

The Influence of Employee Competence and Work Culture on Service Quality: The Moderating Role of Information Technology in the One-Stop Integrated Service at the East Jakarta BPN Office

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Abstract

This study investigates the influence of employee competence and work culture on service quality, with information technology examined as a moderating variable in this relationship. In the context of the One-Stop Integrated Service (PTSP) at the East Jakarta BPN Office, the research highlights how internal organizational factors and technological support contribute to improving public service outcomes. A quantitative research design was employed, utilizing a moderated regression analysis approach. Data were gathered through structured questionnaires distributed to employees and were analyzed using SPSS software. The findings reveal that employee competence and work culture have a positive and significant impact on service quality. Additionally, information technology also shows a direct positive influence on service quality. The interaction effects between employee competence and information technology, as well as between work culture and information technology, are both statistically significant. These results confirm that information technology acts as a strengthening factor in the relationship between the independent variables and service quality. The study underscores the strategic role of human capital development and cultural reinforcement, along with digital transformation, in enhancing the performance of public service institutions. The implications suggest that policymakers and organizational leaders should invest in continuous employee training, cultivate a constructive work environment, and adopt integrated information systems to meet increasing public expectations and deliver high-quality services.

1. Introduction

The role of the state in the public service sector is clearly articulated in Chapter 1, Article 1 of Law No. 25 of 2009 concerning Public Services, which emphasizes that public service is an activity or series of activities carried out to fulfill service needs in accordance with prevailing regulations. These services encompass the delivery of goods, services, and/or administrative processes by public service providers to all citizens and residents. This legal foundation establishes that public service providers must act responsibly, transparently, and accountably, as their actions are subject to public scrutiny and evaluation,

both internally and externally (Hutagalung, 2021).

In recent years, there has been an increasing demand from the public for faster, more transparent, and accountable services. One of the institutions responsible for delivering such services is the One-Stop Integrated Service (Pelayanan Terpadu Satu Pintu, PTSP) under the National Land Agency (Badan Pertanahan Nasional, BPN). As a key institution in land affairs, BPN is mandated to provide services that are efficient, effective, and oriented towards public satisfaction. PTSP was designed to simplify bureaucratic procedures, reduce service time, and improve overall service quality. However, its implementation

often faces challenges such as processing delays, lack of transparency, and limited responsiveness.

Picture 1. 1

Chart Quality Service Integrated One Door (PTSP) Office National Land Agency



Source: PTSP Office, National Land Agency*

One contributing factor to suboptimal service quality is the weak work culture among employees, which is closely tied to the institutional development process. Work culture reflects human attitudes and behaviors rooted in shared values, influencing motivation and success in the workplace (Herdina, 2024). In government organizations that serve the public, work culture and employee competence are critical. Competence refers to the combination of knowledge, skills, creativity, and attitudes that enable individuals to perform tasks in accordance with established standards and procedures (Dahlan, 2023; Suriati, 2018).

In today's competitive and globalized environment, organizations must develop

human resources that are not only technically competent but also capable of responding to the evolving needs of service users. Competence plays a central role in determining the effectiveness and efficiency of organizational performance. Within the PTSP system, employee competence significantly impacts public trust and the institutional image. Incompetent personnel may result in slow, inefficient, and unsatisfactory services. Conversely, investments in training, coaching, and education can enhance individual and organizational performance (Sedarmayanti, 2018).

