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The Influence of Employee Responsibility and Knowledge on the Speed of Service and Employee Performance Moderated by the Hospital Management Information System: A Case Study of Type D Hospitals in the East Kalimantan Province

Abstract. *All medical system employees must work harmoniously and responsibly to provide quality medical services to the population. However, the effectiveness of their work can be influenced by various factors, the impact of which was studied in this research. This research aims to examine the influence of employee responsibility and knowledge on the speed of service and employee performance moderated by the hospital management information system. This study encompasses five hospitals in East Kalimantan, namely RSUD KORPRI Prov Kaltim, RS Tk IV Samarinda, RS Bhakti Nugraha, RS Medika Utama Manggar, and RS Umum Balikpapan Baru, all of which fall under hospital type D. Twenty-five respondents from each hospital took part in the survey. The Data analyzed by PLS-SEM with Smart PLS Software do running data tabulation. According to the research objectives, the variables of this study consist of exogenous variables (i.e., responsibility and knowledge), mediating variables (i.e. speed of service), moderating variables (i.e. hospital management information system) and endogenous variables (i.e. employee performance). The study findings indicate that the variables of responsibility and knowledge exert a favourable and substantial influence on the rate of service delivery. Responsibility and hospital management information systems clearly and considerably positively affect staff performance. However, prioritizing enhancing employee performance by focusing on expertise and speed of service is crucial. Additionally, this research presents initial empirical evidence of the moderating effect of hospital management information systems on the relationship between service speed and employee performance. So, it is crucial to enhance the capabilities of human resources in the hospital management information system to improve the correlation between service speed and employee performance.*

Keywords: *employee responsibility and knowledge, speed of service, employee performance, hospital management information system, hospitals in East Kalimantan.*

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Вплив відповідальності та знань співробітників на швидкість надання послуг і ефективність роботи співробітників, модеровану інформаційною системою управління лікарнею: тематичне дослідження лікарень типу D у провінції Східний Калімантан

Анотація. *Усі працівники медичної системи мають працювати злагоджено та відповідально, щоб надавати якісні медичні послуги населенню. Однак, на ефективність їхньої роботи можуть впливати різні фактори, вивченню яких присвячене дане дослідження. Мета дослідження – вивчити вплив відповідальності та знань співробітників на швидкість обслуговування та результативність співробітників, модеровану інформаційною системою управління лікарнею. Це дослідження охоплює п'ять лікарень у провінції Східний Калімантан, а саме RSUD KORPRI Prov Kaltim, RS Tk IV Samarinda, RS Bhakti Nugraha, RS Medika Utama Manggar та RS Umum Balikpapan Baru, які належать до лікарень типу D. Двадцять п'ять респондентів з кожної лікарні взяли участь в опитуванні, проведеному дослідниками. Дані, проаналізовані за допомогою часткового моделювання структурних рівнянь методом найменших квадратів (PLS-SEM), використовуючи програмне забезпечення Smart PLS. Змінні цього дослідження складаються з екзогенних змінних (відповідальність та знання), посередницьких змінних (швидкість обслуговування), модеруючих змінних (інформаційна система управління лікарнею) та ендогенних змінних (результативність співробітників). Результати дослідження свідчать, що змінні відповідальності та знань позитивно і суттєво впливають на швидкість надання послуг. Відповідальність та інформаційні системи управління лікарнею позитивно і суттєво впливають на продуктивність персоналу. Однак, в цілях підвищення ефективності роботи медичного персоналу основна увага має приділятися збільшенню їх досвіду та швидкості обслуговування. Крім того, це дослідження надає емпіричні докази модеруючого впливу інформаційних систем управління лікарнею на зв'язок між швидкістю обслуговування та продуктивністю співробітників. Отже, надзвичайно важливо розширити можливості людських ресурсів в інформаційній системі управління лікарнею, щоб покращити співвідношення між швидкістю обслуговування та продуктивністю співробітників.*

Ключові слова: *відповідальність і знання співробітників, швидкість обслуговування, продуктивність співробітників, інформаційна система управління лікарнею, лікарні в провінції Східний Калімантан.*

INTRODUCTION

A hospital is a facility where health services are organized or provided, including health workers such as doctors, nurses, health analysts, pharmacists, and others with rights and obligations. One of their obligations is to provide services to the public or patients to obtain a health degree. In contrast, according to Law Number 8 of 1999 concerning Consumer Protection, hospitals are categorized as business actors. As a business actor, you have rights, obligations, and responsibilities summarized in Law Number 44 of 2009 concerning Hospitals (from now on referred to in this article as the Hospital Law).

