

Original Research Article

The Role of Employee Competence in Mediating the Relationship between Information System Effectiveness, Employee Training, and Managerial Support on Employee Performance at KKPRI RSSA

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Abstract: This research aims to analyze the influence of information system effectiveness, employee training, and managerial support on employee performance, both directly and through the mediation of employee capability, at the Consumer Cooperative of Employees of the Republic of Indonesia at RSUD Dr. Saiful Anwar (KKPRI RSSA Syaiful Anwar). Using a quantitative approach and path analysis, data were collected from 50 employees who directly interacted with the information system through questionnaires. The results revealed that information system effectiveness, employee training, and managerial support significantly influence employee capability and performance. Employee capability was proven to mediate the relationship between these variables and employee performance. Information system effectiveness showed a stronger direct impact on performance than its indirect effect through employee capability. Conversely, employee training had a negative direct impact on performance but became positive when mediated by employee capability. This study highlights the importance of enhancing employee capability to support optimal performance through effective information systems, managerial support, and relevant training.

Keywords: Employee Competence, Information System Effectiveness, Employee Training, Managerial Support, Employee Performance.

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I. INTRODUCTION

The advancements in the digital era have compelled organizations to adopt information technology, particularly in managing cooperative operational processes, to enhance efficiency, effectiveness, quality, and credibility. This, in turn, aims to improve the performance of cooperative management carried out by employees (Rini & Rohman, 2024). According to Ismail and Razak (2019) and Sudrajat (2020), adopting information technology in cooperative operational management represents a form of operational digitalization that promotes greater transparency and automation in membership, inventory, and financial management. The primary goal of this digitalization process is to minimize manual errors.

KKPRI RSSA is a cooperative that strives to adopt technology to enhance its services and competitiveness. According to Venkatesh and Davis (2000) and Sudrajat (2020), the success of information technology adoption does not solely depend on the

system itself but is also influenced by employee performance and competence, the effectiveness of training, and managerial support, all of which play a crucial role in determining the outcomes of technology implementation (Venkatesh & Davis, 2000; Sudrajat, 2020; Ismail & Razak, 2011). A study conducted by Yulianto *et al.*, (2024) revealed that the effectiveness of information systems does not significantly impact employee performance. Furthermore, KKPRI RSSA also takes into account factors such as the effectiveness of information systems, employee training, employee competence, managerial support, and the performance of cooperative employees.

Ismail and Razak (2011), Sudrajat (2020), and Venkatesh and Davis (2000) highlighted several challenges in adopting new technology, including employees' resistance to technological adoption, limited infrastructure due to financial constraints, the perceived complexity of management information systems that can be confusing, and employees' lack of skills in utilizing technology (Andika & Sumadi, 2021). However,

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adopting technology in cooperatives has significant benefits. It enhances employees' ability to complete tasks more quickly and accurately (Sudrajat, 2020). Additionally, the effectiveness of information systems can improve efficiency and transparency in financial management (Ismail & Razak, 2011). Resource and policy support for technology usage (Sudrajat, 2020) and continuous employee training to operate cooperative information systems (Venkatesh & Bala, 2008) further contribute to optimizing cooperative management.

Information systems play a critical role in managing data from various organizational activities, transforming it into valuable information. O'Brien and Marakas (2011) emphasized that effective information systems support better decision-making processes by providing accurate and relevant information. The key components of an information system include hardware, software, data, procedures, and people (Laudon & Laudon, 2016; Turban *et al.*, 2018). Hardware refers to physical tools such as computers, while software consists of programs that govern data processing. Data is a collection of facts processed to generate information, procedures are the guidelines used to operate the system, and people are the users responsible for managing and utilizing the information system effectively.

Employee training also plays a crucial role in shaping individuals' technical capabilities. Andika and Sumadi (2021) highlighted that relevant training programs can significantly enhance employees' ability to utilize information technology, ultimately enabling them to perform their tasks more effectively. However, a study by Aminah and Yusuf (2020) revealed that training had no significant impact on employee capabilities at PT. Telkom Kota Bima. This outcome was attributed to the lack of alignment between the training content and the employees' job requirements. These findings underscore the importance of designing training programs that are closely tailored to the specific needs of the workforce to maximize their effectiveness.

Managerial support also plays a significant role in enhancing employees' ability to perform their tasks. Nasution and Rizky (2024) demonstrated that managerial support, through effective communication and supportive policies, significantly improves employees' capabilities. However, Azzahra (2024) found that top management support does not have a significant impact on the effectiveness of accounting information systems (AIS). These findings suggest that managerial support must be complemented by employee training and development strategies to achieve optimal outcomes.

