implementation of digital government has diverse impacts on sensitive public services because it influences the quality of protection, the speed of response, the security of information, and the experience of service users (Hooda et al., 2023; Raab & Bellamy, 2005). In cases involving vulnerable groups, digitalization can support more accurate recording, faster reporting, and improved coordination among service providers. However, digitalization may also create new risks when victims' complex experiences are reduced into standardized administrative categories. Therefore, digital systems for violence reporting must be designed not only to improve administrative efficiency, but also to protect victims' rights, ensure data security, and support victim-centered services.

Violence against women and children is a complex public health, social, and governance problem that requires an effective, integrated, and accountable recording

and reporting system (Díez et al., 2018; Szilassy et al., 2013). Gender-Based Violence is understood as any gender-based violent act that results in, or is likely to result in, physical, sexual, psychological suffering, or deprivation of liberty, whether occurring in public or private spaces (United Nations General Assembly, 1993). This concept emphasizes that violence against women and children is not merely an individual problem, but is rooted in unequal gender relations, discriminatory norms, and structural vulnerability. In public policy and e-government contexts, the GBV framework has important implications for the design of digital reporting systems. Since violence is often hidden, underreported, and influenced by fear, stigma, and distrust toward institutions, reporting systems without a victim-centered and gender-sensitive perspective may produce incomplete and biased data. In Indonesia, violence against women and children remains a serious issue that requires strong governance capacity. Data on violence throughout 2024 show that violence against children is numerically higher than violence against adult women, although both categories are dominated by violence occurring in private spaces and involving perpetrators from close relationships. Violence against women recorded 12,161 cases and 12,416 victims, while violence against children recorded 19,628 cases and 21,648 victims. In cases of violence against women, the dominant victims were aged 25–44 years and 18–24 years, with household settings as the dominant location of incidents. In cases of violence against children, victims were mostly aged 6–12 years and 13–17 years, with the home and children’s immediate environment as dominant locations. These patterns indicate that violence is structural, occurs across the life cycle, and requires more than a reporting mechanism. It requires integrated prevention, protection, recovery, legal assistance, social rehabilitation, and reintegration services.

Table 1. Data on Violence Against Women and Children in 2024

Source: Processed by the researcher, 2026

Aspect of Analysis	Violence Against Women	Violence Against Children
Total Cases	12,161 cases	19,628 cases
Total Victims	12,416 victims	21,648 victims
Provinces	West Java, Central Java, East Java	National (cross-regional)
Dominant Age Group of Victims	25–44 years (37.5%)18–24 years (28.4%)	6–12 years (±43.6%)13–17 years (±37.9%)
Victim Gender	Female (100%)	Female ±70.48%Male ±29.52%
Dominant Education Level of Victims	Senior High School/equivalent (41.4%)	Elementary School/equivalent (±48%)Junior High School (±21%)
Dominant Location of Incidents	Household (74.94%)	Home & child’s immediate environment
Dominant Types of Violence	Physical (50.68%)Psychological (39.33%)	Physical & sexual violence dominant
Main Perpetrator Relationship	Husband / intimate partner	Close persons (family, caregivers, surrounding environment)
Access to Services	Reporting (100%)Health services (22.51%)Legal assistance (13.47%)	Reporting is dominant, follow-up services are limited
Number of Perpetrators	8,722 persons	Not specified (multi-relationship cases)

The table indicates that the governance of violence handling must be strengthened through reliable data, effective coordination, and integrated services. However, the handling of violence cases in Indonesia still faces various implementation challenges. Weak data integration and coordination among institutions often hinder case handling, resulting in duplicated reporting, inconsistent data, and delayed service responses. These challenges are particularly significant because violence response services involve multiple actors, including central government, local governments, women and child protection service units, health facilities, law enforcement institutions, legal aid providers, social services, non-governmental organizations, and community organizations. Without an integrated reporting and recording system, each institution may collect and manage data separately, making it difficult to develop comprehensive policy responses and monitor case handling consistently.

