



# Information System Evaluation Framework to Improve Teacher and Education Personnel Competency (GTK Room): Extended Hot-Fit Framework Approach

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## Abstract.

**Purpose:** This study aims to identify the factors that influence users in the implementation of the GTK (Teachers and Educational Staff) Room System among elementary school teachers in Banyumas Regency, Central Java, Indonesia.

**Methods:** This study employed the HOT-Fit (Human, Organization, and Technology Fit) Framework approach, with the addition of the 'Behavioral Intention to Use' variable on the Human dimension and the 'Organizational Culture' variable on the Organizational dimension. The sample consisted of 147 elementary school teachers from Banyumas Regency, Central Java, Indonesia. Data were analyzed using SmartPLS to identify the variables that influence user behavior.

**Result:** The results of this study indicate that certain relationships between variables do not have a significant influence on others. Specifically, User Satisfaction and Behavioral Intention to Use do not significantly affect Net Benefit. Additionally, Information Quality does not have a significant effect on System Use. Furthermore, System Quality does not significantly influence User Satisfaction or Behavioral Intention to Use. Meanwhile, other variable relationships were found to significantly impact the successful implementation of the GTK (Teachers and Educational Staff) Room system. The model's goodness-of-fit shows an NFI (Normed Fit Index) value of 0.632, indicating that the proposed model explains 63.2% of the variance in the data.

**Novelty:** This research presents several significant novelties that contribute to the evaluation of the implementation of the GTK (Teachers and Education Personnel) Room System in primary education. The traditional HOT-Fit (Human, Organization, Technology-Fit) model was enhanced by adding two new variables, Behavioral Intention to Use and Organizational Culture, resulting in a more comprehensive and contextually relevant evaluation framework. The study was conducted within a specific local context, focusing on primary school teachers in Banyumas Regency, Central Java, Indonesia, thereby providing empirical insights into the implementation dynamics at the local level, which have been rarely explored in previous research. The findings reveal that system success is influenced not only by technical factors but also by behavioral dynamics and social contexts, such as organizational culture.

**Keywords:** Successful implementation system, GTK room system, HOT-FIT framework

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## INTRODUCTION

Technology in education has become a primary driver of the transformation of learning methods, bringing about significant changes [1]. The impact of technological advances can be widely felt across various sectors, including education [2]. The education sector currently faces the challenge of maximizing technology use to enhance educational quality [3][4]. The implementation of effective and efficient information systems can support the performance of teachers and education personnel, thereby improving the quality of education [5].

In 2025, the government, through the Ministry of Primary and Secondary Education (Kemdikdasmen), launched the Teachers and Educational Staff Room (GTK Room) system. GTK (Teachers and Educational Staff) Room is a transformation of the independent teaching platform into an education management-based system. The aim of the GTK (Teachers and Educational Staff) Room system is to improve learning quality, accelerate administrative processes, and facilitate access to information for teachers and education personnel [6][7]. Currently, the implementation of the GTK (Teachers and Educational Staff) Room still faces problems experienced by users, such as difficulties in accessing the system due to an unintuitive interface, slow internet connections, and a lack of training. In addition, the system is often poorly integrated

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with other systems, and data entries are not always accurately recorded. Some expected features are also unavailable or inadequate. Although the use of the GTK (Teachers and Educational Staff) Room system is not mandatory for teachers or educational personnel, many schools and educational institutions have adopted it. Therefore, it is necessary to evaluate the system to ensure it provides actual benefits and supports the intended objectives. One approach that can be used for this evaluation is the HOT-Fit (Human, Organization, and Technology Fit) Framework approach [8].

The HOT-Fit (Human, Organization, and Technology Fit) Framework approach is suitable for assessing the success of information system implementation by examining the Organization, Technology, Humans, and Net Benefits perspectives. This model combines the DeLone & McLean Model with the IT-Organizational Fit Model [9]. From the organizational perspective, the assessment includes structure and environment, while the technological perspective includes three qualities: system quality, information quality, and service quality. The human perspective encompasses system use and user satisfaction [10] [11]. A positive organizational culture also contributes to the success of e-learning implementation; established organizational habits can increase the frequency of e-learning use, ultimately leading to more effective performance and higher quality, accountable information [12] [13]. The success of information systems depends not only on the technology itself but also on users' intentions and behaviors to use the system effectively [14] [15].

