

Organizational and Strategy Impact Evaluation of CRM Implementation at Statistics Indonesia

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ABSTRACT

The increasing adoption of digital systems in public sector organizations has positioned Customer Relationship Management (CRM) as a strategic instrument for improving service quality and organizational performance. This study aims to evaluate the organizational and strategic impacts of CRM implementation at Statistics Indonesia through the SILASTIK system. An applied research design with a case study approach was employed to examine CRM implementation within its institutional context. The evaluation was conducted using a multi-perspective performance evaluation framework focusing on organizational capital, human capital, customer retention, customer expansion, and customer perceived value. Data were collected through a structured questionnaire distributed to internal CRM users, open-ended survey responses, and a semi-structured interview with a key system stakeholder. Quantitative data were analyzed using descriptive analysis, while qualitative data were examined through thematic analysis and KPI categorization. The findings indicate that CRM implementation has contributed positively to organizational alignment, service coordination, and internal efficiency, particularly in terms of management commitment, knowledge sharing, and productivity. However, limitations were identified in behavior-oriented adoption, structured training mechanisms, system integration, and the systematic measurement of customer-oriented performance dimensions. Overall, the study demonstrates that CRM implementation at Statistics Indonesia has progressed beyond a technical system and now functions as an organizational enabler, although its strategic potential has not yet been fully realized. These findings provide empirical insights into CRM evaluation in public sector statistical institutions and offer a foundation for strengthening CRM governance and performance management.

KEYWORDS Customer Relationship Management, Public Sector CRM, Performance Evaluation, Organizational Impact, Strategic Impact.



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INTRODUCTION

The rapid advancement of digital technology has significantly transformed the way public sector organizations deliver services and manage relationships with stakeholders (Ashaye & Irani, 2019). In the context of public administration, digital transformation is no longer limited to internal efficiency but has become a strategic instrument to improve service quality, transparency, and citizen satisfaction (Latupeirissa et al., 2024; Mergel et al., 2019). Government institutions are increasingly required to adopt digital systems that support user-centered services, particularly in

organizations whose core mandate involves intensive interaction with the public (Weigl et al., 2024).

Customer Relationship Management (CRM) has traditionally been associated with the private sector as a strategic approach to managing customer interactions, enhancing satisfaction, and improving organizational performance (Diah et al., 2025; Hassan et al., 2015). However, in recent years, CRM has also gained relevance in the public sector, where citizens and stakeholders are increasingly viewed as service users whose needs and expectations must be managed systematically. In government institutions, CRM plays a critical role in improving service accessibility, responsiveness, and accountability while supporting long-term relationships between institutions and their stakeholders (Avetyan et al., 2025). Unlike the private sector, the success of CRM implementation in public organizations is not primarily measured by financial outcomes but rather by organizational effectiveness, service quality, and strategic alignment with public service objectives (Paramita, 2025; Wu, 2021).

Statistics Indonesia (Badan Pusat Statistik) is a non-ministerial government agency responsible for administering national statistics. To support this role, Badan Pusat Statistik implemented a CRM-based system known as the Sistem Informasi Layanan Statistik (SILASTIK) in 2019. SILASTIK was developed to integrate various statistical service processes, including consultation services, data requests, and service coordination, which were previously managed separately across different organizational units. Through this system, Badan Pusat Statistik aims to enhance service efficiency, improve user satisfaction, and strengthen stakeholder engagement in statistical services (Pertiwi et al., 2023).

Despite the implementation of SILASTIK as a CRM-based solution, service performance challenges remain evident. The Survei Kebutuhan Data conducted by Badan Pusat Statistik in 2024 revealed that twelve out of twelve statistical service satisfaction indicators did not meet user expectations (Badan Pusat Statistik, 2024). These findings indicate a gap between the intended objectives of CRM implementation and the actual performance perceived by service users. The persistence of this gap suggests that the effectiveness of CRM cannot be fully understood solely through system adoption or operational metrics but requires a more comprehensive evaluation of its organizational and strategic impacts (Dalla Pozza et al., 2018; Quzwen et al., 2021).