The problem of violence reporting, therefore, cannot be viewed merely as a technical administrative problem. It is part of a broader governance issue involving institutional coordination, interoperability, data standards, service accountability, and local implementation capacity. In Indonesia, the development of e-government began with Presidential Instruction Number 3 of 2003 concerning the National Policy and Strategy for E-Government Development, which marked the government's initial commitment to using information and communication technology to improve public services, bureaucratic efficiency, and government transparency. This policy was later strengthened by Presidential Regulation Number 95 of 2018 concerning the Electronic-Based Government System (SPBE), which became the legal umbrella for the national e-government framework. The principles of SPBE emphasize interoperability among government agencies, the use of integrated government data, and the integration of digital service applications across levels of government. Nevertheless, as Dwiyanto (2018) argues, the main challenge of e-government in Indonesia is not only technological infrastructure, but also institutional readiness, weak inter-agency coordination, and human resource capacity. This condition often causes digital transformation to stop at the formal and technical level without fundamentally changing bureaucratic work patterns and inter-organizational relations.

To respond to the need for a more integrated system, the Ministry of Women's Empowerment and Child Protection developed the Online Information System for Women and Child Protection, known as SIMFONI PPA, as a national system for recording and reporting cases of violence against women and children. This system is also in line with the mandate of Law of the Republic of Indonesia Number 35 of 2014 concerning Amendments to Law Number 23 of 2002 concerning Child Protection and Law of the Republic of Indonesia Number 23 of 2004 concerning the Elimination of Domestic Violence. SIMFONI PPA is used by victim assistance service units at the provincial, regency, and city levels. Data are recorded by operators from various service agencies and UPTD PPA using uniform standards, allowing data to be compiled, monitored, and analyzed across regions.

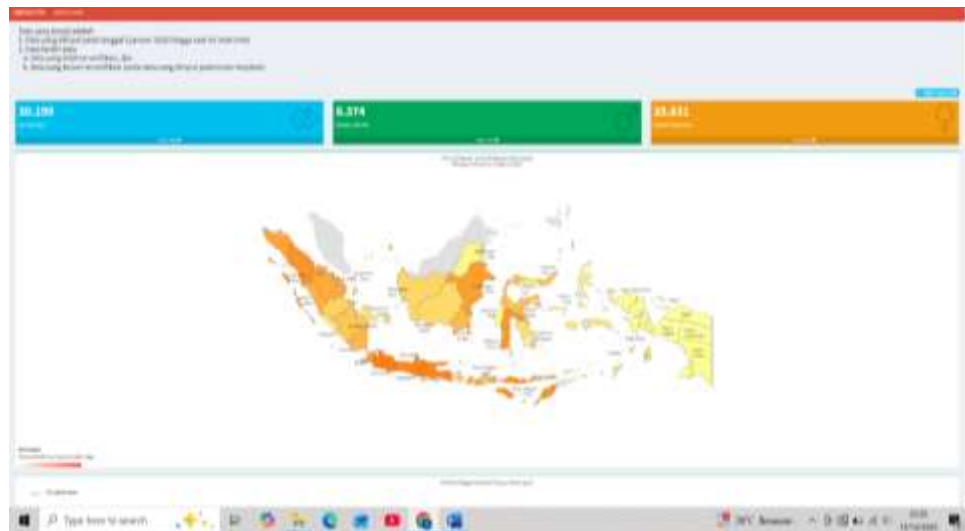


Figure 2. SIMFONI PPA Service Dashboard
Source: <https://kekerasan.kemenpppa.go.id>, 2026

SIMFONI PPA can be accessed in real time by operators and the public, reflecting the performance of violence assistance services in each region. The system has been widely utilized by ministries, agencies, and local governments as a basis for planning, implementing, monitoring, and evaluating policies and programs related to women and child protection. Several types of services are recorded in the system, including complaints, health services, legal aid, law enforcement, social rehabilitation, social reintegration, and repatriation. Through this system, the government seeks to strengthen data integration, reduce fragmented recording mechanisms, improve traceability of case handling, and support more coordinated service delivery for victims.