Research by [16] shows that applying the HOT-Fit (Human, Organization, and Technology Fit) Framework approach provides a comprehensive and valuable evaluation of the e-learning system at MAN 20 East Jakarta. From the perspectives of technology, organization, and people, the model significantly and positively influences the success of the MAN 20 e-learning system. Further, research by [17][18][19] states that behavioral intention affects usage behavior, demonstrating that MSME players in Malang Raya intend to continue using the Cash Book application consistently, thereby encouraging its ongoing use. Another study by [20][21] indicates that organizational culture positively affects accounting information systems in BUMN companies in Bandung City, contributing 28.1%. The more supportive the organizational culture, the higher the quality of the accounting information system.

This study aims to identify the factors influencing the implementation of the Teacher and Education Personnel Room System by adopting the HOT-Fit (Human, Organization, and Technology Fit) Framework approach, with the addition of organizational culture and user intention factors.

## **METHODS**

This study adopts a quantitative research approach utilizing the survey method to examine the factors that influence the implementation of the Teacher and Education Personnel Room System (GTK) at the primary school level. The research aims to explore how technological, human, and organizational factors contribute to the system's effectiveness, acceptance, and overall impact on educational administration.

### **Data Collection Techniques**

To ensure comprehensive data triangulation, the study employed three complementary methods of data collection:

#### **a) Literature Review**

An extensive review of previous studies and theoretical frameworks relevant to technology adoption, information systems success, and the HOT-Fit (Human, Organization, and Technology Fit) Framework approach was conducted. This provided a strong conceptual basis for model development and variable selection.

#### **b) In-depth Interviews**

Semi-structured interviews were carried out with key informants, including school principals, education office representatives, and experienced teachers who are active users of the GTK (Teachers and Educational Staff) Room system. The qualitative insights obtained helped contextualize the variables and informed the refinement of the questionnaire design.

#### **c) Questionnaire Distribution**

The primary data collection method involved a structured questionnaire administered to participants. The questionnaire was developed based on the extended HOT-Fit (Human, Organization, and Technology Fit) Framework approach, which incorporates dimensions from the Human, Organization, and Technology perspectives, along with added constructs such as Behavioral Intention to Use and Organizational Culture for a more holistic assessment. Before distribution, the questionnaire underwent

validity and reliability testing, ensuring that all items accurately represented the latent constructs and demonstrated internal consistency.

### **Population and Sampling**

The population of this research comprises 332 primary school teachers with civil servant (PNS) status in Banyumas Regency, Central Java, Indonesia, who are actively utilizing the GTK (Teachers and Educational Staff) Room system. To determine the sample size, the Slovin formula was applied with a margin of error of 5%, resulting in a final sample of 147 respondents. The sampling technique employed was simple random sampling, ensuring each individual in the population had an equal chance of selection, thereby minimizing sampling bias.

### **Conceptual Framework**

The study's conceptual framework is grounded in the extended Human-Organization-Technology Fit (HOT-Fit) Framework, adapted to incorporate two additional constructs: Behavioral Intention to Use and Organizational Culture. The framework is categorized into three perspectives, each with specific measurable variables:

#### **a) Human Perspective**

The Human Perspective in the extended Human-Organization-Technology Fit (HOT-Fit) Framework focuses on the interaction between individual users and the information system, in this case, the GTK (Teachers and Educational Staff) Room System. This perspective is assessed through three key variables: System Use (SU), User Satisfaction (US), and Behavioral Intention to Use (BI). System Use (SU) refers to the actual utilization of the GTK (Teachers and Educational Staff) Room System by primary school teachers in performing administrative or professional tasks. It captures the frequency, intensity, and diversity of system functions employed. User Satisfaction (US) represents the users' overall contentment with the system, reflecting their perceptions of its usefulness, ease of use, and relevance to their needs. Lastly, Behavioral Intention to Use (BI) measures the willingness and likelihood of users to continue using the system in the future. This construct is crucial as it reflects the sustainability of system adoption. Together, these variables provide a comprehensive understanding of how human factors influence the successful implementation and continued use of the GTK (Teachers and Educational Staff) Room System.

