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Evaluating Rural E-Government Web Service Using Design Thinking and COBIT 2019: A Case Study of Indramayu Regency

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Abstract. This study evaluates the maturity of public web services in Indramayu Regency, Indonesia, using a Design Thinking methodology combined with the COBIT 2019 Process Performance Model, aiming to clarify the digital governance gap in rural public service delivery. The research applies the five-stage Design Thinking process (Empathize, Define, Ideate, Prototype, Test) as an evaluation lens. Data were collected from 45 respondents through interviews, questionnaires, direct observations, and workshops with village officials. The COBIT 2019 Process Attribute Achievement Model was used to quantify capability maturity levels across each Design Thinking phase for 14 public web services in the regency. Most public web services scored only 'Manage' in the Empathize phase, with BPS Indramayu and PPID reaching 'Established'. The Ideate, Prototype, and Test phases were predominantly 'Performed', with only BPS Indramayu and SIPADU reaching 'Managed'. These findings indicate that most platforms function primarily as informational websites with limited user-driven innovation, prototyping, and structured testing. This study offers a novel integrative framework that combines human-centered Design Thinking with COBIT 2019 governance assessment to assess the public sector web services of digital transformation in decentralized rural governance contexts, providing a scalable, empirically grounded model applicable to other rural communities.

Keywords: Design Thinking, public web services, Rural E-Government, COBIT 2019, Indramayu

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1. INTRODUCTION

The digital transformation of public services has become a cornerstone of modern governance, aiming to enhance service delivery, transparency, and citizen engagement. Although substantial progress has been made in urban areas, rural communities often remain underserved due to limited access to administrative offices, lower digital literacy, and infrastructure challenges. These issues are particularly pronounced among populations whose livelihoods depend on mobility and irregular schedules, such as fishermen, farmers, and migrant workers. As a result, rural residents may experience delays, inefficiencies, and dissatisfaction with conventional, office-based public service delivery models.

Indramayu Regency, located on the north coast of West Java, Indonesia, exemplifies these rural digital governance challenges. The regency encompasses 10 sub-districts with 35 villages adjacent to the coastline and a predominantly rural population engaged in agriculture and fishing. Data from the Central Statistics Agency (BPS) indicates that in 2021, internet penetration in rural Indonesia was approximately 60%, compared to 74% in urban areas [1][2] Furthermore, concerns about trust and data security, coupled with the complexity of navigating e-government platforms, have hindered adoption [3][4]. A 2022 survey by the Ministry of PANRB revealed that public satisfaction with e-government services averaged only 72 out of 100 [5].

In order to bridge this gap, there is a growing need for innovative, user-centered solutions sensitive to the specific needs of rural communities. Design Thinking, a methodology rooted in empathy and iterative problem-solving, offers a powerful framework for developing such solutions [6] Unlike traditional top-down approaches, Design Thinking engages end-users and stakeholders throughout the design process, ensuring that technological innovations are both relevant and readily adopted. Combined with COBIT 2019, a comprehensive IT governance framework, this study delivers a holistic, empirically grounded approach to public service innovation[7] [8].

Several prior studies have explored e-government adoption in Indonesian villages. Research on the Simpel desa system in Kajowair Village, East Nusa Tenggara, demonstrated that despite only 51.9% internet coverage, 50% of administrative data

could be digitized, highlighting both the potential and limitations of rural digital transformation [9] Similarly, the Smart Village initiative in Salu Dewata Village improved basic infrastructure but left strategic digital applications underdeveloped [10]. Broader analyses confirm that while e-government platforms enhance efficiency, they are constrained by digital infrastructure gaps, cybersecurity concerns, and urban-rural disparities [12].