II. LITERATURE REVIEW

1. Effectiveness of Information

The Effectiveness of Information Systems refers to the extent to which an information system provides benefits through system quality, information quality, service quality, usage, user satisfaction, and net

impact on individuals and organizations (DeLone & McLean, 1992). The Effectiveness of Information Systems represents the degree of success in supporting work processes and operational activities at KKPRI RSSA in alignment with predetermined objectives. The key factors of Effectiveness of Information are information quality, ease of use, and the speed of information access.

2. Employee Training

Employee Training is a systematic effort to equip employees with the skills, knowledge, and attitudes necessary to perform their jobs more effectively. The primary objective of training is to enhance employees' current performance or prepare them for future responsibilities (Dessler, 2013). Employee training is a process aimed at improving work competencies and skills, conducted by KKPRI RSSA for its employees, with the goal of enhancing their performance quality in carrying out their duties and responsibilities. The key indicators of effective training include the relevance of training materials, training frequency, and employee competency development.

3. Management Support

Management Support refers to the efforts made by management to provide assistance, guidance, resources, and motivation to employees in order to achieve organizational goals effectively. It represents the level of participation, attention, and involvement of management in providing the necessary resources, facilities, and motivation to support task execution and goal attainment at KKPRI RSSA. This support includes the provision of facilities, access to information, and a conducive work environment, enabling employees to perform optimally (Robbins & Coulter, 2016).

4. Employee Capability

Employee Capability is the combination of skills, knowledge, and competencies possessed by employees, enabling them to perform their duties and job responsibilities effectively. Employee capability is related to the level of expertise, knowledge, and competencies employees have in carrying out their tasks and responsibilities. It encompasses technical, behavioral, and professional aspects required to achieve the expected performance (Armstrong, 2014).

5. Employee Performance

Employee Performance refers to the quality and quantity of work achieved by an employee in carrying out their duties in accordance with their assigned responsibilities. Performance is influenced by an employee's capabilities, motivation, and work environment.

In the context of KKPRI, employee performance is the work outcome achieved by employees in fulfilling their tasks and responsibilities based on established standards, considering work

quality, productivity, timeliness, and commitment to performance (Mangkunegara, 2015).

6. The Framework of Conceptual Research

The conceptual framework represents a depiction of reality that visualizes and forms a theory or idea about the relationship between the variables being studied. The interconnection between the variables used in this research can be illustrated as follows:

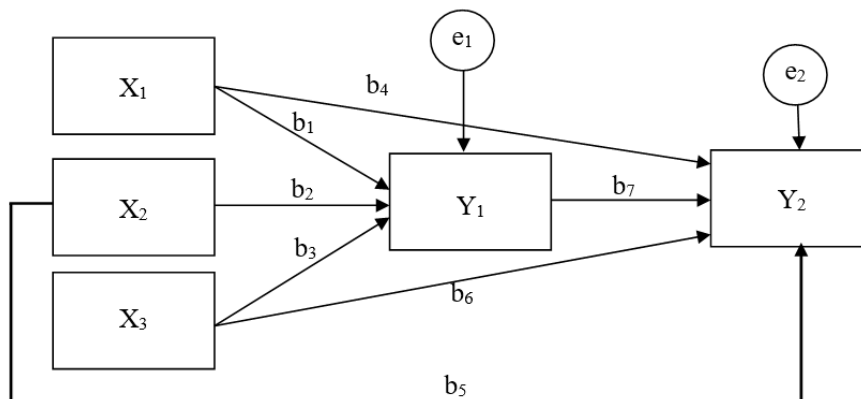


Fig 1: Conceptual Research

Table 1:

No.	Variables	Indicator
1.	Effectiveness of Information (X ₁)	Information Quality
		Ease of Use
		Information Access Speed
2.	Employee Training (X ₂)	Training Material Relevance
		Training Frequency
		Employee Competency Improvement
3.	Management Support (X ₃)	Policy Support
		Facility Support
		Motivation Support
4.	Employee Capability (Y ₁)	Technical Knowledge
		Problem-Solving Skills
		Adaptability
5.	Employee Performance (Y ₂)	Work Quality
		Productivity
		Timeliness
		Commitment to Performance