Nevertheless, the implementation of SIMFONI PPA still faces several challenges. These include institutional integration, uneven regional utilization, human resource capacity, technological infrastructure, and limited cross-sector interoperability. Studies by Engkus (2021) and Wodecka-Hyjek et al. (2024) show that digitalization of public services often fails to produce governance transformation when it focuses only on technical aspects without institutional reintegration and user-needs-based orientation. Conceptually, Grigalashvili (2023) emphasizes the distinction between digital government and digital governance. Digital government refers more to the use of digital technology in administrative services, while digital governance emphasizes the transformation of power relations, institutional coordination, and governance processes. This distinction is important because SIMFONI PPA should not be evaluated only as a digital reporting tool, but also as a governance mechanism that may transform the recording, reporting, coordination, and handling of violence cases.

Although previous studies have discussed e-government, digital governance, and digital public service transformation, limited attention has been given to the application of the Digital Era Governance framework in systems for recording and

reporting victims of violence. Existing studies tend to discuss digital transformation in general public services, while the governance dynamics of gender-based violence reporting systems remain underexplored. This creates an important research gap, especially because victim reporting systems involve sensitive data, vulnerable service users, multi-level governance, and cross-sectoral coordination. Therefore, this research analyzes the application of Digital Era Governance in SIMFONI PPA to assess the extent to which digitalization contributes to governance transformation in the protection of women and children in Indonesia.

Based on this gap, this study addresses the following research questions: How is the Digital Era Governance framework applied in the implementation of SIMFONI PPA? To what extent does SIMFONI PPA support reintegration, needs-based service orientation, and digitalization in the governance of violence reporting? What institutional, technical, and human resource challenges limit the transformation of SIMFONI PPA as a digital governance mechanism? These questions are important because they allow the study to move beyond a descriptive explanation of digital systems and toward an analytical understanding of how digital governance operates in socially sensitive public services.

This research contributes to the development of digital governance literature by extending the application of the Digital Era Governance framework to the field of women and child protection, particularly in the recording and reporting of violence cases. Empirically, this study provides an analysis of SIMFONI PPA as a national digital reporting system in Indonesia. Theoretically, it explains how the dimensions of reintegration, needs-based holism, and digitalization operate in a multi-level and cross-sectoral governance context. Practically, this study emphasizes the importance of balancing digital standardization with local institutional readiness, human resource capacity, cross-sector interoperability, and victim-centered service practices. Thus, SIMFONI PPA is analyzed not only as an instrument of administrative digitalization, but also as a mechanism of digital era governance in the protection of women and children.

B. Methods

Research Design and Site Context

This study used a qualitative case study design with intensive data collection and analysis (Baxter & Jack, 2015) to examine the processes, institutional dynamics, coordination mechanisms, and governance practices in SIMFONI PPA implementation. This approach was appropriate because Digital Era Governance analysis requires in-depth understanding of institutional coordination, service orientation, data integration, and changes in bureaucratic work processes. The research was conducted within KemenPPPA, which has a strategic mandate in policy formulation, cross-sectoral coordination, national referral services, and gender and

child protection data management.

SIMFONI PPA was selected because it functions as a national system for recording and reporting violence cases against women and children. The study also included West Java, Central Java, North Sulawesi, Sleman Regency, and Malang City as pilot areas in 2025 to examine regional variation. Data were collected through semi-structured interviews, observation, regulations, institutional documents, digital sources, social media, and academic literature. Secondary data were collected from regulatory and policy documents, including Presidential Regulation Number 95 of 2018 and Presidential Regulation Number 132 of 2022 concerning Electronic-Based Government Systems, Presidential Regulation Number 39 of 2019 concerning One Data Indonesia, and internal policies of KemenPPPA related to information systems and digital transformation. Digital sources were obtained from official websites and social media platforms, including Instagram, Facebook, X, and YouTube. Academic literature was collected from research databases such as Google Scholar, Scopus, Dimensions, EBSCOhost, and Oxford Academic Journals.