The most fundamental right is to secure legal safeguards for consumers or patient actions with bad ethics, while the obligation is to treat or serve patient consumers correctly, honestly, and non-discriminatorily so that medical disputes do not occur as regulated in Article 46 of the Hospital Law. Hospitals in the Law are divided based on the type of service and management and carry out all health service activity processes, which involve various health professional professions in the hospital, using hardware and software two related to technology, and implementing hospital management to serve patients. as a user of hospital services.

The managerial phenomenon in type "D" hospitals in the East Kalimantan region, as a health service entity with unique challenges, is currently in the midst of a managerial transformation that is leading to improved service quality and operational efficiency. Special attention is paid to employee responsibility to understand and overcome managerial problems. This phenomenon reflects the complexity of the relationship between employees, management, and health service demands in a Type D hospital environment. Type D hospitals often face limited resources, increasing patient volumes, and the challenges of a dynamic work environment. In this context, employee responsibility is not only an individual responsibility but also a critical factor that influences operational performance and sustainability. The significance of this obligation is strengthened by the necessity to attain elevated levels of healthcare, notwithstanding the constraints imposed by the limited resources at hand.

The analysis indicates that information exchange and e-service quality are good, while staff performance is very good. According to Assyofa et al. (2023), there is a positive and significant impact on employee performance when both knowledge-sharing and e-service quality characteristics are included, either partially or concurrently. The effect is considered moderate. The correlation study reveals a statistically significant and favourable association between training and employee performance. The additional correlation analysis reveals a statistically significant and favourable association between employee engagement and performance. Sendawula et al. (2018) discovered a partial mediation effect of employee involvement in the connection between training and employee performance. Confirmed the influence of employee abilities on service performance and identified customer experience as a mediating factor in this relationship. Our study addresses the inquiries proposed by the theory of Personality Factors and Employee Service Performance by Razali et al. (2016), the suggestions put out by the Multilevel Model of Service Performance (Liao & Chuang, 2004), and those by Hanafi & Ibrahim (2018). The overall finding of the Yang et al. (2021) study indicates that the effectiveness of utilizing hospital information systems is influenced by self-efficacy, management support, information quality, and system quality. Additionally, the impact of self-efficacy on the effective use of hospital information systems is strengthened by management support for female workers rather than for male workers. Furthermore, self-efficacy has a significant positive effect on the effectiveness of female workers in utilizing hospital information systems, while it is not significant for male workers.

Previous studies based on observation and experience focus more on factors directly influencing hospital employee performance. This study will involve responsibility factors and knowledge of employee performance. Apart from that, the mediating role of speed of service and moderation of hospital information systems is novel in this study.

LITERATURE REVIEW

Several previous studies have used trends in service speed to see the impact on perceived service satisfaction with support from employee performance. In this case, service speed increases patient satisfaction and shows good employee performance (Sisworo & Suprapto, 2020). Further studies by Mitchell et al. (2018) also found that increasing employee knowledge will increase the speed of service and support for employee performance or hospital organizations.

Employee competency has a direct and considerable influence on service performance and customer experience, and customer experience directly impacts service performance, according to the research. The results also indicate that, albeit not significant, customer experience has a moderating effect. Proficiency in specific abilities has a direct and significant beneficial effect on the quality of service provided. The role of customer experience in mediating between employee competency and service performance is insignificant. The proficiency of employees is crucial for enhancing the success of service-based businesses. In order to get exceptional service performance, managers must prioritize assessing staff capabilities (Hanafi & Ibrahim, 2018).

The other research results show that remuneration is closely related to performance, so the better the stripping system, the better the employee's performance. However, providing reasonable remuneration does not necessarily result in good performance. Employee performance is reviewed from the quality of service, which is considered quite good, and the speed, ability, and initiative of employees, which are considered not optimal. So, the issue of speed in service is an essential factor for subsequent research studies (Permana & Bharoto, 2021). Innovation in the form of service speed will also improve employee performance (Ibrahim et al., 2022). The findings of evaluating employee performance based on specific situations of using service speed with the assistance of service technology systems for frontline staff can provide preliminary information, allowing for a better understanding of the impact on employee performance (Di Pietro et al., 2014).