III. RESEARCH METHODOLOGY

1. Research Design

This study employed a quantitative research design aimed at collecting responses from 60 participants. The research utilized a survey method, with data collection carried out through the distribution of questionnaires. There are five research variables, 16 indicators, and a total of 48 items in the instruments used. The primary objective of this study was to investigate the role of employee competence in mediating the relationship between information system effectiveness, employee training, and managerial support on employee performance at KKPRI RSSA. The analysis techniques included descriptive analysis to create frequency distributions of variables, indicators, and questionnaire items, as well as equation modeling analysis and classical assumption testing by using SPSS Program. The

latter consisted of three types of tests: multicollinearity, heteroscedasticity, and normality. The questionnaire employed a Likert scale with five response options: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

2. Population and Sample

The employee population of KKPRI RSSA consists of 75 individuals, with 50 employees directly interacting with the information system and 25 employees in roles that do not involve direct interaction, such as servers, shop attendants, distribution staff, drivers, photocopy operators, and cleaning service personnel. These employees are distributed across various work units within KKPRI at RSUD Dr. Saiful Anwar. A purposive sampling technique was employed, selecting this population as it is deemed representative

for analyzing the role of employee competence in mediating the relationship between information system effectiveness, employee training, and managerial support on employee performance at KKPRI RSSA.

IV. RESEARCH RESULTS

1. Respondent Profile

This study involved a total of 50 respondents. The characteristics of the respondents, categorized by age and gender, are presented in the following table 2.

Table 2: Respondent Profile

Category	Sub-category	Frequency (n)	Percentage (%)
Gender	Male	18	36
	Female	32	64
Age	18–30 years	18	36
	31–40 years	16	32
	41–50 years	10	20
	51–58 years	6	12
Education Level	High School	31	62
	Bachelor’s Degree	14	28
	Junior High School	5	10

From the table 2 Above The demographic analysis reveals a predominance of female respondents (64%) over males (36%), suggesting a more diverse workforce composition. The largest age group (18–30 years) represents 36% of the respondents, followed by 31–40 years (32%). Educational background shows that 62% of employees hold a high school diploma, while 28% have a bachelor’s degree. The distribution of education levels indicates the potential need for

specialized training to enhance employee competency in using information systems effectively.

2. Results of Descriptive Analysis

Primary data were collected using a questionnaire instrument. A total of 50 respondents completed the questionnaires. The researcher performed data tabulation using the SPSS program and completed the descriptive analysis, validity test, and reliability test. The results of the statistical analysis are presented in Table 3.

Table 3: Descriptive Analysis Results

Variable	Mean	Standard Deviation	Cronbach’s Alpha	Correlation				
				1	2	3	4	5
IS Effectiveness (X1)	4.16	0.15	0.87	1.000	0.572	0.485	0.498	0.622
Employee Training (X2)	4.14	0.18	0.89	0.572	1.000	0.514	0.629	0.602
Management Support (X3)	4.09	0.21	0.85	0.485	0.514	1.000	0.459	0.487
Employee Capability (Y1)	4.15	0.19	0.88	0.498	0.629	0.459	1.000	0.636
Employee Performance (Y2)	4.18	0.16	0.91	0.622	0.602	0.487	0.636	1.000

From the Table 3 above the results indicate strong internal consistency for all variables, as demonstrated by Cronbach’s Alpha values ranging from 0.85 to 0.91, exceeding the 0.7 reliability threshold. The descriptive statistics show that all variables received high mean ratings above 4.00, suggesting employees perceive the IS, training programs, and management support as effective contributors to their capabilities and performance. The correlation analysis reveals significant relationships among the variables, with the highest correlation (0.636) found between Employee Capability (Y1) and Employee Performance (Y2), indicating that employee skills significantly impact performance. IS Effectiveness (X1) also shows a substantial correlation with Employee Performance (0.622), highlighting the importance of system usability in work outcomes.

The data processing and analysis in this study were carried out using SPSS (Statistical Package for the Social Sciences). The research involved four variables, 1 indicators, and a total of 32 instrument items. Each variable was tested for validity and reliability, and all 32 items were found to be valid, as indicated by the significance value of each item in Table 4 ≤ 0.05 . This suggests that the respondents understood the measurements in the questionnaire. The reliability test results demonstrated a high level of reliability, with Cronbach’s Alpha values for all indicators exceeding 0.6, confirming that the variables are statistically reliable. Therefore, this research instrument is deemed highly appropriate for conducting the study. The analysis of respondents was based on the average values generated by the indicators and instrument items. The results of the testing are presented in the figure below.