The Design Thinking approach has been applied successfully in other rural and public-sector innovation contexts. Kertayasa Village applied the five-stage Design Thinking process to create digital public awareness materials, notably improving community understanding of Smart Village programs In broader digital transformation scholarship, four foundational pillars have been identified as critical: open data, ICT infrastructure, digital skills, and agile development [11]. Despite this efforts, a critical gap remains in the literature; existing rural e-government studies rarely integrate human-centered design methodology with structured IT Govenrment assessment framewotk, nor do they provide measureable, phase-by-phase evaluation web service capability maturity of current service delivery. [12][13] This study addresses that gap by applying an integrate Design Thinking and COBIT 2019 framework to systematically evaluate 14 public web service platforms in Indramayu Regency. This study seeks to determine the current COBIT 2019 capability maturity level of public web service platforms across each Design Thinking phase, to identify which phases and service dimensions expose the most critical governance weaknesses in rural e-government delivery, and to recommend improvement strategies grounded in the evaluation findings to guide future capability enhancement efforts at the local government level.

2. METHODS

This study employs an integrative methodological framework combining Design Thinking and COBIT 2019 to evaluate 14 public web service platforms in Indramayu Regency. The Design Thinking model comprises five iterative stages: Empathize, Define, Ideate, Prototype, and Test, while COBIT 2019 is applied as a governance evaluation tool to assess IT capability maturity levels against each stage's outcomes. Figure 1 illustrates the overall research methodology. The Design Thinking model comprises five iterative stages: Empathize, Define, Ideate, Prototype, and Test. COBIT 2019 is applied as a governance

evaluation tool to assess IT capability maturity levels against each stage's outcomes. Figure 1 illustrates the overall research methodology [14], [15], [16].