Previous studies on CRM implementation have demonstrated that organizational performance is closely linked to how CRM is embedded within organizational processes, culture, and strategic decision-making (Paşcalău et al., 2024; Rainy et al., 2024). Research in both private and public sectors emphasizes that CRM implementation alone does not automatically lead to improved performance; continuous evaluation is necessary to identify areas requiring improvement and to ensure alignment with organizational goals (Juwita & Putro, 2024; Ullah et al., 2020). However, many existing CRM evaluation studies focus primarily on financial, economic, or technical aspects—such as efficiency, cost reduction, or system utilization—while non-financial

dimensions, such as organizational and strategic impacts, receive less attention (Ledro et al., 2022).

In the public sector context, especially within government institutions responsible for service delivery rather than profit generation, evaluating CRM from an organizational and strategic perspective becomes increasingly important (Panno, 2019). Organizational factors such as user involvement, employee behavior, knowledge sharing, innovation, and management commitment play a crucial role in determining whether CRM initiatives can effectively support public service objectives (Khashab et al., 2020; Ledro et al., 2022). Furthermore, empirical studies examining CRM implementation in statistical institutions remain limited, particularly in developing countries, including Indonesia. This gap highlights the need for context-specific research that captures the unique characteristics and challenges of CRM implementation in public statistical organizations.

Addressing this research gap, this study aims to evaluate the implementation of Customer Relationship Management at Badan Pusat Statistik by focusing on its organizational and strategic impacts. This research seeks to provide a comprehensive understanding of how CRM implementation contributes to organizational objectives and service improvement at Badan Pusat Statistik. From a practical perspective, the study provides evidence-based recommendations to support the further development of CRM implementation at Badan Pusat Statistik. From an academic perspective, this research enriches the literature on CRM evaluation in the public sector by offering insights into organizational and strategic dimensions that are often overlooked in existing studies.

The novelty of this research lies in its application of a multi-perspective performance evaluation framework designed specifically to assess the organizational and strategic impacts of CRM implementation in a public statistical institution. Unlike studies that focus primarily on technical performance or user satisfaction, this research examines CRM effectiveness across five integrated dimensions: organizational capital, human capital, customer retention, customer expansion, and customer perceived value. This comprehensive approach enables identification of both strengths and weaknesses in CRM implementation, providing a foundation for targeted improvement strategies. The focus on Badan Pusat Statistik, as the national statistical office, offers insights into CRM implementation in a context where service quality directly affects national data infrastructure and evidence-based policymaking.

This study aims to evaluate the implementation of Customer Relationship Management at Badan Pusat Statistik by focusing on its organizational and strategic impacts. Specifically, the research seeks to: (1) assess the organizational capital dimensions of CRM implementation, including customer-centric culture, teamwork, innovation, management commitment, goal setting, knowledge sharing, and reward systems; (2) evaluate human capital dimensions, including user productivity, behavior, satisfaction, and knowledge; (3) examine the extent to which customer retention, customer expansion, and customer perceived value dimensions have been operationalized through CRM-related KPIs; and (4) identify areas requiring

improvement to enhance CRM effectiveness. Through these objectives, the research contributes to academic knowledge by extending understanding of CRM evaluation in public sector contexts. Practically, the findings provide evidence-based recommendations to support the further development of CRM implementation at Badan Pusat Statistik and offer insights for similar institutions seeking to optimize their CRM systems.

RESEARCH METHOD

Research Design

This study adopts an applied research design using a case study approach to evaluate the implementation of CRM at Statistics Indonesia. A case study approach was selected to allow an in depth examination of CRM implementation within its real organizational setting, where service quality, stakeholder engagement, and strategic alignment are central to institutional performance. The CRM system examined in this research is Sistem Layanan Statistik (SILASTIK), which has been implemented since 2019 to support statistical service delivery including consultation services, data requests, and service coordination across institutions.

Evaluation Framework

To assess the organizational and strategic impacts of CRM implementation, this study applies a multi-perspective CRM performance evaluation framework developed by Ledro et al. (2022) as shown in figure 1. The evaluation framework consists of five main dimensions such as organizational capital, human capital, customer retention, customer expansion, and customer perceived value. These dimensions provide a holistic view of CRM focusing on the organizational and strategic impacts of CRM. This framework was operationalized into a questionnaire instrument and semi structured interview guidelines, which were previously tested and validated by Ledro et al. (2022). From that instrument, it will be tailored based on the conditions of Statistics Indonesia.