Picture 1. 2 Behavior Deviation Service Integrated One Door (PTSP) BPN Office



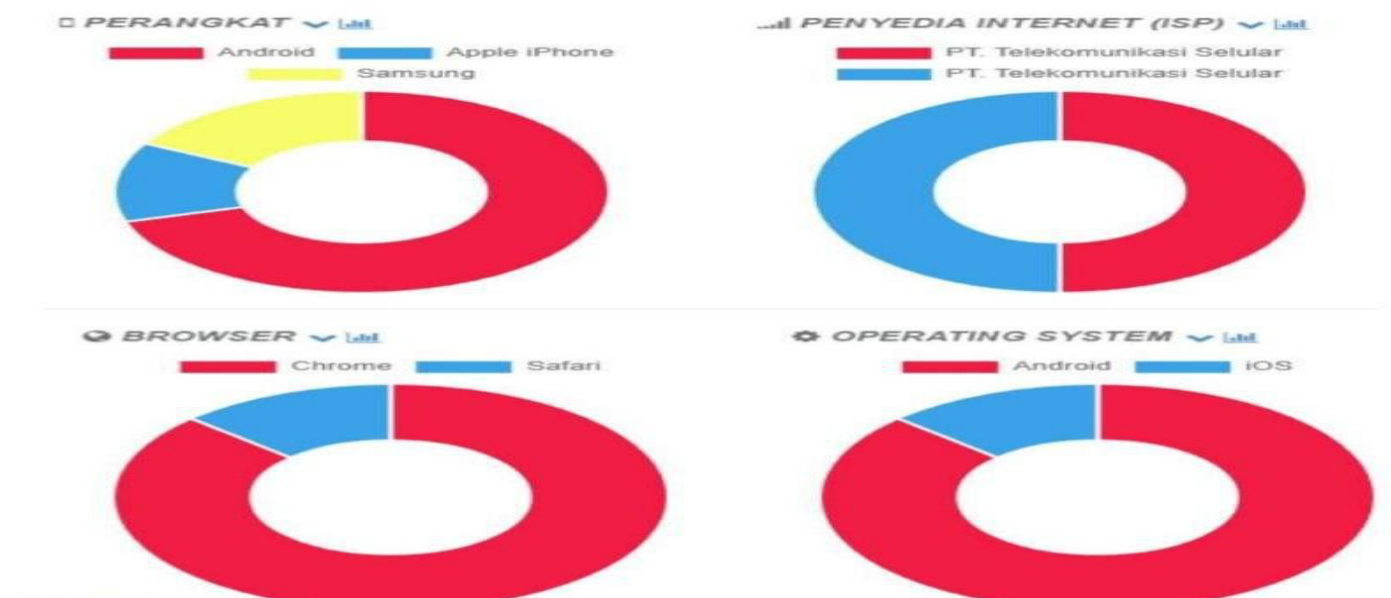
Source: PTSP Office, National Land Agency*

Work culture also influences the extent to which organizational missions are achieved. A strong and positive culture promotes efficiency, motivation, and task effectiveness (Saputra, 2020; Syafitri, 2020). It shapes how employees perform their roles in pursuit of institutional objectives (Fareira, 2024). Thus, improving employee performance remains one of the most challenging tasks for public service managers, as organizational success hinges on the quality of human resources.

Moreover, information technology (IT) has become a strategic enabler in enhancing

service delivery, particularly in the digital era. IT is defined as the integration of computing systems and high-speed communication tools that process, transmit, and store data, enabling real-time access to accurate and relevant information (Rahman, 2024). In public service contexts, IT improves service accessibility, reduces bureaucracy, enhances transparency, and fosters public participation. The adoption of e-government platforms, digital budgeting, and web-based service systems exemplifies the transformative role of IT in public administration.

Figure 1.3 Technology Which Used



Source: PTSP Office, National Land Agency*

As organizations are increasingly required to meet dynamic public expectations, optimize technological advancements, and maintain competent personnel, there is a pressing need to develop service delivery models that are responsive, accountable, and satisfactory to all stakeholders.

Based on these considerations, this study aims to analyze the influence of employee competence and work culture on service quality, with information technology as a moderating variable in the context of the One-Stop Integrated Service (PTSP) at the East Jakarta National Land Agency Office.

2. Literature Review

2.1.1. Understanding Human Resource Management (HRM)

High-quality human resources are crucial for organizations to achieve their vision and goals (Tambunan, 2024). Human resources (HR) are the most valuable asset of an organization as they function as operators, managers, producers, and designers of all organizational systems (Hall, 2022). Business entities must improve the quality of human resources to remain competitive and address external challenges that affect their

sustainability (Supriyadi, 2020). HRM is the effective use of people to accomplish organizational goals (Diah, 2021).

Human Resource Management (HRM) is a component of general management that focuses on human resources as the central aspect of managing organizational activities. HR is an essential and inseparable element of any institution or company. HRM involves planning, organizing, directing, and controlling functions from recruitment, selection, training, development, placement, performance appraisal, compensation, to employment termination (Imi, 2023).

According to Hidayat (2023), HR refers to individuals working within an organization to drive the achievement of organizational goals. Darmadi (2022) defines HR as individuals acting as the driving force of institutions and businesses, who require continuous training and development. Novitasari (2021) emphasizes that HRM encompasses recruitment, development, and utilization of personnel to meet individual and organizational objectives.