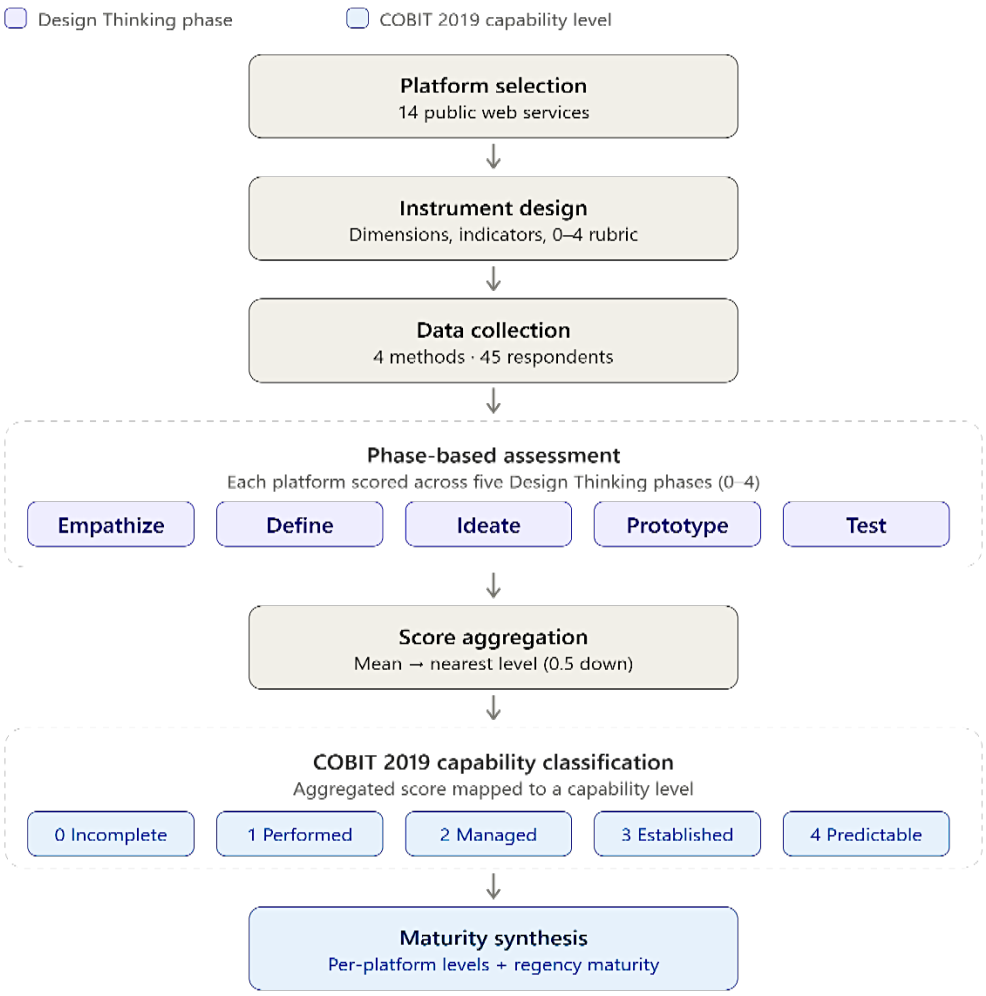

Figure 1. Research Methodology: Integration of Design Thinking Model and COBIT 2019

Research Methodology that integrating of Design Thinking Model and COBIT 2019 as follow.

2.1. Empathize: User Research and Data Collection

In the Empathize stage, insights were gathered from village officials through interviews, questionnaires, direct observations, and workshops. This aligns with common practices in user-centered design within public-sector contexts [17]. The goal was to understand user

experiences, needs, and pain points related to public web services, capturing authentic perspectives regarding accessibility, usability, reliability, responsiveness, and support.

2.2. Define: Problem Definition and Pain Point Analysis

A comprehensive mapping of all digital public service platforms managed by local government agencies was conducted. This mirrors approaches in broader public-sector digital transformation studies, which emphasize the importance of clear problem definition in addressing resistance to change, infrastructure disparities, and digital literacy gaps [13].

2.3. Ideate: Concept Generation and Co-Creation

During ideation, the research team and stakeholders collaboratively generate solutions including document management, workflow automation, and communication modules. This co-creative practice echoes Design Thinking frameworks applied in public-sector HR contexts, where iterative workshops and stakeholder engagement led to practical, user-informed solutions [18]

2.4. Prototype: Design and Development of System Interfaces

In the Prototype phase, the evaluation assessed the extent to which each public web service platform in Indramayu Regency supports the piloting of new features, incorporates user feedback into iterative service updates, and maintains dedicated prototype or staging environments for testing proposed improvements prior to full deployment. The COBIT 2019 Process Attribute Achievement Model was applied to quantify the maturity of each platform's prototyping and iterative development practices, drawing on data collected through questionnaires, interviews, and direct observations of agency workflows. This evaluation approach is consistent with user-centered design assessment frameworks applied in public sector digital transformation studies, which emphasize that the capacity to iteratively refine services based on structured user input is a critical indicator of governance maturity in e-government contexts [18].

2.5. Test: Usability Evaluation and Task Performance Metrics

In the Test phase, the evaluation assessed the extent to which each public web service platform in Indramayu Regency provides structured opportunities for users to report issues, participate in service testing, and contribute feedback that is systematically

integrated into service improvement processes. The COBIT 2019 Process Attribute Achievement Model was applied to measure the maturity of each platform's testing and quality assurance practices across indicators including the availability of issue-reporting mechanisms, the existence of user acceptance testing procedures, and the regularity of post-deployment performance reviews. This evaluation approach aligns with usability and accessibility assessment frameworks applied to Indonesia's national Open Government Data Portal (Satu Data Indonesia), where Sari et al. (2025) demonstrated that structured quantitative evaluation of user experience indicators is essential for understanding platform adoption barriers and identifying actionable service quality gaps in public sector digital governance contexts [18]

2.6. COBIT 2019 Governance Framework

COBIT 2019 is utilized as a comprehensive tool to assess, monitor, and enhance IT governance and management processes, providing a structured means to align information systems deployment with organizational and regulatory objectives [1]. The framework's process-based approach enables the identification of key governance objectives, assessment of capability levels (ranging from 0-Not Achieved to 4-Predictable), and implementation of continuous improvement cycles. The incorporation of Design Thinking ensures a human-centered and iterative approach to problem-solving, fostering innovation and enhancing user experience in digital government service design and delivery [7] [19]

The questionnaire instrument was developed based on integrate model based on Design Thinking and COBIT 2019 framework which consists of 6 sub domains measurement items, yielding a total of 28 questionnaire items. Response was measured using COBIT 2019 was applied using the Process Attribute Achievement Model to quantify governance maturity across each Design Thinking phase. For each platform, evaluators scored performance against phase-specific process attributes derived from the COBIT 2019 Process Performance Model, drawing on triangulated data from questionnaire responses, interview findings, and observational records. [20]Scores for each attribute were averaged across respondent groups and mapped to the following achievement rubric as shown in Table 1.