The Hospital Information System is a comprehensive and integrated system that manages all aspects of hospital operations. It encompasses diagnostic services, medical data collection, medical records management, pharmaceutical supply and storage, billing, personnel databases, payroll, accounting, and control management. According to Article 52, paragraph 1 of the Constitution of the Republic of Indonesia Number 44 of 2009, Indonesian hospitals are required to document and report all actions within the hospital premises. Regulation of the Minister of Health no. 1171 of 2011, Article 1 paragraph 1 in the Republic of Indonesia's ministerial rules mandates that every hospital must use a hospital information system. This is also aimed at enhancing hospital management's professionalism by providing sufficient system support and human resources (Rumambi et al., 2020).

The information management system is a crucial instrument for enhancing staff performance by aligning roles and knowledge to facilitate efficient service delivery, and it is further reinforced by contemporary information technology. Nevertheless, the outcome is contingent upon the proficiency of the individuals managing the human resources in this scenario. Integrating accountability, service speed, knowledge, and personnel performance is essential, facilitated by an effective hospital management information system.

THEORETICAL BACKGROUND

Responsibility

According to Light (2004), employee responsibility or empowerment is strongly related to employee involvement and engagement and is also strongly related to employee satisfaction. The study also discovers that employee satisfaction is associated with the intention to stay with the organization. He analyzed the four job kinds of hourly wage, non-management, engineers, and managers, and discovered substantial differences in their

attitudes toward employee responsibility or empowerment and employee satisfaction, with managers being the most satisfied in all three categories. He also examined four engagement procedures to see if they were related to involvement, and employees specifically mentioned information and rewards.

Dose & Klimoski (1995) found that due to shifting trends and the nature of the workforce, people need to take more personal responsibility and organisations need to use self-management techniques. Additionally, companies also recognised the importance of maintaining external control. The study suggests that the effectiveness of accountability mechanisms is primarily determined by the relationship between the person assigning responsibility and the employee. The employee's level of responsibility increases as they are held accountable for meeting expectations, perceiving the work or activity as important, and feeling a sense of control over the situation.

Hospital Management Information System

Hospital Management Information System (SIMRS) is a communication information technology system employed in hospitals to manage and consolidate the progression of hospital service procedures, including patient registration, hospital admission, doctor consultation queues, medical examinations, and prescription administration. SIMRS is an integral part of a health information system comprising a network of coordination, reporting, and administrative protocols to acquire accurate and reliable information (Kharish & Munawaroh, 2021).

Every hospital must use SIMRS, either by utilising a Ministry of Health-provided programme or by developing their own application that complies with the Minister of Health's criteria. SIMRS deployment aims to enhance efficiency, effectiveness, professionalism, performance, and accessibility to healthcare services (Suyudi et al., 2021). Almost all hospitals have implemented SIMRS to date, and the Ministry of Health will require all SIMRS to have integrated electronic medical records (REM) in the future (Widianto & Supriyono, 2018).

Public Service

Public authorities must serve their citizens. Daily, the quality of public services provided is expected to improve. According to Hood (2007), service means that a person or organization acts or does something in such a way that customers, employees and managers feel satisfied. Public services are activities carried out by the government towards many individuals, in groups or units, to provide satisfaction to them without any physical results (Hamzah, 2021).

According to Sedarmayanti (2016), public service means serving people's needs and moving based on established rules and procedures. Modern government basically serves the society in which it operates (Bertz et al., 2023). The government must serve the public interest by creating conditions for developing the skills and creativity of every member of society. Public is the provision of services, per the main applicable rules and procedures, to meet the needs of people or communities interested in the organization (Hodgkinson et al., 2017). The agreed definition of public services highlights its skilled and quality delivery, producing positive outcomes that meet community needs in line with government direction.

Service Quality

Service is an intangible action or activity that one party can provide to another party without transferring ownership (Kotler, 2011). Services that exhibit exceptional quality tend to yield a higher degree of satisfaction. Service quality is a result that must be attained and executed by action (Chairudin et al., 2018). Nevertheless, despite their ethereal nature and susceptibility to being forgotten, these acts can still be experienced and recalled. As a result, consumers become more engaged in consuming a company's products and services.

Service quality can be defined as the degree to which client expectations are met or exceeded. Customer satisfaction can be assessed by comparing the anticipated level of service consumers desire with the actual level of service they receive. Effective service meets the expectations of consumers. Nevertheless, if the service exceeds the consumer's expectations, the service quality might be exceptionally excellent. Conversely, a service of subpar quality refers to a service that falls much below the established level or fails to meet the consumer's service expectations.

