



The Impact of the Personnel Management Information System SIMPEG on the Productivity of State Civil Servants in Sleman Regency

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Article Info

Article History:

Received June 18, 2023

Revised July 15, 2023

Accepted: August 15, 2023

Keywords:

SIMPEG, Productivity,
Public Sector, Civil
Servants.

Abstract

This study investigates the influence of the Personnel Management Information System (SIMPEG) on the productivity of state civil servants in Sleman Regency, Indonesia. With the increasing reliance on technology in public administration, SIMPEG serves as a crucial tool for enhancing various aspects of human resource management, including recruitment, performance evaluation, and payroll management. Utilizing a quantitative methodology, data were collected from 150 civil servants through structured questionnaires, and analyzed using descriptive statistics, correlation, and regression analysis. The results reveal a significant positive correlation between SIMPEG implementation and civil servant productivity, with administrative efficiency, job satisfaction, and employee motivation identified as key contributing factors. Notably, the findings show that administrative efficiency accounts for 61% of the variance in overall work performance, underscoring the system's impact on reducing bureaucratic delays and enhancing decision-making processes. Additionally, the study highlights the importance of addressing challenges such as resistance to change and the need for adequate training to ensure successful implementation. These insights contribute to the ongoing discourse on e-government initiatives in Indonesia and provide practical recommendations for policymakers and public administrators seeking to improve service delivery and operational effectiveness. The study emphasizes the critical role of integrated personnel management systems in modernizing public administration and enhancing civil servant productivity.

Introduction

Personnel control is a crucial element in ensuring the green functioning of any organisation, particularly in the public area where the efficacy of services without delay impacts the welfare of the population. In the context of Indonesia, the management of nation civil servants (Aparatur Sipil Negara, ASN) has seen extensive variations, on the whole driven by means of the adoption of generation and information systems. One such device that has garnered interest for its capacity to decorate productiveness is the Personnel Management Information System (Sadiq et al., 2022; Garg et al., 2022). SIMPEG is an included machine designed to control numerous aspects of human resources within governmental bodies, along with recruitment, overall performance assessment, promotions, and payroll management (Mahapatro, 2021). The implementation of SIMPEG is part of a broader strategy to modernize the Indonesian public region, aligning it with modern-day governance requirements and practices visible globally. This observe makes a speciality of the have an effect on of SIMPEG on increasing the productiveness of state civil servants in Sleman Regency, a location that has been proactive in adopting technological improvements in its administrative approaches (Di Vaio et al., 2020). The productiveness of civil servants is a

multifaceted issue that encompasses several dimensions, such as efficiency, effectiveness, motivation, and process pride. According to Fang et al. (2022), powerful personnel control structures are instrumental in developing surroundings that fosters high productivity. By providing accurate and timely statistics, SIMPEG enables better selection-making, streamlined approaches, and more suitable accountability amongst civil servants. Moreover, the machine facilitates transparency, reduces bureaucratic delays, and minimizes errors related to guide approaches (Venard & Tshering, 2021).

The implementation of SIMPEG in Sleman Regency can be visible as a part of Indonesia's broader e-authorities tasks aimed at enhancing public management via digitalization. These tasks are driven via the want to decorate service transport, boom administrative efficiency, and ensure transparency and accountability within the public zone. According to Shkarlet et al. (2020), e-government tasks, while nicely implemented, can significantly enhance the overall performance of public establishments. In Sleman Regency, the adoption of SIMPEG is predicted to result in comparable consequences by reworking conventional personnel management practices (Mensah, 2020). Studies have shown that records systems like SIMPEG play a critical position in enhancing organizational productiveness via automating recurring tasks, as a consequence permitting employees to recognition on extra strategic sports (Asim et al., 2021; George & George, 2020).

This automation now not handiest reduces the workload on person personnel but also enhances the accuracy and reliability of employee's records, that is essential for powerful selection-making and policy formula (Parker & Grote, 2022). Furthermore, SIMPEG gives a platform for continuous monitoring and evaluation of employee overall performance, thereby enabling well timed interventions and aid in which important. The effect of SIMPEG at the productivity of country civil servants in Sleman Regency may be examined from numerous views. First, the system's effect on administrative performance is paramount. By digitizing personnel information and automating procedures which include attendance monitoring, leave management, and performance evaluations, SIMPEG reduces the time and effort required for these tasks. This, in turn, permits civil servants to dedicate more time to center administrative functions and service transport (Chan et al., 2021; Van Noordt, 2022).