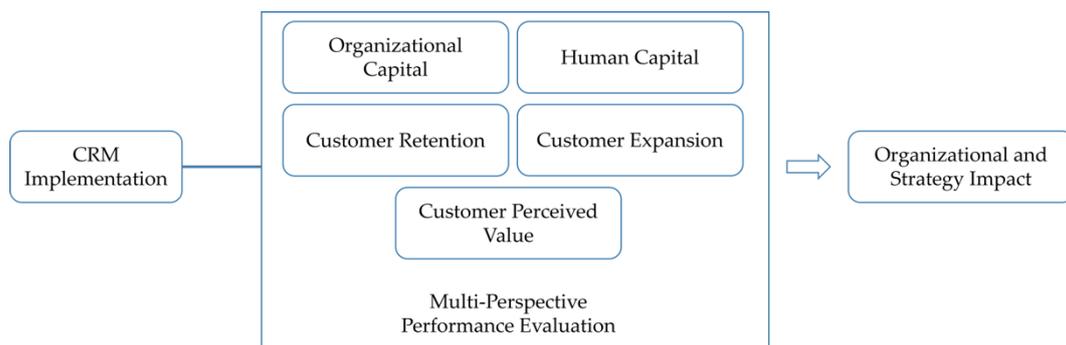


Figure 1. Multi-Perspective Performance Evaluation Framework

Data Collection

A survey was conducted using a structured questionnaire distributed through purposive sampling to internal users of the CRM system at Statistics Indonesia Headquarters. The questionnaire targeted employees directly involved in statistical

service processes and CRM usage. Responses were measured using a seven point Likert scale ranging from strongly disagree to strongly agree to capture users' perceptions related to organizational capital and human capital. To ensure measurement accuracy and consistency, the closed ended questionnaire items were tested for validity and reliability. Pearson correlation analysis was used to assess validity, while internal consistency was evaluated using Cronbach's Alpha. In addition to closed ended items, the survey included open ended questions aimed at capturing qualitative insights related to user perceived value of CRM implementation.

Another data collection process will also be carried out using semi structured interview with a key informant, namely the Head of the SILASTIK Team at Statistics Indonesia Headquarter. The interview was conducted to gather objective information related to CRM related key performance indicators (KPIs) across all five evaluation dimensions, including organizational capital, human capital, customer retention, customer expansion, and customer perceived value.

Data Analysis

Quantitative data obtained from the closed ended questionnaire were analyzed using descriptive analysis. This analysis focused on examining respondents' perceptions of CRM implementation in relation to organizational capital and human capital dimensions. The descriptive results were used to identify overall performance levels as well as areas requiring improvement within these two internal dimensions.

Qualitative data from open ended questionnaire responses were analyzed using thematic analysis to explore user perceived value of CRM implementation. This analysis aimed to identify recurring themes related to how CRM supports work processes, service quality, and organizational effectiveness from the perspective of internal users.

Qualitative data obtained from the semi structured interview were analyzed to identify and categorize CRM related KPIs that have been implemented at Statistics Indonesia. The analysis examined KPI coverage across the five dimensions of the multi-perspective performance evaluation framework. The interview results provide objective information regarding the extent to which each evaluation dimension has been operationalized in practice.

RESULT AND DISCUSSION

Respondent Demographic and Data Quality

Prior to analysis, the questionnaire instrument was tested for validity and reliability, and the results indicate that all items met acceptable validity and reliability thresholds as each item correlation value are above correlation table and Cronbach's Alpha value is 0,946. This confirms that the collected data were adequate for further quantitative analysis. In addition, the data entry has been checked for incomplete or invalid entries to ensure data quality.

A total of 32 respondents participated in the survey, while additional qualitative data were obtained through an semi structured interview with the Head of the

SILASTIK Team at Statistics Indonesia. The demographic characteristics of the survey respondents including gender, age, education level, and length of service, are summarized in Table 1. Overall, the survey respondents represent a diverse range of backgrounds and dominated by employees in the female gender, productive age group, and sufficient educational qualifications.

Table 1. Respondent Demographics

Criteria	Details	Percentage (%)
Gender	Male	21.87
	Female	78.13
Age Range	20-29 years old	21.87
	30-39 years old	65.63
	40-49 years old	6.25
	50-60 years old	6.25
Education	Diploma	3.13
	Bachelor	71.87
	Master	25.00
Length of Work	1-5 years	18.75
	6-10 years	25.00
	11-15 years	34.37
	> 15 years	21.88

Survey Results

The results of the survey indicate that the implementation of CRM at Statistics Indonesia demonstrates a generally positive performance in terms of organizational capital and human capital dimensions. The overall average score across all measured indicators is 5.40 on a seven point Likert scale, equivalent to a mean percentage of 77.15% with more details shown in Table 2. This result provides an empirical basis for identifying strengths and weaknesses in CRM implementation at Statistics Indonesia.