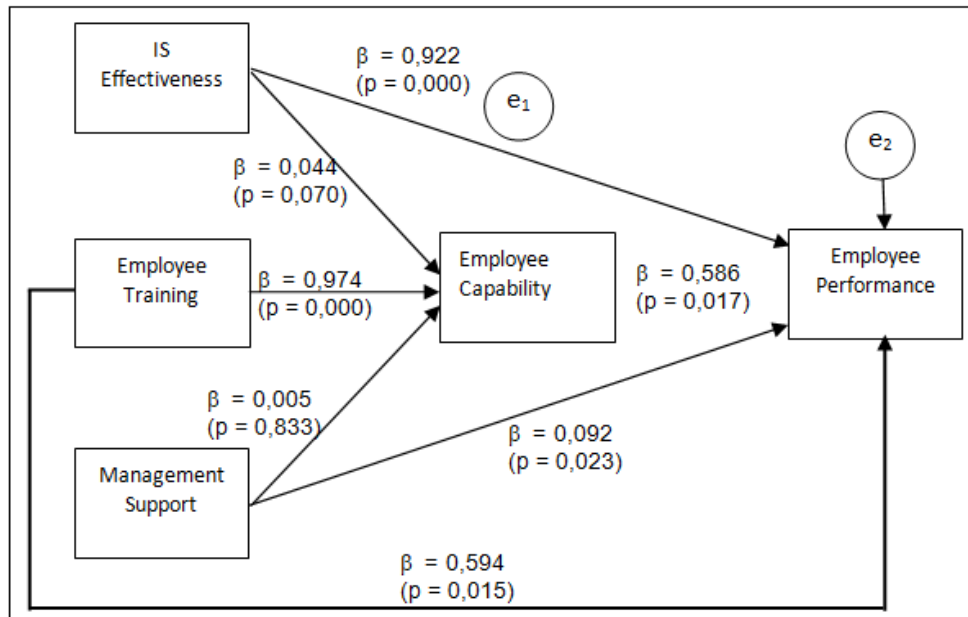


Fig 2: Path Analysis Results

Table 4: Path Analysis Results

Variable	Direct Influence	Sig.	Indirect Influence	Remarks
IS Effectiveness → Employee Capability	0.044	0.070	-	Not Significant
Employee Training → Employee Capability	0.974	0.000	-	Significant
Management Support → Employee Capability	0.005	0.833	-	Not Significant
IS Effectiveness → Employee Performance	0.922	0.000	-	Significant
Employee Training → Employee Performance	0.594	0.015	-	Significant
Management Support → Employee Performance	0.092	0.023	-	Significant
Employee Capability → Employee Performance	0.586	0.017	-	Significant
IS Effectiveness → Employee Capability → Employee Performance	-	-	$0.044 \times 0.586 = 0.026$	No Mediation
Employee Training → Employee Capability → Employee Performance	-	-	$0.974 \times 0.586 = 0.571$	Mediates
Management Support → Employee Capability → Employee Performance	-	-	$0.005 \times 0.586 = 0.003$	No Mediation

From the table 4 the path analysis results reveal a complex interplay between information system effectiveness, employee training, management support, employee capability, and performance. Among these variables, employee training exhibits the highest direct effect on employee capability ($\beta = 0.974, p = 0.000$), underscoring the pivotal role of structured training programs in enhancing employees' competencies. The significant impact suggests that organizations should prioritize well-designed training initiatives to ensure employees are adequately equipped with the necessary skills and knowledge.

Meanwhile, information system effectiveness directly affects employee performance ($\beta = 0.922, p = 0.000$), indicating that a well-structured and functional system is critical in boosting overall job efficiency and productivity. This finding reinforces the notion that technology-driven workplaces benefit significantly from

an optimized IS infrastructure that supports daily operations.

The mediating role of employee capability is confirmed in the relationship between training and performance (indirect effect = 0.571), demonstrating that employees' skill development significantly enhances the effectiveness of training in driving performance. This mediation highlights the necessity of continuous learning and competency-building programs to maximize the benefits of employee training interventions.

However, the mediation effect of employee capability is weak in the relationships between information system effectiveness and performance (0.026) and management support and performance (0.003). These negligible mediation effects suggest that while IS effectiveness and management support contribute to performance, their influence through employee capability is minimal. Therefore, direct

interventions such as improved system usability and proactive managerial engagement may be more effective in optimizing employee outcomes rather than relying solely on capability-building measures.

Overall, these findings emphasize the importance of strategic training initiatives, robust IS infrastructure, and direct management involvement in fostering employee performance. Organizations aiming to enhance workforce productivity should focus on continuous skill development, technology adoption, and leadership-driven support systems to create a well-rounded and high-performing work environment.