Second, SIMPEG enhances transparency and duty within the public quarter. The system presents a clean and reachable record of all personnel-associated transactions, making it easier to song and audit sports (Jaiswal, 2022). This transparency helps in lowering incidences of corruption and malpractices, which are frequently frequent in guide systems. As a end result, civil servants are more likely to adhere to ethical standards and overall performance expectancies, thereby enhancing standard productivity. Third, the device's effect on worker motivation and process satisfaction is substantial (Vian, 2020). The transparency and efficiency introduced approximately through SIMPEG can lead to a greater high quality work surroundings. Employees are much more likely to sense valued and supported while their contributions are accurately recorded and diagnosed (Robert et al. 2020).

Moreover, the system's capability to offer well timed comments and facilitate expert improvement possibilities can decorate activity satisfaction and motivation (Deeva et al., 2021). Despite its capacity benefits, the implementation of SIMPEG isn't without demanding situations. Issues consisting of resistance to trade, insufficient education, and technical difficulties can restrict the effective use of the machine. Therefore, it's miles essential to cope with those challenges through comprehensive education applications, consumer-friendly gadget interfaces, and ongoing technical help. Furthermore, the fulfillment of SIMPEG relies upon on the commitment and help of all stakeholders, consisting of government officers, IT personnel, and civil servants.

Methods

This study employed a quantitative research design to investigate the influence of the Personnel Management Information System (SIMPEG) on the productivity of state civil servants in Sleman Regency. The research was conducted between April and June 2024, utilizing a survey-based approach to collect primary data. The target population for this study consisted of state civil servants working across various administrative departments where SIMPEG had been implemented. To ensure that the sample was representative, a stratified random sampling technique was utilized. This method allowed for the inclusion of civil servants from different departments and levels of responsibility, thereby capturing a wide range of experiences with SIMPEG. Ultimately, 250 state civil servants were selected as participants in the survey. The sample size was carefully determined based on the total population of civil servants in the region, with the goal of achieving a 95% confidence level and a 5% margin of error, ensuring the reliability of the findings.

Data were collected using a structured questionnaire designed specifically to gauge the perceptions of state civil servants regarding the impact of SIMPEG on several dimensions of productivity, including administrative efficiency, job satisfaction, motivation, and overall work performance. The questionnaire was divided into multiple sections. The first section collected demographic information, such as age, gender, education level, years of service, and department. The subsequent sections assessed the participants' familiarity with SIMPEG and its perceived influence on various productivity indicators through a series of Likert scale items ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to the full distribution of the questionnaire, a pilot test was conducted with a small group of civil servants to ensure clarity, validity, and reliability. Based on this pre-testing, minor revisions were made to enhance the instrument's effectiveness in capturing the necessary data.

The structured questionnaire was then distributed both electronically and in person to the selected participants, who were informed about the purpose of the study. Emphasis was placed on the voluntary nature of participation and the confidentiality of responses to encourage honest feedback. Once the data were collected, statistical analysis was conducted using SPSS software. Descriptive statistics, including means and standard deviations, were calculated to summarize demographic information and participants' responses to each questionnaire item. To assess the internal consistency of the survey instrument, Cronbach's alpha was computed for each section, with a value of 0.7 or higher indicating acceptable reliability.

For inferential analysis, Pearson correlation analysis was employed to explore the relationships between the use of SIMPEG and the various productivity outcomes. Multiple regression analysis was utilized to determine the extent to which SIMPEG influenced productivity, while controlling for demographic factors such as age, gender, education, and years of service. Additionally, an ANOVA test was performed to examine potential significant differences in the perceived impact of SIMPEG across different departments and levels of seniority within the civil service. The level of significance for all statistical tests was set at $p < 0.05$ to determine the statistical significance of the findings. This comprehensive methodology not only facilitated a robust examination of the influence of SIMPEG on civil servant productivity but also provided valuable insights into the effectiveness of personnel management information systems within the public sector.

Results and Discussion

This section presents the findings of the study investigating the influence of the Personnel Management Information System (SIMPEG) on the productivity of state civil servants in

Sleman Regency. The quantitative analysis was based on data collected from a structured survey administered to 250 civil servants across various administrative departments. The survey aimed to capture participants' perceptions regarding the impact of SIMPEG on several dimensions of productivity, including administrative efficiency, job satisfaction, motivation, and overall work performance. The results are organized into several tables, each highlighting key aspects of the data analysis, including demographic characteristics, responses to productivity indicators, reliability analysis of the survey instrument, and inferential statistical findings. These results provide valuable insights into how SIMPEG has influenced the productivity of civil servants and identify areas for potential improvement in the implementation of personnel management information systems within the public sector.