Table 2. Survey Result

Criteria	Sub Criteria	Mean (Scale 1-7)	Mean Percentage (%)
Organizational Capital	Customer Centric Culture	5.39	77.01
	Teamwork	5.33	76.12
	Innovation	5.34	76.34
	Management Attitude and Commitment	5.50	78.57
	Setting CRM Goals	6.02	85.94
	Knowledge Sharing	5.81	83.04
	Reward System and	4.91	70.09

Criteria	Sub Criteria	Mean (Scale 1-7)	Mean Percentage (%)
	Training Program		
Human Capital	User Productivity	5.47	78.13
	User Behavior	5.00	71.43
	User Satisfaction	5.44	77.68
	User Knowledge and Skills	5.20	74.33
	Average	5.40	77.15

Within the organizational capital dimension, most sub-criteria achieved mean scores above the overall average. Setting CRM goals recorded the highest performance, with a mean score of 6.02 (85.94%), reflecting clarity in CRM-related objectives within the organization. Similarly, knowledge sharing also showed strong results, with a mean score of 6.02 (85.94%), indicating that CRM implementation has supported information exchange and collaboration among users. Management attitude and commitment achieved a mean score of 5.50 (78.57%), suggesting that managerial support for CRM implementation is perceived as relatively strong.

Other organizational capital indicators, such as customer-centric culture, teamwork, and innovation, demonstrated comparable performance levels, with mean percentages ranging from approximately 76% to 77%. These results indicate that CRM has contributed to fostering a service-oriented culture and a collaborative work environment. The lowest score within the organizational capital dimension was observed in the reward system and training program sub-criteria, which obtained a mean score of 4.91 (70.09%). This finding suggests that training and incentive mechanisms related to CRM usage are perceived as less optimal compared to other organizational aspects.

In the human capital dimension, user productivity recorded a relatively high mean score of 5.47 (78.13%), indicating that CRM implementation is perceived to support efficiency and effectiveness in daily work activities. User satisfaction achieved a similar level, with a mean score of 5.44 (77.68%), reflecting generally positive user perceptions toward CRM usage. However, user behavior and user knowledge and skills obtained comparatively lower scores, with mean percentages of 71.43% and 74.33%, respectively. These results suggest that while users recognize the benefits of CRM, variations remain in consistent usage behavior and technical competence.

A thematic analysis was conducted on responses from 32 respondents, resulting in several recurring themes, as shown in Table 3. The most dominant themes relate to improvement in public service quality, service structure and standardization, and data management and traceability. Respondents frequently reported that CRM implementation supported better service delivery to the public, improved documentation and service standardization, and facilitated easier processing of microdata. These themes indicate that CRM is perceived as contributing positively to day-to-day operations and service outcomes.

Table 3. Thematic Analysis Result

Thematic Category	Frequency of Mentions	Example Quotations
Improvement in Public Service Quality	11	“Serving the public better”
Service Structure and Standardization	6	“More systematic and well documented”
Data Management and Traceability	4	“Microdata processing has become easier”
Efficiency and Work Productivity	3	“More efficient and creative”; “Makes work easier”
Decision Making and Insights	3	“External feedback helps decision making”
System Integration	3	“There are still systems that are not well integrated”
Neutral/Minimal Impact	1	“No significant change, just a tool”

Other themes identified include efficiency and work productivity and enhanced decision making supported by external feedback. Several respondents highlighted that CRM has made work processes more efficient and creative and supports decision making by providing structured feedback from service users. These findings suggest that CRM implementation has begun to support not only operational efficiency but also analytical and decision support functions.

However, the thematic analysis also revealed concerns related to system integration. A number of respondents noted that system integration remains limited and that CRM has not yet fully supported cross system interoperability. Lastly, one respondent expressed neutral or minimal perceived impact, indicating that CRM is still viewed by some users primarily as a supporting tool rather than a strategic system.