Table 1. COBIT 2019 Capability Level

Level	Capability Level Name	Process Attribute Achievement	Achievement Range
0	Incomplete	Not Achieved	0% – 15%
1	Performed	Partially Achieved	16% – 50%
2	Managed	Largely Achieved	51% – 85%
3	Established	Fully Achieved	86% – 100%
4	Predictable	Fully Achieved + Quantitative Management	Sustained & Measured
5	Optimizing	Fully Achieved + Continuous Improvement	Continuously Improved

2.7. Respondents and Data Collections

The data were collected from 45 respondents selected through purposive sampling based on their direct involvement in rural public web service delivery and administration. The respondent profile comprised three groups: (1) village officials (n=20), including village heads, village secretaries, and administrative clerks from 10 sub-districts in Indramayu Regency, who participated in structured questionnaires and direct observations of administrative workflows; (2) government agency representatives (n=15), including staff from Diskominfo, DPMD, and five departmental agencies covering Health, Education, Public Works, LPSE, and the Regional Secretariat, who participated in semi-structured interviews and co-design workshops to provide institutional perspectives on web service governance and operational constraints; and (3) community members (n=10), including farmers, fishermen, and migrant workers residing in coastal villages, who participated in questionnaires assessing their direct experiences with accessing public web services. All respondents were selected on the basis of having direct experience with or operational responsibility for the public web service platforms evaluated in this study. Interview data were recorded, transcribed, and analyzed thematically to identify recurring pain points, governance weaknesses, and unmet service needs. Observational data collected during field visits to village offices and agency premises were documented through structured observation checklists covering workflow efficiency, system accessibility, and staff digital

literacy, and were subsequently triangulated with interview and questionnaire findings to ensure consistency and validity of the overall assessment.

The 14 public web service platforms evaluated in this study were selected through a systematic mapping of all official government domains registered under the Indramayu Regency administration, conducted in collaboration with the Diskominfo agency. Inclusion criteria required that each platform: (1) operate under an official government domain or subdomain, (2) be publicly accessible and intended to serve citizen or administrative functions, and (3) have been operational for a minimum of one year prior to the evaluation period. Platforms meeting these criteria spanned key public service areas including integrated village administration (SIPADU), public information disclosure (PPID), statistics (BPS Indramayu), procurement (LPSE), and nine departmental websites covering health, education, public works, environment, cooperatives, civil service.

3. RESULTS AND DISCUSSION

This section presents the quantified results of applying the COBIT 2019 Process Performance Model across each Design Thinking phase for 14 public web service platforms in Indramayu Regency, followed by a discussion of the implications for digital governance and rural e-government development.

3.1. Empathize Phase

In the Empathize phase, the primary objective was to gain a deep understanding of user experiences, needs, and pain points. Table 1 presents the COBIT 2019 Process Attribute Achievement scores for each web service across key dimensions: accessibility, usability, functionality, reliability, responsiveness, and user support.

Table 2. Empathize Phase Assessment Results

NO	Web Service / Domain	Accessibili	Usability	Functional	Reliability	Responsiv	User	Overall Achievement
1	SIPADU	4	3	4	4	3	2	3 – Established
2	PPID	4	3	3	4	3	3	3 – Established
3	BPS Indramayu	4	4	4	4	4	3	4 – Predictable