Employee Performance

Performance (productivity in activities, actions, and work) is a general requirement of all companies worldwide. Performance is the degree of productivity of a company's work processes and product manufacturing processes, expressed in terms of output results. Performance is also a benchmark for determining inputs and outputs but primarily focuses on output results. A comparison is made between input and output. Human resources determine inputs, and infrastructure determines outputs (Wau et al., 2021). Performance is sometimes considered a highly accurate measurement tool for work efficiency and, therefore, an incentive user for conversion resources.

Employee success is determined by the extent to which individuals can perform their assigned duties and complete tasks at a satisfactory level of quality and quantity (Marthalia, 2022). According to Kasmir (2016), various aspects can influence a person's performance, especially he relates to

– The abilities and skills a person has in a particular job;

– Competent people, especially those who know their job well, have positive results in performance;

– The concept of work design involves consciously structuring work roles in ways that help employees achieve their goals more effectively;

– Employee personality or personality traits;

– Work motivation refers to the intrinsic or extrinsic factors that stimulate people to engage in work-related activities;

– Leadership refers to the actions and actions of a person in a position of authority to effectively coordinate, monitor, and delegate tasks and duties to subordinates.

Leadership style refers to how leaders effectively supervise and interact with their subordinates.

Research Hypothesis

Supported by both theoretical and empirical evidence, the following research hypothesis can be proposed (Figure 1):

H_1: Responsibility affects the speed of service;

H_2: Knowledge affects the speed of service;

H_3: Responsibility affects employee performance;

H_4: Knowledge affects employee performance;

H_5: Speed of service affects employee performance;

H_6: Hospital management information system affects employee performance;

H_7: The hospital management information system moderates the connection between the speed of service and employee performance.

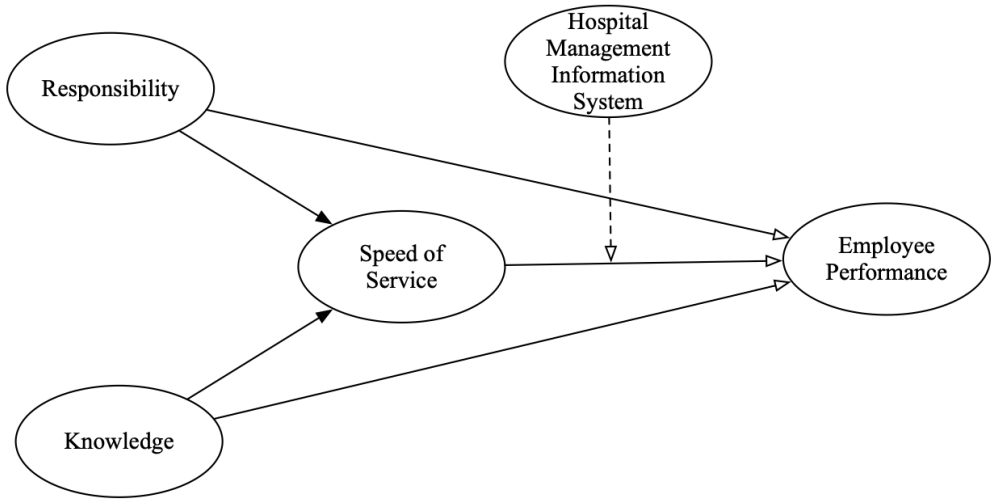

Figure 1. **Research Conceptual Framework**

RESEARCH METHODOLOGY

The research design of this study encompasses exploratory, descriptive, and diagnostic components. This is an exploratory approach as studies have yet to be conducted by previous scholars to investigate the employee culture prevailing in organizations regarding the element of responsibility. The basis of this study is the review of the relevant literature that investigates the impact of responsibility and knowledge on speed of service and employee performance with a moderation effect of the hospital information management system, making the study descriptive and quantitative. This study encompasses five hospitals in East Kalimantan, namely RSUD KORPRI Prov Kaltim, RS Tk IV Samarinda, RS Bhakti Nugraha, RS Medika Utama Manggar, and RS Umum Balikpapan Baru, all of which fall under hospital type D. Employees were selected from the selected hospital to represent the sample of respondents. A uniform number of 25 respondents from each type D Hospital was established because respondents from a particular organization expressed more or less the same position regarding the statements regarding employee responsibilities and employee culture included in the data collection instruments. The selection of employees was made based on a non-random, purposive quota sampling technique, resulting in a total sample size of 125 respondents. The Data analyzed by PLS-SEM with Smart PLS Software do running data tabulation.