Interview Results

An interview with the Head of the SILASTIK Team was conducted to identify the extent to which CRM-related KPIs have been implemented and utilized at Statistics Indonesia. The interview results were analyzed using a multi-perspective performance evaluation framework covering five dimensions: organizational capital, human capital, customer retention, customer expansion, and customer perceived value. Each identified KPI was categorized based on its current implementation status using a four level classification that are already measured, feasible and useful, not feasible now but useful, and not useful. Details of the results can be seen at Table 4.

Table 4. Interview Result

Criteria	Sub Criteria	KPIs	Category	
Organizational capital	Customer Centric Culture	Frequency of customer survey	Already measured	
	Reward System and Training Program	Training per user	Not feasible now but useful	
Human capital	User Productivity	Profit per user	Already measured	
		The transactional time reduction rate	Already measured	
		User activity with respect to a target value	Already measured	
	User Behavior	Job efficiency	Already measured	
		Customer service satisfaction rate	Feasible and Useful	
	User Satisfaction	Key user turnover	Feasible and Useful	
	User Knowledge and Skills	Staff cost reduction rate	Already measured	
		Training time reduction rate	Already measured	
	Customer retention	Customer Service Management	Retention rate or churn rate	Feasible and Useful
			Response time or delivery time	Feasible and Useful
Customer care program rate			Feasible and Useful	
Customer Complaints Management		Trouble ticket cleared	Feasible and Useful	
		Complaint resolution time reduction rate	Feasible and Useful	
Customer expansion	Up/Cross Selling	Up/Cross selling rate	Already measured	
	Customer Lifetime Value	SOW, RFM value	Already measured	
Customer perceived value		Net promoter score	Not feasible now but useful	

In the organizational capital dimension, indicators related to customer-centric culture—such as the frequency of customer surveys—have been categorized as “already measured,” reflecting an operational emphasis on service efficiency and customer interaction outcomes. However, KPIs associated with reward systems and training programs—specifically, training per user—were classified as not feasible at present despite being considered useful. This suggests that while organizational commitment to CRM implementation is evident through a customer-centric culture, incentive structures and structured training mechanisms have not yet been fully institutionalized as part of CRM performance evaluation.

Within the human capital dimension, interview findings show that CRM-related KPIs are predominantly focused on measuring efficiency and workforce performance. Indicators such as profit per user, transactional time reduction rate, user activity against target values, job efficiency, staff cost reduction, and training time reduction have already been measured, indicating that CRM implementation has supported internal productivity and capability management. In contrast, KPIs related to user satisfaction and key user turnover were categorized as feasible and useful but not yet fully implemented, reflecting only partial attention to the behavioral and attitudinal aspects of CRM usage.

For the customer retention dimension, all identified KPIs were categorized as feasible and useful. Indicators such as retention rate or churn rate, response time or delivery time, customer care program rate, trouble tickets cleared, and complaint resolution time reduction were recognized as important for evaluating customer retention, particularly in areas such as customer service management and complaint handling. However, these indicators are not yet consistently measured or systematically utilized, indicating a gap between recognized performance needs and actual implementation.

In the customer expansion dimension, KPIs related to up- or cross-selling, as well as customer lifetime value measures such as share of wallet (SOW) and recency–frequency–monetary (RFM) values, were categorized as already measured. This suggests that CRM implementation has supported the monitoring of service utilization growth and customer portfolio development, particularly in relation to statistical service usage.

In contrast, KPIs within the customer perceived value dimension—specifically, the Net Promoter Score (NPS)—were classified as not feasible at present but useful. Although these indicators are considered valuable for capturing user perceptions and long-term relationship quality, limitations in data collection mechanisms and institutional readiness have constrained their current implementation. Notably, no KPIs were identified as not useful, indicating that all proposed indicators were considered relevant within the CRM performance evaluation framework.

Discussion and Recommendations

This study demonstrates that the implementation of Customer Relationship Management (CRM) through SILASTIK at Statistics Indonesia has produced generally

positive organizational and strategic impacts, particularly within the internal dimensions of organizational capital and human capital. The overall performance level indicates that CRM has moved beyond a purely technical system and begun to function as an organizational enabler that supports service coordination, standardization, and internal efficiency. This finding supports the view that CRM effectiveness in public organizations is primarily reflected in organizational alignment and service quality (Alony, 2025; Paramita, 2025).