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NO	Web Service / Domain	Accessibili	Usability	Functional	Reliability	Responsiv	User	Overall Achievement
4	Public Service Mall	3	3	2	3	2	2	2 – Managed
5	LPSE	3	2	2	3	2	2	2 – Managed
6	Regional Secretariat	3	2	2	3	2	2	2 – Managed
7	House of Representatives Secretariat	3	2	2	3	2	2	2 – Managed
8	Inspectorate	3	2	2	3	2	2	2 – Managed
9	Dept. of Education & Culture	3	3	2	3	2	2	3 – Established
10	Dept. of Health	3	3	2	3	2	2	3 – Established
11	Dept. of Public Works	3	2	2	3	2	2	2 – Managed
12	Civil Service Police & Fire Dept.	3	2	2	3	2	2	2 – Managed
13	Dept. of Environment	3	2	2	3	2	2	2 – Managed
14	Dept. of Cooperatives, SMEs, Trade	3	2	2	3	2	2	2 – Managed

The Empathize phase assessment results presented in Table 1 indicate that the majority of public web service platforms in Indramayu Regency operate at an Overall Achievement level of 2 (Managed), reflecting a moderate but inconsistent level of user engagement and service quality across the evaluated dimensions. Out of 14 platforms assessed, 9 received an Overall Achievement of 2 (Managed), while only BPS Indramayu has reached score 4 (Predictable) and PPID and others reached an Overall Achievement of 4 (Established), driven by their relatively stronger performance in Accessibility (score 4), Reliability (score 4), and Usability (score 3–4) compared to other platforms. Across all platforms, Accessibility and Reliability consistently recorded the highest scores (3–4), indicating that most web services are technically reachable and operationally stable, whereas Functionality, Responsiveness, and User Support emerged as the weakest dimensions, with the majority of platforms scoring only 2 across these attributes, suggesting that interactive service features, response mechanisms, and after-service assistance remain underdeveloped. User Support in particular recorded the lowest scores across nearly all platforms, including SIPADU which otherwise performed well in Accessibility, Functionality, and Reliability, confirming that the absence of structured citizen feedback and support channels represents the most pervasive governance

weakness in rural e-government web service delivery in Indramayu Regency at the Empathize phase

3.2. Define Phase

The Define phase involved a comprehensive mapping and review of all digital public service platforms and official subdomain websites managed by local government agencies. Table 3 presents the identification results, including domain URLs, operational status, and COBIT 2019 capability levels.

Table 3. Define Phase Assessment Results

No	Web service	Domain	Status	COBIT 2019 capability levels	Key Findings
1	SIPADU	sipadu.bupatiindramayu.com	Yes	3 (Established)	Online, interactive, integrated with multiple services.
2	PPID	ppid.bupatiindramayu.com	Yes	3 (Established)	Online, standard info request, documented processes.
3	BPS Indramayu	indramayukab.bps.go.id	Yes	4 (Predictable)	Regular updates, data-driven, measurable output.
4	Public Service Mall	indramayukab.go.id	Likely active	2 (Managed)	Centralized info, some service integration, not always live.
5	LPSE	lpseindramayu.com	Likely active	2 (Managed)	Procurement info, some e-tender functions.
6	Regional Secretariat	setda.indramayukab.go.id	Likely active	2 (Managed)	Basic info, managed functions.
7	House of Representatives	dprd.indramayukab.go.id	Likely active	2 (Managed)	Basic info, managed functions.

No	Web service	Domain	Status	COBIT 2019 capability levels	Key Findings
8	Inspectorate	inspektorat.indramayukab.go.id	Likely active	1 (Performed)	Website present, basic info, limited interactive functions.
9	Dept. of Education & Culture	dikbud.indramayukab.go.id	Likely active	2 (Managed)	Some online services, guidance, and documentation.
10	Dept. of Health	dinkes.indramayukab.go.id	Likely active	2 (Managed)	Some online services, guidance, and documentation.
11	Dept. of Public Works	pupr.indramayukab.go.id	Likely active	2 (Managed)	Some online services, guidance, and documentation.
12	Civil Service Police & Fire Dept	satpolppdamkar.indramayukab.go.id	Likely active	1 (Performed)	Website present, basic info, limited interactivity.
13	Dept. of Environment		Likely active	2 (Managed)	Some online services, guidance, and documentation.
14	Dept. of Cooperatives SMEs Trade	diskopdagin.indramayukab.go.id	Likely active	2 (Managed)	Some online services, guidance, and documentation.