Table 2. Digital Sources

Type of Data	Source / Informant	Data Collection Technique	Purpose
Primary data	Representatives of KemenPPPA, including units related to women's protection, child protection, integrated service governance, and data and information	Semi-structured interviews	To explore policy direction, system management, institutional coordination, and governance transformation
Primary data	Regional PPPA Offices in West Java, Central Java, North Sulawesi, Sleman Regency, and Malang City	Semi-structured interviews	To examine regional implementation, local capacity, and variations in SIMFONI PPA use
Primary data	Service providers, operators, general public, and service users/reporters	Interviews and observation	To understand practical use, service experience, and challenges in recording and reporting cases
Primary data	SIMFONI PPA implementation practices	Observation	To examine system use, coordination dynamics, and interaction between users and digital technology
Secondary data	Laws, presidential regulations, ministerial policies, and internal documents of KemenPPPA	Document analysis	To understand the regulatory and institutional basis of SIMFONI PPA
Secondary data	Official websites and social media of relevant institutions	Digital source analysis	To examine public communication and digital information related to women and child protection services
Secondary data	Academic literature from Google Scholar, Scopus, Dimensions, EBSCOhost, and Oxford Academic Journals	Literature review	To develop the theoretical framework and compare findings with previous studies

Data Analysis

Data were analyzed using thematic coding based on a constructivist approach. This approach was used because the study aimed to understand how digital governance practices are constructed through institutional interaction, policy interpretation, and local implementation experiences. Through thematic coding, the researcher identified recurring patterns related to the implementation of SIMFONI PPA and interpreted them through the Digital Era Governance framework. The data analysis was conducted in several stages. First, interview data, observation notes, regulatory documents, digital materials, and academic literature were organized according to their sources and relevance to the research questions. Second, the researcher conducted repeated readings of the data to identify key issues related to SIMFONI PPA implementation, including data integration, service flow, central-local coordination, human resource capacity, infrastructure readiness, reporting procedures, and cross-sector collaboration.

Third, open coding was conducted to identify important concepts emerging from the data. The initial codes included “case recording,” “complaint channels,” “central-local coordination,” “data standardization,” “operator capacity,” “service referral,” “real-time reporting,” “data duplication,” “victim needs,” “system interoperability,” and “cross-sector coordination.” Fourth, these codes were grouped into broader analytical categories based on the three dimensions of Digital Era Governance: reintegration, needs-based holism, and digitalization.

Codes related to data integration, workflow standardization, complaint transfer, case transfer, and coordination between central and regional governments were categorized under reintegration. Codes related to victim needs, complaint handling, service referral, health services, legal aid, law enforcement, social rehabilitation, reintegration, and repatriation were categorized under needs-based holism. Codes related to real-time data input, digital workflows, user roles, system-based validation, digital case management, and data traceability were categorized under digitalization.

Fifth, the researcher compared findings across different data sources to identify consistencies, differences, and implementation gaps between formal policy and practical use. Source triangulation was applied by comparing interview findings, observation results, regulatory documents, digital sources, and academic literature. This process allowed the researcher to distinguish SIMFONI PPA as a technical reporting application from SIMFONI PPA as a broader digital governance mechanism.

Table 3. Analytical Framework Based on Digital Era Governance

DEG Dimension	Analytical Focus	Indicators in SIMFONI PPA
Reintegration	Reunification of fragmented government functions, data, workflows, and responsibilities	Integrated case recording, standardized reporting, central-local data access, complaint transfer, case transfer, and national monitoring
Needs-Based Holism	Service orientation based on victims' needs rather than bureaucratic boundaries	Complaint intake, initial assessment, service referral, health services, legal aid, law enforcement, social rehabilitation, social reintegration, and repatriation
Digitalization	Embedding digital processes into government operations	Real-time data input, digital case management, user roles, hierarchical recording, digital validation, system-based reporting, and data traceability

Complaint and Case Recording Flow

This study also examined the complaint and case recording flow within SIMFONI PPA to understand how victim reports enter the system and how case information is processed. Complaints can be submitted through direct and indirect channels, including the Lapor SAPA website, complaint posts, PPPA hotline, SAPA 129 mobile application, Call Center 129, WhatsApp SAPA 129, and direct visits to PPPA offices. Cases may also enter the system through referrals from health facilities, SP4N-LAPOR!, NGOs, foundations, community organizations, the Indonesian Child Protection Commission, the police, local governments, and central government institutions.