#### **b) Organizational Perspective**

The Organizational Perspective in the extended Human-Organization-Technology Fit (HOT-Fit) Framework examines the organizational context in which the GTK (Teachers and Educational Staff) Room System is implemented and used. This perspective includes three critical variables: Structure (ST), Environment (EV), and Organizational Culture (OC). Structure (ST) refers to the formal arrangements within educational institutions, such as roles, responsibilities, decision-making hierarchies, and communication flows that support or hinder system adoption. Environment (EV) captures external influences on the organization, including policies from the education authority, availability of technical support, and pressure to conform to digital transformation initiatives. Meanwhile, Organizational Culture (OC) encompasses the shared values, beliefs, and norms within the school environment that shape attitudes toward change and technology use. These three variables collectively assess how conducive the organizational setting is to the effective use of the GTK (Teachers and Educational Staff) Room System. A supportive structure, responsive environment, and adaptive culture are key enablers of successful system implementation and long-term integration into daily school operations.

#### **c) Technological Perspective**

The Technological Perspective in the extended Human-Organization-Technology Fit (HOT-Fit) Framework emphasizes the technical aspects of the GTK (Teachers and Educational Staff) Room System that influence its effectiveness, efficiency, and user satisfaction. This perspective consists of four main variables: Information Quality (IQ), System Quality (SQ), Service Quality (SVQ), and Net Benefit (NB) as the outcome variable. Information Quality (IQ) measures the extent to which the information provided by the system is accurate, relevant, complete, and timely. High-quality information enables users to make appropriate decisions and complete tasks effectively [22]. System Quality (SQ) reflects the technical performance of the system, including ease of use, access speed, reliability, and overall system functionality. Meanwhile, Service Quality (SVQ) refers to the quality of support services, such as the availability of technical assistance, training, and system maintenance provided to users. Good service support enhances users' trust and satisfaction. Finally, Net Benefit (NB) is the outcome variable that describes the overall benefits of using the system, both at the individual

level (teachers) and organizational level (schools), such as improved work efficiency, time savings, and better management of educational data.

### Data Analysis

To analyze the relationships among the variables and validate the proposed hypotheses, the study employed Structural Equation Modeling using the Partial Least Squares (SEM-PLS) technique. SEM-PLS is particularly well-suited for:

1. Handling complex models with multiple latent constructs [23].
2. Managing data with a relatively small sample size.
3. Assessing both the measurement model (validity and reliability) and the structural model (hypothesis testing).

The analysis was performed using appropriate SEM-PLS software tools, and results were interpreted with reference to standardized criteria such as path coefficients, t-statistics, and R-squared values to determine the strength and significance of relationships between constructs.

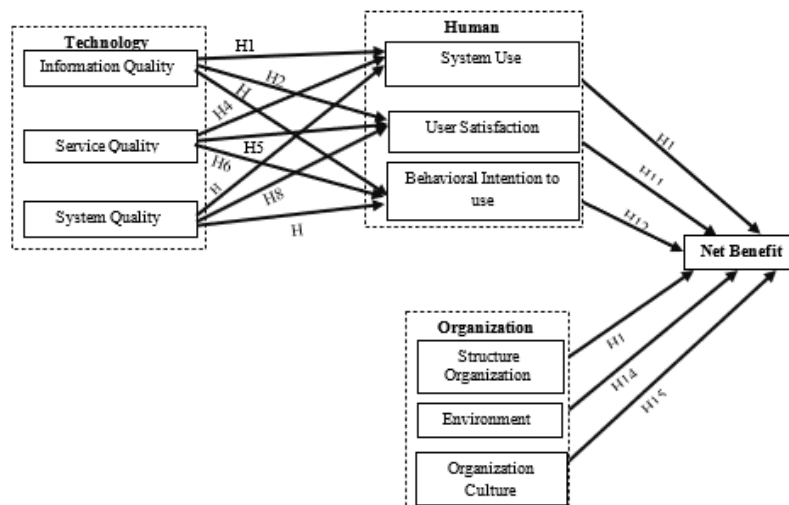


Figure 1. Research model concept

Based on Figure 1, the Research Conceptual Model can be described as follows:

- 1) The Technology category consists of three main variables: Information Quality (IQ), Service Quality (SQ), and System Quality (SQ). IQ measures the accuracy and relevance of the information provided by the system, SQ assesses the reliability and responsiveness of the service, while SQ refers to the system's technical performance, such as usability and speed. These three variables directly affect the variables in the Human category, namely System Use (SU), User Satisfaction (US), and Behavioral Intention to Use (BI).
- 2) The Human category includes SU, US, and BI, which represent the frequency and effectiveness of system usage, the level of user satisfaction, and the user's intention to continue using the system. These variables have reciprocal relationships and collectively influence Net Benefit (NB).