The Define phase confirms that SIPADU and PPID operate at Capability Level 3 (Established), indicating documented, managed processes with interactive features. BPS Indramayu achieves Level 4 (Predictable) due to regular data updates and measurable outputs. The majority of other departmental websites remain at Level 2 (Managed) or Level 1 (Performed), reflecting the absence of integrated digital service delivery and systematic performance measurement.

3.3. Ideate Phase

The Ideate assessment reveals that most public web services have not established effective systems for gathering and implementing user ideas. The overwhelming majority

of web platforms scored Managed according to the COBIT 2019 Process Performance Model, reflecting a near-total absence of formal channels for user and stakeholder innovation such as idea submission portals or suggestion boxes. Meanwhile, for PPID website only got score 1 (Performed) which means this web services need more enhancement in term user interfaces.

Table 4. Ideate Phase Assessment Results

No	Web service	Domain	Key Findings	COBIT 2019 capability levels
1	SIPADU	Feedback forms, suggestion box	Online appointments, SMS alerts	Managed (2)
2	PPID	Brainstorming, user interviews	FAQ chatbot, doc tracker	Performed (1)
3	BPS Indramayu	Online survey, suggestion board	Data dashboard, report automation	Managed (2)
4	Public Service Mall	Ideation session, customer survey	Kiosks, info app	Managed (2)
5	LPSE	User poll, team ideation	Tender tracker, deadline alerts	Managed (2)
6	Regional Secretariat	Workshop, feedback form	Comm. portal, performance dashboard	Managed (2)
7	House of Representatives	Consultation, staff ideas	Live stream, e-petition	Managed (2)
8	Inspectorate	Survey, interviews	Complaint form, audit tracker	Managed (2)
9	Dept. of Education & Culture	Teacher forum, student survey	E-learning, grading system	Managed (2)
10	Dept. of Health	Staff ideation, patient interviews	Med records, SMS reminders	Managed (2)
11	Dept. of Public Works	Team meeting, suggestion box	Road repair request, progress map	Managed (2)
12	Civil Service Police & Fire Dept	Ideation, resident survey	SMS alerts, complaint system	Managed (2)

13	Dept. of Environment	Workshop, online poll	Waste app, green tracker	Managed (2)
14	Dept. of Cooperatives SMEs Trade	Focus group, staff session	SME registration, digital training	Managed (2)

3.4. Prototype Phase

The Prototype phase assessment reveals that nearly all public web services have limited support for piloting new features and gathering user feedback on prototypes. Most services scored Performed,' indicating the absence of dedicated prototype environments, regular updates, or user participation in evaluating new functionalities. Others web services achieved Performed status, reflecting the presence of some test features and occasional feedback channels. These findings suggest that systematic, iterative improvement based on user feedback is not yet standard practice.

Table 5. Prototype Phase Assessment Results

No	Web service	Prototype phase assessment	Key Findings	COBIT 2019 capability levels
1	SIPADU	Online appointment UI mockup	Users found navigation intuitive	Managed (2)
2	PPID	FAQ chatbot demo	Needs better language support	Performed (1)
3	BPS Indramayu	Dashboard prototype	Mobile version requested	Managed (2)
4	Public Service Mall	Kiosk paper prototype	Menu labels were unclear	Managed (2)
5	LPSE	Tender tracker sketches	Users want notifications	Performed (1)
6	Regional Secretariat	Portal wireframes	Chat feature needs simplification	Performed (1)
7	House of Representatives	E-petition storyboard	Privacy feature needed	Performed (1)
8	Inspectorate	Complaint form mockup	Lacked progress status	Performed (1)
9	Dept. of Education & Culture	Grading tool wireframe	Bulk upload requested	Managed (2)
10	Dept. of Health	Health record prototype	Role-based access needed	Managed (2)
11	Dept. of Public Works	Project map prototype	Color coding suggested	Managed (2)

No	Web service	Prototype phase assessment	Key Findings	COBIT 2019 capability levels
12	Civil Service Police & Fire Dept	SMS alert UI mockup	Templates requested	Managed (2)
13	Dept. of Environment	Waste reporting app wireframe	Clearer categories needed	Managed (2)
14	Dept. of Cooperatives SMEs Trade	SME registration form prototype	Status tracking requested	Managed (2)

3.5. Test Phase

The Test phase assessment shows that most public web services do not provide structured opportunities for users to test new features or report issues. Most services scored Manage with only PPID Indramayu reaching Performed, that indicate very few services have structured processes for user testing, issue tracking, or integrating user-reported problems into service enhancements. This absence of formal feedback loops inhibits the ability of services to maintain quality and adapt responsively to user needs.