The complaint process consists of several stages: complaint submission, referral or support from external institutions, informal information input, complaint intake, initial identification, data collection, and case outcome decisions. At the initial stage, officers collect information related to the complaint, reporter, victim, and reported person. The case may then proceed to further handling, be closed, or be transferred to another authorized institution or region. This flow was analyzed to understand how SIMFONI PPA supports both administrative recording and governance coordination in the handling of violence cases.

C. Results and Discussion

Results

Systemic Reintegration in SIMFONI PPA

Reintegration within the Digital Era Governance framework refers to the reunification of government functions, processes, and responsibilities that were previously fragmented due to sectoral division of authority and the managerial logic of New Public Management (Dunleavy, 2005; Dunleavy et al., 2011). In this study,

reintegration is understood not only as institutional centralization, but also as the integration of workflows, data standards, service coordination, and information management. The findings show that SIMFONI PPA has formed a reintegration mechanism in the governance of women and child protection by connecting central and regional governments in a single digital case recording and reporting system.

SIMFONI PPA functions as a national platform that unifies violence case data from different regions and service units. Reports received through various complaint channels can be entered into the same system, thereby reducing administrative fragmentation that previously occurred because each region or institution used different recording mechanisms. This integration is particularly important in the governance of violence against women and children, where case handling often involves multiple actors, including central government, regional PPPA offices, UPTD PPA, health facilities, legal aid institutions, law enforcement agencies, and social services.

From an operational perspective, reintegration occurs through direct input by service officers at UPTD PPA or regional PPPA offices into the SIMFONI PPA application. Each stage of case handling is constructed as a sequence of interconnected processes that must be completed according to the authority of each user. One central informant explained: "Every stage of case handling, from receiving complaints, assessment, implementation of services, to case termination, is recorded hierarchically according to the role of each user. With this mechanism, case data can be integrated nationally and can be accessed according to authority by the central and regional governments for monitoring, evaluation, and reporting purposes."

This statement indicates that reintegration in SIMFONI PPA is not limited to data integration. It also includes workflow standardization, role-based authority, hierarchical recording, and uniform reporting procedures across regions. The system indirectly creates a common work pattern among service providers, so that coordination that previously relied on manual administrative mechanisms can be carried out through standardized digital procedures.

In addition to unifying case recording processes, SIMFONI PPA also supports case management between central and regional governments through complaint transfer and case transfer features. These features allow cases to be transferred to regions or institutions with handling authority without the need for repeated data entry. As a result, service distribution becomes more coordinated, administrative redundancy can be reduced, and follow-up on case handling can be accelerated.

The reintegration process is also strengthened through standard workflows, user role assignments, approval mechanisms between service stages, and logical validation to prevent data anomalies. Through these mechanisms, SIMFONI PPA does not only function as a data storage tool, but also as a governance instrument that maintains

data consistency and quality at the national level. However, the findings also show that reintegration has not been fully optimal. Data duplication can still occur in regions that previously used other recording systems or continue to conduct manual recording in parallel with SIMFONI PPA. Differences in human resource capacity, operator turnover, and variations in understanding case recording procedures also affect the quality of data integration. This condition indicates that the challenge of reintegration is not only technological, but also institutional and organizational.

Cross-sectoral integration is another important issue. The findings show that SIMFONI PPA has successfully integrated recording and reporting processes within the women and child protection service ecosystem. However, its integration with data systems from other ministries, agencies, and institutions has not been fully realized. One informant stated: "SIMFONI PPA V.3 has no connection with other government databases. But the SIMFONI PPA V.3 infrastructure is located in PDNS1 (Temporary National Data Center 1), which can technically receive and send data as needed from government agencies. However, its implementation will require a scope and MoU with the relevant ministries/agencies/regions."

This finding shows that the technical capacity for interoperability is already available, but its implementation still requires regulatory support, institutional agreements, data-sharing governance, and cross-sector coordination. Thus, the main obstacle to reintegration no longer lies only in the technological infrastructure, but also in institutional synchronization and the governance of inter-agency data exchange.