The Organization category encompasses Structure (ST), Environment (EV), and Organizational Culture (OC). ST refers to the governance and organizational structure, EV to external factors influencing the organization, and OC to the prevailing values and norms. These three variables directly contribute to NB, supporting the successful implementation of the system.

### RESULTS AND DISCUSSIONS

The characteristics of respondents obtained based on gender obtained data as many as 93 (63%) female respondents and 54 (37%) male respondents, based on age characteristics the majority are in the age range 41-45 years of 40 people (27%), age 31-35 years of 27 (19%) respondents, age 36-40 years of 24 people (16%), age 26-30 of 17 (11%) respondents, age 46-50 of 18 (12%) respondents, age 51-55 of 12 (8%) respondents, age 56-60 years of 7 (5%) respondents, and age 20-25 of 2 (1%) respondents. Based on the characteristics of the latest education, the majority of bachelor's 146 (98%) respondents and master's 1 (2%) respondent.

### Discriminant Validity Test

Discriminant validity testing is carried out by analyzing the Fornell-Larcker criteria; a construct is declared valid if the AVE value in its construct has a value greater than the AVE value of the construct with other constructs [24][25][26]. The results of the discriminant validity test in Table 1 show that the AVE value of each construct itself is greater than the AVE value of the construct with other constructs, so the discriminant validity is declared good.

Table 1. The results discriminant validity test

	OC	US	EV	IQ	SQ	SyQ	NB	SU	BI	ST
OC	0,877									
US	0,255	0,918								
EV	0,562	0,262	0,819							
IQ	0,542	0,404	0,370	0,746						
SQ	0,637	0,361	0,584	0,401	0,926					
SyQ	0,595	0,341	0,525	0,558	0,771	0,913				
NB	0,541	0,345	0,552	0,368	0,727	0,646	0,859			
SU	0,257	0,563	0,319	0,229	0,570	0,584	0,582	0,829		
BI	0,008	0,030	-0,168	0,153	-0,130	0,010	-0,045	-0,015	1,000	
ST	0,418	0,266	0,540	0,302	0,454	0,490	0,327	0,427	-0,047	0,849

### Convergent Validity Test

Convergent validity test is measured by Average Variance Extracted (AVE), a good AVE value must be above 0.50, which indicates that more than half of the indicator variance is influenced by the construct or declared valid [27][28]. Table 2 is the result of the AVE calculation, which shows the AVE value of each variable above 0.5, so it is said to be good and qualified or declared valid.

Table 2. The result Convergent validity test

Variables	Average Variance Extracted (AVE)
Organization Culture (OC)	0,769
User Satisfaction (US)	0,842
Environment (EV),	0,671
Information Quality (IQ)	0,556
Service Quality (SQ),	0,858
System Quality (SyQ)	0,834
Net Benefit (NB)	0,738
System Use (SU)	0,687
Behavioral Intention to Use (BI)	1,000
Structure (ST),	0,721

### Reliability Test

This test is carried out by measuring the reliability value of a variable in the study and comparing it to know the respondent scale by observing the Composite Reliability value greater than 0.7 and Cronbach's Alpha with the provisions of Cronbach's Alpha value <0.5 declared low reliability, > 0.5 - 0.8 declared moderate reliability (still acceptable) and > 0.8 high reliability [29][30]. The result of the reliability test can be shown in Table 3.

Table 3. The reliability test result

Variables	Cronbach's Alpha	Composite Reliability	Description
Organization Culture (OC)	0,700	0,870	Medium reliability
User Satisfaction (US)	0,813	0,914	High reliability
Environment (EV),	0,535	0,801	Medium reliability
Information Quality (IQ)	0,607	0,788	Medium reliability
Service Quality (SQ),	0,834	0,923	High reliability
System Quality (SyQ)	0,900	0,938	High reliability
Net Benefit (NB)	0,822	0,894	High reliability
System Use (SU)	0,773	0,867	High reliability
Behavioral Intention to Use (BI)	1,000	1,000	High reliability
Structure (ST)	0,805	0,885	High reliability