According to the research objectives, the variables of this study consist of exogenous variables (i.e., responsibility and knowledge), mediating variables (i.e. speed of service), moderating variables (i.e. hospital management information system) and endogenous variables (i.e. employee performance) which are explained as follows:

Responsibility (X1)

Responsibility is a duty or obligation to carry out or complete a task with satisfaction (given by someone or based on one's promise or commitment) which must be fulfilled by someone and which has a consequent penalty for failure and can be measured by indicators: 1) innovation, 2) productivity, 3) commitment, and 4) accountability (Brammer et al., 2007).

Knowledge (X2)

Knowledge is the acquisition of information that can bring about a transformation or impact on something or someone. This phenomenon occurs when knowledge serves as the foundation for decision-making or empowers individuals or organizations to undertake new and more impactful actions, which can be evaluated through measurable indicators. The four elements mentioned by Buckman (2004) are: 1) information, 2) action, 3) experience, and 4) skills.

Speed of Service

Speed of service is found in service quality. Service speed is a retailer's desire to be able to provide services to its customers accurately and quickly and can be measured by indicators: 1) tangible, 2) reliable, 3) responsiveness, 4) assurance, and 5) empathy (Zeithaml, 1988)

Employee Performance

Employee performance refers to attaining the highest level of productivity and effectiveness that aligns with an employee's capabilities. This is a matter of great importance for organizational leaders. This performance demonstrates how a person's activities in doing tasks and striving to attain defined goals are evaluated using the five factors identified by Robbins (2006): 1) quality, 2) quantity, 3) timeliness, 4) efficacy, and 5) independence.

Hospital Management Information System

Information communication technology systems facilitate the processing and integration of the complete service process flow. Hospitals utilize coordination, reporting, and network administrative operations to get precise and reliable information. These procedures are integral to the Health Information System and are evaluated based on specific metrics. The five main stages of the process are: 1) gathering data, 2) processing data, 3) presenting information, 4) analyzing data, and 5) delivering information (Gregor, 2006).

RESULTS AND DISCUSSION

Validity and Reliability

The research analysis demonstrated the validity and reliability of the data. The validity tests conducted using either the Pearson correlation method or the modified item-total correlation method are two-tailed tests. These tests assess the validity of all variables and all values of the 23 items at a significance level of 0.05. The indicator's R count value exceeds both the R table value and 0.1757. Similarly, a data reliability assessment conducted using Cronbach's alpha approach demonstrates the reliability of all the data. All of the variables in Cronbach's alpha have an alpha value greater than 0.70. All variables have Cronbach's alpha values that are more than or equal to 0.70. The results suggest that the study instrument is highly trustworthy and demonstrates satisfactory internal consistency among all scale items, as Nunnally and Bernstein (1994) indicated. All 125 questionnaires were distributed to and received from all respondents in this study.

PLS SEM Analysis

This study employs a methodology to examine the impacts of moderation. Generally, the moderating effect refers to the interaction between a variable that is not influenced by other variables (predictor variable) and a variable that influences the relationship between the predictor variable and another variable (moderating variable) in affecting the outcome variable (Baron & Kenny, 1986). The data is tested using Smart PLS version 3.2.9 software (Ghozali & Latan H, 2015) through structural equation modelling.

Output Model

Model measurements examine manifest and latent variables, which is feasible with a loading factor value above or >0.70 (Figure 2).