Needs-Based Holism: Translating Victim Needs into Digital Service Logic

Needs-based holism, the second dimension of Digital Era Governance, means designing public services around citizens' real needs rather than bureaucratic structures (Margetts & Dunleavy, 2013a). For victims of violence against women and children, needs are multidimensional and evolving, including complaint handling, psychological support, medical care, legal aid, law enforcement, rehabilitation, reintegration, and repatriation. Findings show that SIMFONI PPA has shifted service orientation from administrative reporting to needs-based case management by recording complaint data, reporter and victim identities, reported persons, types of violence, service needs, referrals, and outcomes. The system also connects multiple complaint channels, such as Lapor SAPA, hotline, SAPA 129, WhatsApp, direct visits, and referrals from health facilities, police, NGOs, KPAI, and governments. However, victims' complex experiences cannot always be captured by standardized digital categories. Thus, SIMFONI PPA supports victim-centered services, but still requires professional judgment and contextual sensitivity from officers to ensure appropriate follow-up actions in actual practice.

Digitalization of Case Recording and Reporting

Digitalization in the Digital Era Governance framework is not merely the transfer of manual procedures into online applications. It refers to the embedding of digital processes into the core operations of government, transforming the way organizations work, coordinate, and provide services (Dunleavy, 2005). In the case of SIMFONI PPA, digitalization has entered the core process of violence case recording and reporting by connecting complaint reception, assessment, case management, service implementation, and reporting within one national digital workflow.

The findings show that SIMFONI PPA has transformed case recording and reporting from mechanisms that were previously largely manual, fragmented, and paper-based into a more integrated digital system. Processes that were formerly carried out through physical documents, hierarchical reports, or separate applications are now connected through one platform. This transformation allows case data to be updated directly by service officers and monitored more quickly by central and regional governments. One informant from the North Sulawesi Province PPA UPTD stated: "Increases work efficiency because it is carried out up to date/real time."

This statement indicates that SIMFONI PPA's most visible digitalization benefit is administrative efficiency and faster access to information. Real-time data supports monitoring, evaluation, and decision-making based on current case information, making the system not only a data repository but also an instrument of data-based governance. Digitalization also reshapes officers' work patterns. They are responsible not only for service delivery, but also for managing information, ensuring data completeness and accuracy, and following digital workflows. This reflects a bureaucratic shift toward digital literacy, data management, and system-based coordination. However, these benefits are uneven across regions due to differences in infrastructure, internet quality, operator capacity, and organizational readiness. Some regions are still adapting to the system, showing that digital transformation requires institutional support, training, infrastructure readiness, and stable human resources. Moreover, SIMFONI PPA remains stronger in recording and reporting than in cross-sector service integration with police, health, legal aid, and social services providers.

Discussion

The findings of this study show that SIMFONI PPA represents an important effort to transform the governance of women and child protection through digital technology. From the perspective of Digital Era Governance, SIMFONI PPA demonstrates the three main dimensions of DEG: reintegration, needs-based holism, and digitalization (Dunleavy et al., 2011). However, the findings also show that these dimensions are not implemented equally or completely. The system has achieved stronger progress in administrative reintegration and digital case recording, while cross-sector interoperability and substantive service integration remain limited.

Regarding reintegration, SIMFONI PPA demonstrates how digital technology can reduce fragmentation by unifying case recording, reporting procedures, and data standards between central and regional governments. This supports Digital Era Governance by showing that technology can reconnect fragmented government functions and create more integrated public services. However, system-based integration does not automatically produce institutional integration because implementation remains shaped by human resource capacity, regional infrastructure, and organizational readiness. These findings also show that digital governance depends on coordination among actors and institutions. Since violence case handling involves multiple levels and sectors, SIMFONI PPA reflects networked governance. As Provan and Kenis (2007) argue, network governance requires structure, management, and coordination mechanisms. SIMFONI PPA provides this digital structure, but its effectiveness still depends on institutional agreements, user capacity, data-sharing willingness, and cross-boundary coordination. It also supports needs-based holism by linking complaint data with service needs, referrals, and follow-up mechanisms.