### R-Square Test

This test aims to determine the aim of knowing how much influence exogenous variables have on endogenous variables. The provisions of the strong category value if 0.75, moderate 0.50, and weak 0.25 [12][31]. Table 4 shows that the R-Square value of User Satisfaction (US) is 0.211, meaning that the effect of User Satisfaction (US) is 21.1%, including having a weak category influence, while the remaining influence is influenced by other variables. The R-Square Net Benefit (NB) value of 0.567 means that the Net Benefit (NB) influence of 56.7% is included in having a moderate category influence, while the remaining influence is influenced by other variables. The R-Square System Use (SU) value of 0.388 means that the System Use (SU) influence of 38.8% is included in having a weak category influence, while the remaining influence is influenced by other variables [32]. The R-Square Behavioral Intention to Use (BI) value of 0.074 means that the effect of Behavioral Intention to Use (BI) of 7.4% includes having a weak category influence, while the remaining influence is influenced by other variables.

Table 4. The result R-Square test

Variables	R Square	Criteria
User Satisfaction (US)	0,211	Weak
Net Benefit (NB)	0,567	Moderate
System Use (SU)	0,388	Weak
Behavioral Intention to Use (BI)	0,074	Weak

### Goodness of Fit (GoF) Test

The accuracy of a model is evaluated using the Goodness of Fit test by observing the Normed Fit Index (NFI), which has a range of values between 0 and 1. Table 5 shows that the proposed research model has good accuracy if the NFI (Normed Fit Index) value is close to 1. The NFI (Normed Fit Index) score is 0.632. which means the proposed model has 63.2% accuracy.

Table 5. GoF test results

	Saturated Model
SRMR	0,079
d_ULS	1,891
d_G	0,981
Chi-Square	845,294
NFI (Normed Fit Index)	0,632

### Hypothesis Test

Hypothesis testing is carried out to determine the acceptance or rejection of the hypothesis that has been prepared and testing using the bootstrapping method. Furthermore, to determine the significance of correlations in the model used, namely the T-statistic and P-value. If the T-statistic value is greater than 1.96 and the P-value is below 0.05, there is a relationship between the variables. Table 6 is the result of data processing using the bootstrapping method.

Table 6. The result of hypothesis testing

Path Coefficient	T statistics (O/STDEV)	P Values	Result
Organization Culture (OC) → Net Benefit (NB)	4,076	0,000	Accepted
User Satisfaction (US) → Net Benefit (NB)	0,772	0,441	Rejected
Environment (EV) → Net Benefit (NB)	4,532	0,000	Accepted
Information Quality (IQ) → User Satisfaction (US)	3,334	0,001	Accepted
Information Quality (IQ) → System Use (SU)	1,625	0,105	Rejected
Information Quality (IQ) → Behavioral Intention to Use (BI)	2,085	0,038	Accepted
Service Quality (SQ) → User Satisfaction (US)	2,034	0,042	Accepted
Service Quality (SQ) → System Use (SU)	2,486	0,013	Accepted
Service Quality (SQ) → Behavioral Intention to Use (BI)	2,567	0,011	Accepted
System Quality (SyQ) → User Satisfaction (US)	0,300	0,765	Rejected
System Quality (SyQ) → System Use (SU)	3,583	0,000	Accepted
System Quality (SyQ) → Behavioral Intention to Use (BI)	1,018	0,309	Rejected
System Use (SU) → Net Benefit (NB)	6,932	0,000	Accepted
Behavioral Intention to Use (BI) → Net Benefit (NB)	0,148	0,882	Rejected
Structure (ST) → Net Benefit (NB)	2,249	0,025	Accepted

**H1: Information Quality variable has a positive influence on System Use**

In Table 6, the test results obtained a T Statistics value of  $1.625 < 1.96$ , and a P Value of  $0.105 > 0.05$ . This value indicates that Information Quality does not have a positive influence on System Use. This result is in line with research [33]. In this study, teachers in elementary schools in Banyumas Regency, Central Java, Indonesia tend to use the GTK (Teachers and Educational Staff) Room System not because of the quality of information, but because the government gives an appeal to use the GTK (Teachers and Educational Staff) Room system. Therefore, information quality does not have a significant effect on system use.