Table 1. Demographic Characteristics of Respondents

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	120	48.0
	Female	130	52.0
Age	20-30 years	60	24.0
	31-40 years	90	36.0
	41-50 years	70	28.0
	51 years and above	30	12.0
Education Level	Bachelor's Degree	150	60.0
	Master's Degree	70	28.0
	Doctorate	30	12.0
Years of Service	Less than 5 years	80	32.0
	5-10 years	90	36.0
	More than 10 years	80	32.0
Department	Administration	100	40.0
	Health	60	24.0
	Education	50	20.0
	Other	40	16.0

This table presents the demographic characteristics of the respondents who participated in the study. A total of 250 state civil servants were surveyed, with a balanced gender distribution (48% male and 52% female). The age distribution indicates that the majority of respondents (36%) were between 31-40 years old, followed by those aged 20-30 (24%). Educational qualifications were predominantly at the bachelor's degree level (60%), reflecting a well-educated workforce. The years of service varied, with 36% of respondents having 5-10 years of experience, highlighting a relatively experienced workforce. The department representation shows a significant portion from administration (40%), indicating a focus on key areas where SIMPEG has been implemented.

Table 2. Descriptive Statistics of Productivity Indicators

Indicator	Mean	Standard Deviation
Administrative Efficiency	4.12	0.78
Job Satisfaction	3.98	0.82
Employee Motivation	4.05	0.76
Overall Work Performance	4.10	0.74

This table summarizes the mean and standard deviation of various productivity indicators assessed in the study. The average scores indicate a generally positive perception of SIMPEG's influence on productivity dimensions. Administrative efficiency had the highest

mean (4.12), suggesting that respondents felt that SIMPEG significantly enhanced their operational efficiency. Job satisfaction (3.98) and employee motivation (4.05) also received favorable ratings, indicating a positive work environment attributed to the system's implementation. Overall work performance had a mean of 4.10, reinforcing the notion that SIMPEG contributed positively to the productivity of civil servants.

Table 3. Pearson Correlation Analysis

Variable	Administrative Efficiency	Job Satisfaction	Employee Motivation	Overall Work Performance
Administrative Efficiency	1.00	0.65	0.60	0.70
Job Satisfaction	0.65	1.00	0.55	0.68
Employee Motivation	0.60	0.55	1.00	0.64
Overall Work Performance	0.70	0.68	0.64	1.00

This table displays the Pearson correlation coefficients between productivity indicators. All variables showed significant positive correlations with one another, indicating that improvements in administrative efficiency, job satisfaction, and employee motivation are interrelated. For instance, administrative efficiency (0.70**) had the strongest correlation with overall work performance, suggesting that as efficiency increases, so does overall performance. These results underscore the interconnectedness of these dimensions and highlight the potential for SIMPEG to influence multiple aspects of productivity.

Table 4. Multiple Regression Analysis Results

Predictor Variable	Unstandardized Coefficients (B)	Standardized Coefficients (β)	t	p
Constant	1.54		3.56	0.001
Administrative Efficiency	0.28	0.30	5.12	0.000
Job Satisfaction	0.22	0.25	4.67	0.000
Employee Motivation	0.19	0.20	4.12	0.000

The results of the multiple regression analysis indicate the extent to which the independent variables administrative efficiency, job satisfaction, and employee motivation predict overall work performance. The significant coefficients (p 0.0001) for all predictors suggest that each has a meaningful impact on work performance, with administrative efficiency having the largest effect (B = 0.28). The model explains 61% of the variance in overall work performance (R² = 0.61), demonstrating a strong relationship between SIMPEG utilization and productivity outcomes among state civil servants.

Table 5. ANOVA Results

Source of Variation	Sum of Squares	df	Mean Square	F	p
Between Groups	123.45	3	41.15	10.67	0.000
Within Groups	940.00	246	3.82		
Total	1063.45	249			

The ANOVA results show significant differences in perceived productivity outcomes among different groups based on the independent variables. The F-value (10.67, $p < 0.001$) indicates that at least one group mean is significantly different from the others. This suggests that the implementation of SIMPEG may yield varied impacts across different departments or demographic categories, warranting further investigation into specific factors that contribute to these differences.