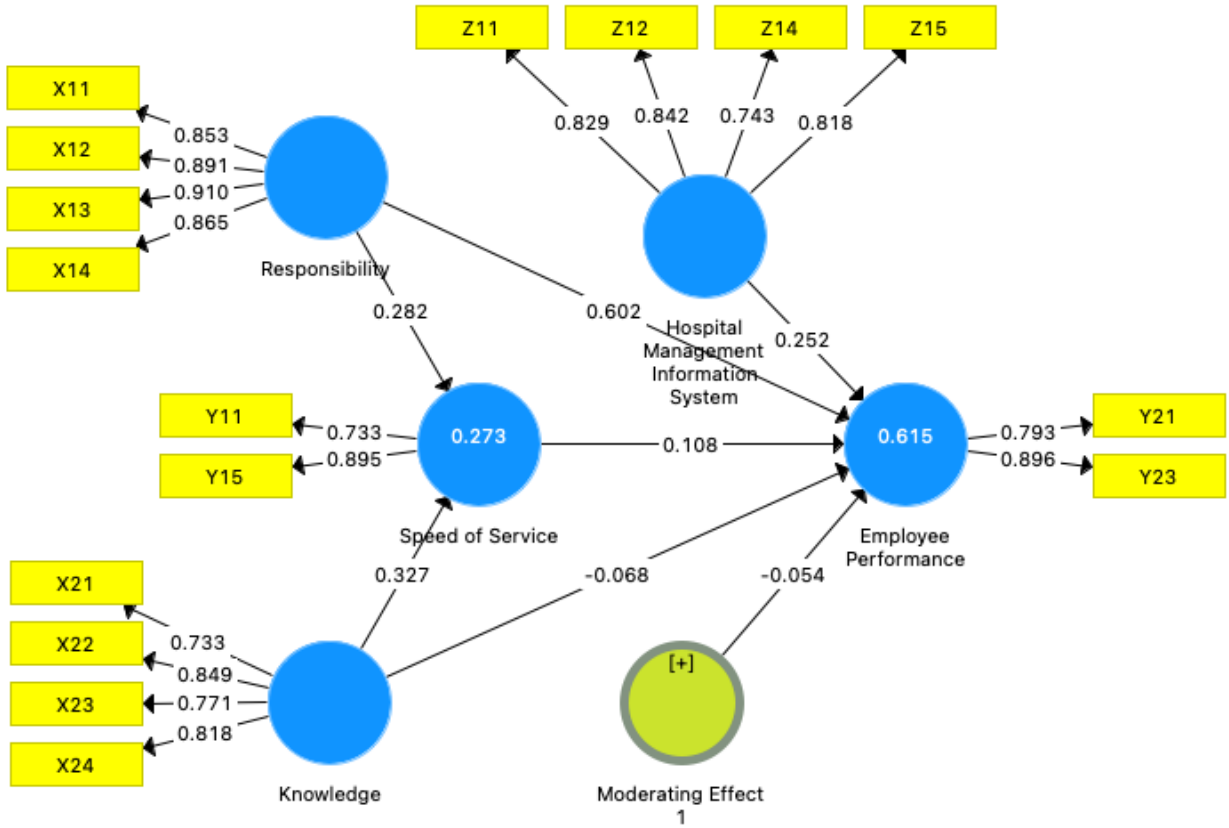

Figure 2. **Outer Loading Factor**

Based on the data shown in Figure 2, it is evident that all structures with recursion indications yield loading factor values that exceed 0.70. This implies that all signs of construction are legitimate. Based on the external loading findings provided, it is evident that all constituent metrics in the model are considered valid if the resulting T-statistic is equal to or greater than 1.96. Chinn (1998), Hair et al. (2011), and Hair et al. (2012).

Evaluation Outer Model

The assessment of the external recursive configuration model, as indicated by the values of Cronbach's Alpha, composite reliability, and average variance extracted (AVE), is presented in Table 1.

Table 1. **Reliability and Validity Construct**

	Cronbach' Alpha	**Composite Reliability**	**Average Variance Extracted (AVE)**
Employee Performance	0.711	0.834	0.716
Hospital Management Information System	0.823	0.883	0.654
Moderating Effect 1	0.806	0.872	0.630
Responsibility	1.000	1.000	1.000
Speed of Service	0.903	0.932	0.775

Given the Cronbach alpha and composite reliability values for all constructs above 0.70, we may infer that all indicators of the constructs are reliable and have successfully passed the reliability test. Moreover, all recursive architectures yielded AVE values greater than 0.50, so satisfying the criteria for convergent validity and reliability as stated by Chinn (1998), Hair et al. (2011), and Hair et al. (2012).

Table 2. **Heterotrait-Monotrait Ratio (HTMT)**

	Employee Performance	Hospital Management Information System	Knowledge	Moderating Effect 1	Responsibility	Speed of Service
Employee Performance						
Hospital Management Information System	0.786					
Knowledge	0.622	0.770				
Moderating Effect 1	0.108	0.098	0.156			
Responsibility	0.820	0.598	0.543	0.041		
Speed of Service	0.730	0.511	0.681	0.270	0.610	

The results of convergent and discriminant consistency testing in path analysis using partial least squares indicate that the ratio between constructs and the correlation within the same build all have HTMT values below 0.9 (Table 2). This suggests that the construct exhibits good convergent consistency.

Evaluation Inner Model

The internal model is evaluated by recording the r-squared value (Table 3).

Table 3. **R Square**

	R Square	**R Square Adjusted**
Employee Performance	0.615	0.599
Speed of Service	0.273	0.261

From the output above, the generated R-squared value is 0.615 for employee performance. This means that the influence of responsibility, knowledge, speed of service, and hospital information management system on employee performance is 61.5%. Other variables outside this research and error factors influence the remaining 38.5%. Based on the results of the statistical analysis conducted, it was shown that the speed of service R-squared value is 0.273. This means the impact of responsibility and knowledge on the speed of service is 27.3%, and other factors influence the remaining 72.7%.