**H2: Information Quality variable has a positive influence on User Satisfaction**

In Table 6, the test results obtained a T Statistics value of  $2.034 > 1.96$ , and a P Value of  $0.042 < 0.05$ . This value indicates that Information Quality has a positive influence on User Satisfaction. This is in line with research [34], in this study the GTK (Teachers and Educational Staff) Teacher Room System is felt by elementary school teachers in Banyumas Regency, Central Java, Indonesia to have features and information that are accurate, relevant and easy for teachers to understand, thereby increasing user satisfaction. Teachers feel more comfortable and are helped by the GTK (Teachers and Educational Staff) Room system because it can support the learning process and improve teacher competence.

**H3: Information Quality variable has a positive influence on Behavioral Intention to Use**

In Table 6, the test results obtained a T Statistics value of  $2.085 > 1.96$ , and a P Value of  $0.038 < 0.05$ . This value indicates that Information Quality has a positive influence on Behavioral Intention to Use. These results are in line with research [35], During the implementation of the GTK (Teachers and Educational Staff) Room system, teachers feel that the information in the system is accurate, relevant and easy to understand so that teachers feel motivated and believe in the services or features of the system used because the information provided can be used to support teachers in the learning process and improve teacher competence, thus teachers have the intention to use the GTK (Teachers and Educational Staff) Room system.

**H4: The Service Quality variable has a positive influence on System Use**

In Table 6, the test results obtained a T Statistics value of  $2.486 > 1.96$ , and a P Value of  $0.013 < 0.05$ . This value indicates that Service Quality has a positive influence on System Use. The results of this study are in line with research [36]. Teachers are greatly helped by the help features contained in the GTK (Teachers and Educational Staff) Room system, as they do not feel confused when they encounter problems when using the system. In addition, elementary school teachers in Banyumas are also helped by the presence of school technicians who can explain and direct how to operate the system so that teachers feel satisfied and comfortable in implementing the GTK (Teachers and Educational Staff) Room system, with the services provided can influence teachers to use the GTK (Teachers and Educational Staff) Room system.

**H5: The Service Quality variable has a positive influence on User Satisfaction**

In Table 6, the test results obtained a T Statistics value of  $2.034 > 1.96$ , and a P Value of  $0.042 < 0.05$ . This value indicates that Service Quality has a positive influence on User Satisfaction. The results of this study are in line with research [37], which indicates that services that meet user expectations can increase the level of satisfaction of system users. In this study, elementary school teachers in Banyumas Regency, Central Java, Indonesia, felt satisfied with the services provided because they were in accordance with the expectations of the teachers, so that when using the GTK Room system, they also felt satisfaction.

**H6: The Service Quality variable has a positive influence on Behavioral Intention to Use**

In Table 6, the test results obtained a T Statistics value of  $2.567 > 1.96$ , and a P Value of  $0.011 < 0.05$ . This value indicates that Service Quality has a positive influence on Behavioral Intention to use. This research is following the results of research [38], in this study elementary school teachers in Banyumas Regency, Central Java, Indonesia felt that the GTK (Teachers and Educational Staff) Room system provided services according to user needs, the system could respond quickly according to user requests so that users felt comfortable using the system. This makes the teacher consideration to tend to use the GTK (Teachers and Educational Staff) Room system.

**H7: The System Quality variable has a positive influence on System Use**

In Table 6, the test results obtained a T Statistics value of  $3.583 > 1.96$ , and a P Value of  $0.000 < 0.05$ . This value indicates that System Quality has a positive influence on System Use. The results of this study support research [39], in this study it was found that teachers tend to use the GTK (Teachers and Educational Staff) Room system more often and longer because the GTK (Teachers and Educational Staff) Room system can meet the needs of teachers effectively and efficiently, and provide a pleasant experience without interference so that teachers can use it optimally in learning and administrative activities.

**H8: The System Quality variable has a positive influence on User Satisfaction**

In Table 6, the test results obtained a T Statistics value of  $0.300 < 1.96$ , and a P Value of  $0.765 > 0.05$ . This value indicates that System Quality does not have a positive influence on User Satisfaction. The results of this study are in line with the research [40], while in this study the teachers felt that the quality of the system such as speed, stability, and functionality was good, but there were other factors such as infrastructure, suitability of features to the needs of teachers, accessibility which also played a big role in influencing user satisfaction, in fact it was felt that still did not meet the expectations of primary school teachers in Banyumas Regency, Central Java, Indonesia, so high system quality would not always have a positive effect on user satisfaction.