In the dimension of digitalization, SIMFONI PPA has improved real-time reporting, data traceability, and administrative efficiency. This finding supports Dunleavy's view that digitalization becomes meaningful when digital processes are embedded into the core operations of government (Dunleavy, 2005). Through SIMFONI PPA, digital processes are not only used at the final stage of reporting, but also throughout the case handling flow, from complaint reception to case termination. This indicates that digitalization has changed the rhythm of bureaucratic work in women and child protection services.

Nevertheless, the study confirms that digital transformation is strongly influenced by organizational capacity. Gaps in technical skills, infrastructure, and regional readiness may create unequal benefits between regions. This supports the argument that digital transformation is not merely a technological project, but an organizational change process that requires investment in institutional capacity and human resource development (Al-Shbail & Aman, 2018). Without such support, digitalization may produce new disparities between regions with strong digital capacity and regions still facing infrastructural and human resource limitations.

Another important discussion point is the limited cross-sector interoperability of SIMFONI PPA. Although the system has integrated data within the women and child protection sector, it is not yet fully connected with the databases of other institutions. This limits the potential of SIMFONI PPA as a fully integrated governance mechanism. In violence case handling, effective services require coordination with police institutions, health facilities, legal aid providers, social services, local governments, and civil society organizations. Therefore, future development of SIMFONI PPA should focus not only on internal system improvement, but also on building interoperability and collaborative governance across sectors.

Overall, this study shows that SIMFONI PPA has contributed to digital governance transformation by improving data integration, case traceability, administrative efficiency, and service orientation. However, the transformation remains partial. SIMFONI PPA has become a strong instrument for recording and reporting, but it still needs further development to become a fully integrated cross-sectoral service governance system. This finding emphasizes that the success of digital government cannot be measured only by the existence of a digital platform, but also by the ability of public institutions to reorganize workflows, coordinate across sectors, strengthen local capacity, and maintain victim-centered service practices.

This study has several limitations. First, the research focuses on SIMFONI PPA as a national digital reporting and recording system, but does not quantitatively measure the performance outcomes of the system, such as response time, case resolution rates, or user satisfaction. Second, the regional cases included in this study are limited to selected pilot areas, namely West Java Province, Central Java Province, North Sulawesi Province, Sleman Regency, and Malang City. Therefore, the findings may not fully represent the diversity of implementation conditions across all regions in Indonesia. Third, because the study uses a qualitative case study approach, the findings are intended to provide an in-depth understanding of governance processes rather than statistical generalization. Future research may combine qualitative and quantitative methods to assess the relationship between digital system implementation, service quality, and victim outcomes.

D. Conclusions

This study analyzed the application of Digital Era Governance (DEG) in SIMFONI PPA, Indonesia's national system for recording and reporting violence against women and children, and yielded three main conclusions. First, SIMFONI PPA demonstrates reintegration through workflow unification and data standardization across central and regional governments without formal institutional restructuring, extending DEG theory by showing that digital reintegration can occur through procedural standardization even when organizational integration remains incomplete. Second, the system has shifted service orientation toward victim needs through integrated identity data, assessment results, and case handling histories; however, representing complex victim experiences in standardized data categories risks oversimplification, suggesting that digital systems should complement rather than replace professional discretion. Third, digitalization has produced uneven benefits across regions due to disparities in human resource capacity, infrastructure, and organizational readiness, qualifying optimistic accounts of digital transformation by demonstrating that technology alone cannot overcome structural inequalities. Theoretically, this study applies the DEG framework to a novel context—gender-based violence recording systems—and identifies the mechanism of “procedural reintegration,” whereby integration is achieved through workflow standardization rather than organizational restructuring. Practically, policymakers should prioritize strengthening local human

resource capacity through continuous training, expanding cross-sector interoperability with health, legal, and social services, ensuring data security and victim confidentiality, and designing flexible data categories that capture victim complexity without oversimplification. The study's limitations include a single-country case study, limited victim perspective data, and a cross-sectional design, while future research could involve comparative studies across countries with similar victim reporting systems, longitudinal research examining system evolution, and mixed-methods studies incorporating quantitative effectiveness metrics.

E. Acknowledgement

We thank the respective institutions Universitas Padjajaran for administrative technical support, and declare that during the preparation of this manuscript, reviewing, editing all outputs and taking full responsibility for the content of this publication

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