Path Coefficients

The results of the path coefficient and hypothesis testing can be displayed in Table 4.

Table 4. **Path Coefficients**

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STCEV)	P Values	Result
H_1 Responsibility → Speed of Service	0.282	0.281	0.099	2.861	0.004	Accept
H_2 Knowledge → Speed of Service	0.327	0.336	0.100	3.258	0.001	Accept
H_3 Responsibility → Employee Performance	0.602	0.594	0.071	8.456	0.000	Accept
H_4 Knowledge → Employee Performance	-0.068	-0.066	0.101	0.674	0.501	Reject
H_5 Speed of Service → Employee Performance	0.108	0.116	0.074	1.465	0.144	Reject
H_6 Hospital Management Information System → Employee Performance	0.252	0.249	0.093	2.704	0.007	Accept
H_7 Moderating Effect 1 → Employee Performance	-0.054	-0.045	0.069	0.784	0.433	Reject

DISCUSSION

Responsibility influences the speed of service at type D hospitals in East Kalimantan.

Based on the statistical analysis results from Smart PLS, a coefficient value of 0.282 was found, the t-statistic was 2.861 > 1.96, and the p-value was 0.004 < 0.05 or classified as positive and significant. So, in this case, hypothesis 1 (H_1) was accepted, and responsibility has a positive and significant effect on the speed of service. This condition is consistent with Light's (2004) opinion that liability affects the speed of service. These results support Dose & Klimoski's (1995) view that employees' sense of responsibility increases when accountability builds expectations, perceives a task or activity as important, and gives employees a sense of control over the situation. This is also supported by an empirical study by Mitchell et al. (2018), which hypothesizes that with an increase in knowledge value, the service speed of hospital organizations will also increase proportionately. The element of responsibility is fundamental and can encourage employees to give their best in their work through prompt service.

Knowledge influences the speed of service at type D hospitals in East Kalimantan.

Based on the statistical analysis results of Smart PLS, a coefficient value of 0.327 was found, the t-statistic was 3.258 > 196, and the p-value was < 0.05, or classified as positive and significant. Hypothesis 2 (H_2) was accepted in this case, and knowledge has a positive and significant effect on service speed. Dose and Klimoski (1995) found in their research that trends and changes in the nature of the workforce require increased personal responsibility among employees and a broader use of self-management techniques, while companies also maintain external control. Empirical research conducted by Hanafi & Ibrahim (2018) corroborates this finding, indicating that skills have a direct and significantly favourable influence on service performance, specifically in terms of service speed. Studies have discovered that the proficiency of employees has a clear and substantial impact on the quality of service and the satisfaction of customers. Additionally, the satisfaction of customers directly affects the performance of the service.

Responsibility influences employee performance at type D hospitals in East Kalimantan.

Based on the statistical analysis results of Smart PLS, a coefficient value of 0.602 was found, the t-statistic was 8.458 > 196, and the p-value was < 0.05, or classified as positive and significant. In this case, Hypothesis 3 (H_3) was accepted, and responsibility positively and significantly impacts employee performance. These results are consistent with Dose and Klimoski's (1995) finding that trends and changes like the workforce require, and companies also feel, increased personal responsibility among employees and the broader use of self-management techniques. Terminate External control refers to the ability to manipulate or influence something from outside of it. Studies indicate that the effectiveness of conscientious executives is predominantly influenced by their interactions with crucial stakeholders and staff members. Responsibility sets expectations, makes tasks and activities perceived as necessary, and makes employees feel more responsible when they feel like they are in control of the situation and impact on employee performance (Permana & Bharoto, 2021). Employee performance is evaluated based on the quality of service (very good) and the employee's speed, skill, and initiative (suboptimal). Therefore, the speed of service is an essential element for subsequent research studies.

Knowledge does not influence employee performance at type D hospitals in East Kalimantan.

Based on the statistical analysis results of Smart PLS, a coefficient value of -0.068 was found, and the t-statistic was classified as 0.674 > 1.96 and p value 0.501 > 0.05 or negative but not significant. Hypothesis 4 (H_4) was rejected in this case, and knowledge has a negative and only a small effect on employee performance. This finding is inconsistent with Light's (2004) view that employee experience strongly impacts performance. According to Dose and Klimoski (1995), employees' knowledge of the existing work situation is very helpful in performing their jobs. This does not support the empirical finding that employee knowledge also leads to innovation in the form of service speed, which can improve employee performance (Ibrahim et al., 2022).