**H9: The System Quality variable has a positive influence on Behavioral Intention to Use**

In Table 6, the test results obtained a T Statistics value of  $1.018 < 1.96$ , and a P Value of  $0.309 > 0.05$ . This value indicates that System Quality does not have a positive influence on Behavioral Intention to Use. This research is in line with [41], in this study the quality of the GTK (Teachers and Educational Staff) Room system is good, but it does not affect the intention of SDN teachers in Banyumas Regency, Central Java, Indonesia to use it because teachers need more features that focus on managing learning or communication with students, on the other hand for teachers who have limited technology skills and are accustomed to using traditional methods in learning hesitant to switch to a digital system makes them feel insecure in utilizing it, besides that Teachers also do not get adequate training and different teaching styles of teachers make teachers feel less interested in continuing to use it.

**H10: The System Use variable has a positive influence on Net Benefit**

In Table 6, the test results obtained a T Statistics value of  $6.932 > 1.96$ , and a P Value of  $0.000 < 0.05$ . This value indicates that System Use has a positive influence on Net Benefit. The results of this study are in line with [42] [43]. In this study, system use influences net benefits because for teachers in the SDN environment in Banyumas Regency, Central Java, Indonesia area who use the GTK (Teachers and Educational Staff) room system consistently, it will support teachers in learning so that it allows teachers to focus more on improving the quality of teaching so that they feel the benefits of the Rang GTK (Teachers and Educational Staff) system. In addition, the GTK (Teachers and Educational Staff) room supports continuous learning, allowing teachers to adapt to new technologies and improve their professional competencies. The use of this system also encourages collaboration between teachers, which ultimately improves the quality of learning in schools.

**H11: User Satisfaction variable has a positive influence on Net Benefit**

In Table 6, the test results obtained a T Statistics value of  $0.772 < 1.96$ , and a P Value of  $0.441 > 0.05$ . This value indicates that User Satisfaction does not have a positive influence on Net Benefit. The results of this study are following research [44][45], in this study, actually SDN teachers in Banyumas Regency, Central Java, Indonesia have felt satisfaction when using the GTK (Teachers and Educational Staff) Room system, but not all teachers make maximum use of the system, only utilizing basic features, thus reducing the positive impact on net benefits. Other factors, such as internet connection, lack of training, and lack of school policy support, can hinder the benefits of the system felt by users.

**H12: Behavioral Intention to Use variable has a positive influence on Net Benefit**

In Table 6, the test results obtained a T Statistics value of  $0.148 < 1.96$ , and a P Value of  $0.882 > 0.05$ . This value indicates that Behavioral Intention to Use does not have a positive influence on Net Benefit. The results of this study support research [46][47], In this study, although elementary teachers in Banyumas Regency, Central Java, Indonesia intend to use the GTK (Teachers and Educational Staff) room system, these intentions often do not lead to consistent and effective use due to factors such as busyness, not maximizing the use of features and lack of training. Besides, without adequate support from schools or colleagues,



curriculum changes can also hinder the implementation of these intentions, so that intentions do not have a positive effect on net benefits.

**H13: The Organization Structure variable has a positive influence on Net Benefit**

In Table 6, the test results obtained a T Statistics value of  $2.249 > 1.96$ , and a P Value of  $0.025 < 0.05$ . This value indicates that Structure Organization has a positive influence on Net Benefit. The results of this study are in line with research [48][49], in this study the organizational structure at elementary in Banyumas Regency, Central Java, Indonesia is clear and well organized to be an important factor in the implementation of the GTK (Teachers and Educational Staff) Room, this facilitates coordination between school principals, teachers and staff so that obstacles in implementation can be reduced and the use of the GTK (Teachers and Educational Staff) Room system becomes more optimal so that it has a beneficial impact individually and organizationally.

**H14: Environment variable has a positive influence on Net Benefit**

In Table 6, the test results obtained a T Statistics value of  $4.532 > 1.96$ , and a P Value of  $0.000 < 0.05$ . This value indicates that the Environment has a positive influence on Net Benefit. The results of this study are in line with research [16], in this study the elementary school environment in Banyumas Regency, Central Java, Indonesia area both physically and socially greatly influences the comfort and enthusiasm of teachers in using the GTK (Teachers and Educational Staff) Room system so that it is maximized in using the system. A supportive environment will facilitate the implementation of the GTK (Teachers and Educational Staff) Room system and increase its efficiency and positive impact.