V. DISCUSSION

The findings of this study align with the literature on the impact of information system effectiveness, employee training, and management support on employee performance through capability development. These factors have been widely recognized as essential components in organizational success and workforce development.

Information System Effectiveness and Employee Performance

Information systems play a vital role in improving employee efficiency, decision-making, and operational transparency. According to DeLone and McLean (2003), an effective information system enhances organizational productivity by providing reliable and timely information. This study reaffirms that an optimized information system contributes positively to employee performance, as supported by Venkatesh and Davis (2000), who introduced the Technology Acceptance Model (TAM), explaining how perceived usefulness and ease of use influence employee adoption of technology. However, technology itself does not automatically enhance employee skills. This study indicates that IS effectiveness must be integrated with training to maximize its impact. Sudrajat (2020) highlights that information system adoption requires employee competency improvements, which can be achieved through structured learning programs.

Employee Training as a Key Factor for Capability and Performance

Employee training is widely recognized as a core strategy for workforce development (Noe *et al.*, 2010). Training enhances employee capabilities, providing them with the necessary knowledge and skills to adapt to changing work environments. Research by Andika and Sumadi (2021) supports this notion, demonstrating that job-relevant training significantly improves technical competencies and overall performance. However, as Handayani and Winarningsih (2019) found, training alone does not always directly translate into improved performance. The effectiveness of training depends on its relevance to employees' actual job roles and how well the acquired skills are applied in practice. Therefore, organizations should design training

programs that align closely with job demands and provide continuous skill enhancement opportunities.

Management Support and Employee Performance

Management support is another crucial factor in improving employee performance. According to Pratiwi (2019), managerial policies, incentives, and communication strategies significantly affect employee engagement and motivation. The study findings align with this, demonstrating that supportive management fosters a productive work environment, thereby enhancing performance. However, Kurniawati and Chalimah (2024) argue that while management support provides an essential foundation for employee engagement, it does not directly contribute to skill development unless it is tied to specific training initiatives. Therefore, organizations should not only focus on providing a supportive work environment but also actively invest in competency-building programs.

Mediating Role of Employee Capability

Employee capability is a crucial intermediary between organizational interventions (such as training and IS effectiveness) and performance. As highlighted by Argote and Ingram (2000), knowledge transfer and skill development are fundamental to sustaining a competitive workforce. This study confirms that employee capability mediates the relationship between training and performance, indicating that employees who undergo skill-enhancing training programs are more likely to perform better. However, the study also suggests that capability does not significantly mediate the effects of IS effectiveness or management support on performance. This finding is supported by Nonaka and Takeuchi (1995), who emphasize that knowledge-sharing cultures and continuous learning are necessary to convert organizational resources into tangible performance gains.

VI. CONCLUSION AND RECOMENDATION

The study confirms that employee capability plays a crucial mediating role in the relationship between information system effectiveness, training, and management support on employee performance. While IS effectiveness and management support contribute directly to performance, their impact is significantly enhanced when integrated with competency-driven training. Organizations must adopt a holistic approach by combining technological adaptation, continuous learning, and proactive leadership to sustain long-term workforce efficiency. By fostering a culture of innovation and equipping employees with the necessary tools and learning opportunities, businesses can develop a resilient workforce capable of adapting to evolving industry demands. To improve workforce performance and optimize the role of IS effectiveness, training, and management support, organizations and stakeholders should implement strategic actions based on the study findings.

1. For Future Research: Future studies should examine the impact of leadership styles and workplace culture on employee capability development. Additionally, researchers should explore how hybrid training models, combining formal education with experiential learning, impact long-term employee performance. Comparative studies across industries would also provide insights into best practices for IS implementation and employee training.
2. For Merdeka University: The university should develop specialized training modules in digital transformation, leadership, and competency-based learning, tailored for professionals in cooperative management and public sector organizations. Collaborations with KKPRI RSUD Syaiful Anwar can foster research-driven training programs, ensuring that academic knowledge is effectively translated into practical applications.
3. For Top Management of KKPRI at RSUD Syaiful Anwar: The management should implement continuous professional development (CPD) programs that align with career growth pathways for employees. Enhancing system usability training, encouraging mentorship programs, and providing performance-based incentives will foster a culture of learning and innovation. Additionally, leadership should encourage the adoption of feedback-driven policies to ensure employees remain engaged and motivated in adapting to evolving organizational needs.

By implementing these recommendations, stakeholders can ensure that workforce competency, technology adoption, and managerial effectiveness are synergized to create a sustainable and high-performing organizational ecosystem.

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