Things in the field show that employee knowledge needs to be improved, considering that knowledge of responsiveness to optimal service is essential.

There is no influence of speed of service on employee performance at type D hospitals in East Kalimantan.

The statistical analysis of Smart PLS revealed a coefficient value of 0.108 and a t-statistic of 1.465, indicating a positive but insignificant relationship. In this case, Hypothesis 5 (H_5) was rejected, meaning that service speed does have a beneficial effect on employee performance, but this effect is not statistically significant. The results of this study show that it is different from the opinion of Dose and Klimoski (1995) that the results of the services provided significantly determine the character of workers. There must be intervention from management to create the speed of service that is mutually expected. Therefore, the speed of service is an essential factor for further research studies (Permana & Bharoto, 2021). Innovation in terms of service speed can improve employee performance (Ibrahim et al., 2022). The results of employee performance evaluations based on specific usage of service speed using service technology systems for frontline employees can provide initial information that allows for a deeper understanding of the impact on employee performance (Di Pietro et al., 2014). The speed of service in type D hospitals still needs to be improved to provide work results that all interested parties can feel.

Hospital information system management influences employee performance at type D hospitals in East Kalimantan.

Based on the statistical analysis results of Smart PLS, a coefficient value of 0252 was found, the t-statistic was 2704 > 196, and the p-value was < 0007 005, or classified as positive and significant Therefore, in this case, Hypothesis 6 (H_6) was accepted, and hospital management information system has a positive and significant impact on employee performance. The results of this study align with the opinion of Kharish and Munawaroh (2021) that the hospital information management system is a series of integrated systems capable of creating networks, coordinating between departments, and presenting accountable information. All hospitals must implement a hospital management information system using a program provided by the Ministry of Health or an application developed by the hospital that meets the requirements. Implementing this system is also expected to improve efficiency, effectiveness, professionalism, performance, and hospital access and services (Suyudi et al., 2021). To date, almost all hospitals have implemented this system, and in the future, the Ministry of Health will mandate the integration of electronic medical records into all these systems (Widianto & Supriyono, 2018). The hospital information management system will enable operational and administrative activities to run well to provide better patient services.

Hospital information system management has not moderated the relationship between service speed and employee performance at type D hospitals in East Kalimantan.

The Smart PLS statistical analysis revealed a coefficient value of -0.0054 and a t-statistic of -0.7841005, indicating a negative but non-significant relationship. Thus, in this instance, Hypothesis 7 (H_7) was refuted, indicating that the hospital management information system did not align with the efficiency of service or the performance of employees. The system utilised by type D hospitals in East Kalimantan has yet to enhance the correlation between service efficiency and employee productivity. Several aspects need to be considered, given the limited human resources within the hospital group. The findings of this study contradict the viewpoints expressed by Kharish and Munawaroh (2021), Suyudi et al. (2021), and Widianto and Supriyono (2018), which suggest otherwise. A hospital management information system is a communication technology system employed to manage and streamline the various procedures involved in providing healthcare services. These activities include patient registration, hospital admission, waiting for medical consultations, conducting medical testing, and administering medication. Furthermore, it is an integral component of a comprehensive health information system, encompassing an interconnected framework of coordination, reporting, and control protocols to acquire pertinent and accurate information.

CONCLUSION

The main goal of the hospital's activity is to provide medical services to the population in the manner and scope established by law. These services are special because the health and lives of patients depend on them. All medical system employees must work harmoniously and responsibly to provide quality medical services. However, the effectiveness of their work can be influenced by various factors, the impact of which was studied in this research.

This study encompasses five hospitals in East Kalimantan, namely RSUD KORPRI Prov Kaltim, RS Tk IV Samarinda, RS Bhakti Nugraha, RS Medika Utama Manggar, and RS Umum Balikpapan Baru, all of which fall under hospital type D. Twenty-five respondents from each hospital took part in the survey. The Data analyzed by PLS-SEM with Smart PLS Software do running data tabulation.

The study findings indicate that the variables of responsibility and knowledge exert a favourable and substantial influence on the rate of service delivery. Responsibility and hospital management information systems clearly and considerably positively affect staff performance. However, prioritising enhancing employee performance by focusing on expertise and speed of service is crucial. It is crucial to enhance the capabilities of human resources in the hospital management information system to improve the correlation between service speed and employee performance.

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