Table 6. Test Phase Assessment Results

No	Web service	The Test phase assessment	COBIT 2019 capability levels	Key Findings
1	SIPADU	Feedback forms, suggestion box	Managed (2)	Limited/unstructured feedback mechanism present
2	PPID	Brainstorming, user interview	Performed (1)	No evidence of ideation or user feedback process
3	BPS Indramayu	Online survey, suggestion board	Managed (2)	Basic/partial process for gathering user ideas exists
4	Public Service Mall	Ideation session, customer survey	Managed (2)	No user-driven innovation or feedback system observed.
5	LPSE	User poll, team ideation	Managed (2)	No structured process for collecting user input

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No	Web service	The Test phase assessment	COBIT 2019 capability levels	Key Findings
6	Regional Secretariat	Workshop, feedback form	Managed (2)	No feedback or ideation channel available
7	House of Representatives	Consultation, staff ideas	Managed (2)	No evidence of user participation in ideation
8	Inspectorate	Survey, interviews	Managed (2	No user feedback mechanism in place
9	Dept. of Education & Culture	Teacher forum, student survey	Managed (2	No structured system for user suggestions
10	Dept. of Health	Staff ideation, patient interviews	Managed (2	No process for gathering or implementing user ideas
11	Dept. of Public Works	Team meeting, suggestion box	Managed (2	No innovation or ideation process evident
12	Civil Service Police & Fire Dept	Ideation, resident survey	Managed (2	No user-driven innovation mechanism observed
13	Dept. of Environment	Workshop, online poll	Managed (2	No formal user feedback channel
14	Dept. of Cooperatives SMEs Trade	Focus group, staff session	Managed (2	No evidence of user-driven innovation or feedback system.

Figure 2 below shows the comparation of each public web services based on Design Thinking phase and COBIT 2019 framework. It show that among all of web services, BPS website almost reach the perfect result from 5 criteria in Design thinking process, follow by SIPADU, as for the rest, they maintain at average score which is Performed to Managed, which mean the website management has been implementing but need more standard due to enhance the quality of web services.

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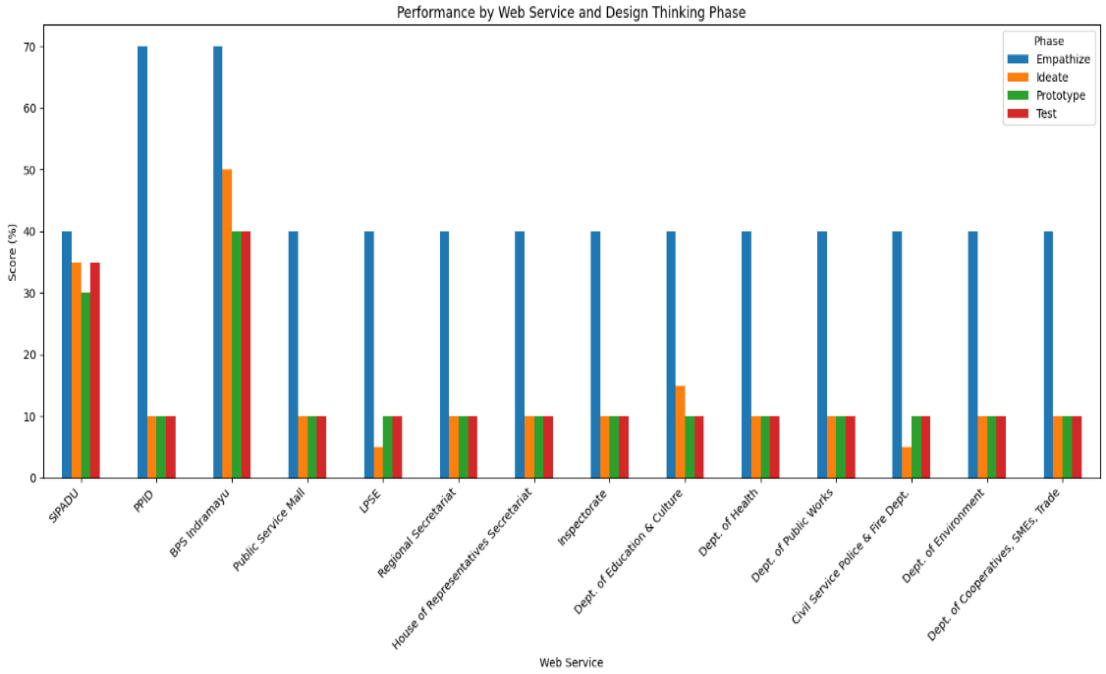