From an organizational capital perspective, strong performance in CRM goal-setting, knowledge sharing, and management commitment indicates that SILASTIK has been strategically positioned within the organization. Clear CRM objectives and improved information exchange suggest that CRM has contributed to a more coordinated and service-oriented organizational culture. These results are consistent with CRM literature emphasizing that strategic clarity and leadership support are critical antecedents of successful CRM implementation in the public sector (Farhan et al., 2018; Jaber & Simkin, 2017; Mendoza et al., 2007). However, the relatively weaker performance of reward systems and training programs highlights a structural gap. The absence of systematic incentives and structured capacity-building mechanisms may constrain sustained CRM value creation and limit deeper organizational transformation (Li et al., 2023; Mou, 2025; Ullah et al., 2020).

In the human capital dimension, CRM implementation was perceived to enhance productivity and user satisfaction, indicating positive operational benefits. Nevertheless, lower scores related to user behavior and knowledge suggest that CRM usage has not yet been fully internalized as a consistent work practice (Bahader, 2022; Chatterjee et al., 2023; Li et al., 2023). This finding implies that CRM adoption at Statistics Indonesia remains partially compliance-driven rather than behavior-driven, reinforcing the argument that CRM initiatives require change management interventions in addition to system deployment (Hamid et al., 2022; Kießig & Giebe, 2023; Sittrop & Crosthwaite, 2021).

Thematic analysis further indicates that CRM is perceived to improve public service quality, service standardization, and data traceability, confirming its contribution to day-to-day service governance. At the same time, concerns regarding limited system integration reveal that CRM's strategic potential has not yet been fully realized. Fragmented information systems may reduce CRM's ability to function as a comprehensive platform for service analytics and decision support (Jabado & Jallouli, 2024; Rainy et al., 2023; Zerbino et al., 2018).

Interview findings reveal that CRM performance measurement at Statistics Indonesia is predominantly focused on internal efficiency and productivity indicators, while customer-oriented dimensions such as retention and perceived value are acknowledged but not yet systematically measured. This imbalance suggests that CRM evaluation remains organization-centric and has not fully evolved toward strategic-centric performance management. As a result, CRM's role in supporting long-term

stakeholder relationships is not yet optimally captured (García-Nieto et al., 2025; Ledro et al., 2022).

Based on these findings, several recommendations can be proposed. First, CRM should be explicitly institutionalized as part of service governance by integrating CRM objectives and indicators into organizational performance management systems (Dalla Pozza et al., 2018; Payne & Frow, 2005). Second, organizational capital should be strengthened through structured CRM-based training programs and the alignment of reward mechanisms with CRM usage and service outcomes, thereby reinforcing desired behaviors and competencies (AlQershi et al., 2020; John, 2019). Third, human capital development should focus on behavior-oriented interventions, such as role-based training and continuous learning, to support consistent and effective CRM utilization (Hamid et al., 2022; Li et al., 2023). Fourth, CRM performance measurement should be gradually expanded to include customer retention and perceived value indicators, supported by improvements in feedback data quality and service analytics (Chinekwu Somtochukwu Odionu et al., 2024; Keramati & Shapouri, 2016; Krizanova et al., 2018). Finally, system integration should be treated as a strategic priority to enhance CRM's role as an integrated platform for service coordination and decision support (Chen & Wu, 2024; Enoch Oluwabusayo Alonge et al., 2025; Jhurani, 2024).

CONCLUSION

This study concludes that the implementation of Customer Relationship Management (CRM) through the SILASTIK system at Statistics Indonesia has generated positive organizational and strategic impacts, particularly within internal dimensions. CRM has been effectively positioned as an organizational enabler that supports service coordination, standardization, and internal efficiency, as reflected by strong CRM goal-setting, management commitment, and knowledge sharing. At the same time, the findings indicate that CRM institutionalization remains incomplete, as reward systems, structured training programs, and behavior-oriented capability development have not yet been fully integrated into organizational performance and human resource management.

Furthermore, while CRM implementation has contributed to improved productivity, user satisfaction, and perceived public service quality, its strategic potential is constrained by limited system integration and an evaluation focus that remains predominantly organization-centric. Customer-oriented dimensions such as retention and perceived value are acknowledged but not yet systematically measured. Overall, this study affirms that CRM at Statistics Indonesia has moved beyond a purely technical system but has not yet fully evolved into a strategic-centric and value-driven platform. Future research may expand this evaluation by incorporating external user perspectives, longitudinal analysis, and broader CRM performance indicators to support a more comprehensive assessment of public sector CRM effectiveness.

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