Table 6. Reliability Analysis

Construct	Cronbach's Alpha	Number of Items
Administrative Efficiency	0.86	5
Job Satisfaction	0.82	5
Employee Motivation	0.80	5
Overall Work Performance	0.84	5

This table presents the reliability analysis for the constructs measured in the study, with Cronbach's alpha values indicating good internal consistency across all dimensions. Administrative efficiency (0.86) and overall work performance (0.84) have the highest reliability, while job satisfaction (0.82) and employee motivation (0.80) also demonstrate acceptable reliability. These results confirm that the survey instrument used was reliable, enhancing the validity of the findings regarding the influence of SIMPEG on the productivity of civil servants.

The results of this study indicate a significant positive influence of the Personnel Management Information System (SIMPEG) on the productivity of state civil servants in Sleman Regency. The findings align with existing literature that underscores the critical role of technology in enhancing administrative efficiency and employee satisfaction in public sector organizations. Specifically, the strong correlations found between administrative efficiency, job satisfaction, and employee motivation reinforce the assertions of Fang et al. (2022) & Asim et al. (2021), who argue that effective personnel management systems facilitate an environment conducive to high productivity.

The mean scores for productivity indicators, particularly the high level of perceived administrative efficiency (4.12) and overall work performance (4.10), reflect the positive reception of SIMPEG among civil servants. These results are consistent with previous studies that suggest technology integration in public administration not only streamlines processes but also empowers employees by reducing bureaucratic hurdles (Di Vaio et al., 2020). The findings illustrate how SIMPEG aligns with broader e-government initiatives aimed at modernizing public administration and enhancing service delivery, further corroborating the work of Shkarlet et al. (2020).

The significant correlation between administrative efficiency and overall work performance (0.70) observed in this study echoes the findings of George & George (2020), who noted that automation allows employees to focus on strategic tasks rather than administrative burdens. Moreover, the multiple regression analysis, which explained 61% of the variance in overall work performance, emphasizes the multifaceted impact of SIMPEG on civil servant productivity. This result is particularly relevant in the context of Indonesia, where public sector reforms are essential for improving service quality and accountability (Mahapatro, 2021).

In addition to operational improvements, the study highlights the enhancement of employee motivation and job satisfaction as critical outcomes of SIMPEG implementation. The positive perception of job satisfaction (mean = 3.98) aligns with Robert et al. (2020), who found that transparent systems can lead to a more supportive work environment. This aspect is crucial as

it directly addresses the growing concern about employee morale in public service, which can significantly influence overall productivity.

Despite these positive outcomes, the study also recognizes the challenges in SIMPEG implementation, such as resistance to change and the need for adequate training. This aligns with the cautionary notes, who highlight that the success of information systems in public administration often hinges on user acceptance and continuous support. Addressing these challenges is vital for realizing the full potential of SIMPEG, as evidenced by the varied impacts noted in the ANOVA results.

This study contributes to the literature by providing empirical evidence on the specific impacts of SIMPEG on the productivity of state civil servants, an area that has received limited attention in existing research (Lim et al., 2022). While prior studies have examined the broader implications of e-government initiatives on public administration (Sadiq et al., 2022; Garg et al., 2022), few have focused on the nuanced effects of specific personnel management systems within local contexts, particularly in Indonesia.

Furthermore, this study addresses a gap in understanding the relationship between administrative efficiency and employee outcomes in the context of public sector reforms (Dhir et al., 2021). Previous research has often emphasized either technological impacts on operational efficiency or employee satisfaction in isolation. By integrating these dimensions, this study provides a holistic view of how SIMPEG influences productivity, thus enriching the academic discourse on public administration reform in Indonesia.

Additionally, the findings offer practical insights for policymakers and public administrators looking to implement similar systems (Makridis & Han, 2021). By highlighting the interconnectedness of efficiency, job satisfaction, and motivation, this research supports the argument for comprehensive training and stakeholder engagement during the implementation process, which is essential for overcoming resistance to change (Crucke et al., 2022).

Conclusion

This study demonstrates that the Personnel Management Information System (SIMPEG) significantly enhances the productivity of state civil servants in Sleman Regency by improving administrative efficiency, job satisfaction, and employee motivation. The findings indicate that the implementation of SIMPEG not only streamlines administrative processes but also fosters a supportive work environment, ultimately leading to better overall performance. By addressing existing gaps in the literature, this research underscores the critical role of technology in modernizing public administration in Indonesia and highlights the importance of strategic implementation to maximize the benefits of such systems. The insights gained from this study provide valuable guidance for policymakers and public administrators aiming to enhance service delivery and operational effectiveness in the public sector.

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