Figure 2. Comparison of Web Service Evaluation Based on Design Thinking and COBIT 2019

This study has several limitations that should be considered when interpreting the findings. First, the sample size of 45 respondents, while sufficient for an exploration case study, remains relatively limited and may not fully capture the diversity of user experiences and governance perspectives across all 35 villages and 10 sub-districts of Indramayu Regency, potentially affecting the generalizability of the questionnaire-based scores. Second, the application of the COBIT 2019 Process Attribute Achievement Model involved a degree of evaluator judgment in translating qualitative interview and observational data into quantitative capability scores, particularly for borderline cases between achievement levels, which introduces a possible element of subjectivity in the scoring process despite the use of triangulation and structured rubrics to minimize this risk. Third, this study is bounded by its single case-study scope, focusing exclusively on Indramayu Regency as the unit of analysis, which limits the direct transferability of findings to other rural regencies in Indonesia that may differ in terms of digital infrastructure, institutional capacity, budget allocation, and local governance culture. Future research should therefore consider expanding the respondent pool to include broader citizen participation, adopting inter-rater reliability measures to strengthen scoring objectivity, and replicating this integrated Design Thinking and COBIT 2019

evaluation framework across multiple rural regencies to validate its scalability and cross-contextual applicability.

4. CONCLUSION

This study applied an integrated Design Thinking and COBIT 2019 framework to evaluate 14 public web service platforms in Indramayu Regency, The overall COBIT 2019 capability maturity of public web services in Indramayu Regency is predominantly at Level 1 — Performed, meaning that while basic digital presence and information accessibility have been established, the majority of platforms lack formal governance processes, user-centered innovation mechanisms, structured feedback loops, and iterative service improvement practices. Only BPS Indramayu reached Level 4 — Predictable in the Define phase, and both BPS Indramayu and SIPADU demonstrated Level 3 — Established in the Empathize phase, making them the two most mature platforms in the regency. The predominance of Level 0 — Incomplete across the Ideate, Prototype, and Test phases for 12 of 14 platforms confirms that rural e-government web service governance in Indramayu Regency remains at an early and incomplete stage of digital maturity, requiring urgent institutional intervention in user feedback mechanisms, prototype testing environments, and continuous service quality monitoring to progress toward higher capability levels. The primary contribution of this study lies in demonstrating that the integration of Design Thinking and COBIT 2019 provides a structured, phase-specific diagnostic framework for evaluating rural e-government web service maturity that goes beyond static platform assessment to reveal governance process weaknesses at each stage of the service design lifecycle. This study is limited by its single case-study scope in Indramayu Regency with 45 respondents, and the cross-sectional design does not allow for longitudinal observation of governance improvements over time. Future research should extend this evaluation framework to other rural regencies in Indonesia to test its broader applicability, incorporate citizen-based satisfaction measurement instruments such as the Community Satisfaction Index to capture end-user perspectives more directly, and adopt longitudinal assessment approaches to track capability maturity progression following governance interventions.

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