**H15: Organization Culture variable has a positive influence on Net Benefit**

In Table 6, the test results obtained a T Statistics value of  $4.076 > 1.96$ , and a P Value of  $0.000 < 0.05$ . This value indicates that Organization Culture has a positive influence on Net Benefit. The results of this study are in line with research [20][50], in this study, the organizational culture of elementary school in the Banyumas Regency, Central Java, Indonesia which helps each other and shares knowledge makes it faster to adapt to the GTK (Teachers and Educational Staff) Room system, thereby increasing the effectiveness of use and the benefits obtained. In addition, an organizational culture that encourages continuous learning makes it easier for teachers to adjust to changes, accelerating the achievement of better results in the implementation of the GTK (Teachers and Educational Staff) Room System.

Based on the research findings, several key insights were identified regarding the implementation of the Ruang GTK system. The respondents were predominantly female (63%), aged 41–45 years (27%), and the majority held a bachelor's degree (98%). The research instruments were proven to be valid and reliable, with AVE values exceeding 0.50, Composite Reliability (CR) above 0.7, and Cronbach's Alpha (CA) above 0.5. The R-Square values indicated weak to moderate influence on User Satisfaction (0.211), System Use (0.388), and Behavioral Intention to Use (0.074), while showing a relatively strong influence on Net Benefit (0.567). The model's Goodness of Fit was categorized as moderate to good with an NFI (Normed Fit Index) of 0.632.

This study applied the HOT-Fit framework, which evaluates system success from three interrelated dimensions:

1. **Human Dimension** assesses the interaction between users and the system. It includes:
  - a) System Use (SU) comprises the Frequency and effectiveness of system utilization.
  - b) User Satisfaction (US) comprises User perceptions of the system's usefulness and ease of use.
  - c) Behavioral Intention to Use (BI) comprises User motivation and intention to continue system use.
2. **Organization Dimension** evaluates the context within which the system is implemented, covering:
  - a) Structure (ST) comprising Clarity of roles, workflows, and decision-making hierarchies.
  - b) Environment (EV) comprising External support, such as infrastructure and policy enforcement.
  - c) Organizational Culture (OC) comprises Shared values and norms influencing technology adoption and collaboration.
3. **Technology Dimension** focuses on system-related quality factors:
  - a) Information Quality (IQ) comprises Accuracy, relevance, and completeness of information produced.
  - b) System Quality (SQ) comprises Technical functionality, usability, and system performance.
  - c) Service Quality (SQ) comprises Support services, including responsiveness and user assistance.

Specifically, Information Quality significantly affected User Satisfaction and Behavioral Intention to Use, but not System Use. Service Quality significantly influenced all three human variables. System Quality only had a significant effect on System Use. Meanwhile, System Use had a significant positive effect on Net Benefit, whereas User Satisfaction and Behavioral Intention to Use did not. In the organizational context, Structure, Environment, and Culture all had significant effects on Net Benefit, underlining the critical role of organizational support in the success of system implementation.

## CONCLUSION

This study focuses on analyzing the acceptance and successful implementation of the GTK Room System, which is used by teachers and education personnel in primary schools. The acceptance of the system is examined through three main dimensions: Human factors (including System Use, User Satisfaction, and Behavioral Intention to Use), Organizational factors (including Structure, Environment, and Organizational Culture), and Technological factors (including Information Quality, Service Quality, and System Quality). By investigating these variables, this study aims to provide a comprehensive understanding of how these factors influence the effectiveness and user acceptance of the GTK Room System. A total of 15 hypotheses were formulated to test the relationships among these variables. Data were collected from elementary school teachers in the sub-district area and analyzed to verify these hypotheses. The findings reveal that five of the hypothesized relationships do not show significant influence. Specifically, User Satisfaction and Behavioral Intention to Use do not significantly affect Net Benefit; Information Quality does not significantly influence System Use; and System Quality does not have a significant impact on User Satisfaction or Behavioral Intention to Use. Conversely, the remaining ten hypotheses demonstrate significant effects, highlighting important factors that contribute to the successful implementation of the GTK Room System. The model's overall fit is supported by an NFI (Normed Fit Index) value of 0.632, which indicates that the model explains 63.2% of the variance in the data. Despite these findings, this study has a limited scope as it focuses only on elementary school teachers within a specific sub-district area. Therefore, the generalizability of the results may be limited, and future research should consider expanding the sample size to include teachers from a wider geographical area and different educational levels, such as junior high schools and vocational schools.

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