2.1.1.2 Objectives of Human Resource Management

According to Hidayat (2023), the objectives of HRM include:

1. **Organizational Objective:** Align HR practices to organizational effectiveness.
2. **Functional Objective:** Maintain departmental contributions at optimal levels.
3. **Social Objective:** Address societal and ethical challenges.
4. **Personal Objective:** Facilitate individual employee goal attainment.

HRM is a strategic function not only managed by the HR department but also by all levels of management and staff. It integrates planning, organizing, leading, and controlling into HR operational activities.

2.1.2. Service Quality

2.1.2.1 Understanding Service Quality

Service quality refers to fulfilling customer needs and expectations in a consistent, reliable, and satisfactory manner. Meithiana (2019) describes it as dynamic and influenced by the quality of products, services, human resources, and the environment. According to Tjiptono (2019), it is the extent to which service delivery meets or exceeds customer expectations. Kotler and Armstrong (2019) also argue that service quality plays a significant role in customer satisfaction and organizational success.

Majid (2021) views service quality as the completeness of features that meet customer needs, while Wibowati (2021) defines service as any activity offered to another party that does not result in ownership.

2.1.2.2 Factors Influencing Service Quality

According to Alinaung (2016), service quality is influenced by:

1. **Care and Attention:** Employee readiness and responsiveness.
2. **Spontaneity:** Initiative in addressing customer issues.
3. **Problem Resolution:** Training and adherence to service standards.

2.1.2.3 Service Quality Indicators

Pane (2018) identifies five indicators:

1. **Reliability:** Consistency in fulfilling promises.
2. **Responsiveness:** Willingness to help and provide timely service.
3. **Assurance:** Employee competence, courtesy, and credibility.
4. **Empathy:** Personalized attention to customers.
5. **Tangibles:** Physical evidence like facilities and staff appearance.

2.1.3. Employee Competence

2.1.3.1 Understanding Employee Competence

Wibowo (2018) defines competence as the capability to perform a job based on skills, knowledge, and attitude. Trisdiana (2023) adds that competence includes applying knowledge and skills to meet job requirements. Hooghiemstra (in Faturahman, 2024) considers competence a characteristic inherent in individuals for effective job performance.

2.1.3.2 Factors Influencing Employee Competence

Wibowo (2018) outlines factors such as:

1. Beliefs and Values
2. Skills
3. Experience
4. Motivation
5. Emotional Intelligence

2.1.3.3 Indicators of Employee Competence

According to Wibowo (2018), indicators include:

1. **Knowledge:** Relevant and applicable information.
2. **Skills:** Ability to perform specific tasks efficiently.
3. **Attitude:** Behavioral approach to job responsibilities.
4. **Traits:** Personal characteristics influencing behavior.
5. **Motive:** Consistent internal drivers guiding action.

2.1.4. Work Culture

2.1.4.1 Understanding Work Culture

Work culture is a set of shared values, beliefs, and norms that guide behavior within an organization (Juwita, 2021; Rohmah, 2023). It includes attitudes and habits that shape how tasks are performed. Dexter (2023) emphasizes work culture as a tool to enhance employee performance and address future challenges.

2.1.4.2 Factors Influencing Work Culture

According to Gomez (in Yulfitasari, 2022), factors include:

1. Group Norms
2. Exposed Values
3. Formal Philosophy
4. Organizational Rules
5. Embedded Skills
6. Mental Models
7. Shared Meanings
8. Integrating Symbols

2.1.4.3 Indicators of Work Culture

Hazing (2019) identifies indicators as:

1. Integrity
2. Professionalism
3. Management Support
4. Innovation
5. Communication

2.1.5. Information Technology

2.1.5.1 Understanding Information Technology

According to Turban (2021), information technology encompasses systems, infrastructure, and users that manage data collection, processing, storage, and dissemination. It includes hardware and software that transform raw data into valuable information (Agustika, 2023).

2.1.5.2 Role of Information Technology

Efendi (2023) highlights IT's significant impact in communication, education, health, and services. Computers, ATMs, digital cameras, and other devices demonstrate its integration into daily life. IT simplifies operations and enhances quality of life by enabling fast, accurate, and global information exchange.

Research Hypotheses

According to Saunders et al. (2020:144), a hypothesis is a statement whose truth is still in doubt, derived logically from existing theories, laws, or prior propositions. Transformational

leadership plays a crucial role in enhancing employee performance and job satisfaction. Studies by Tracey & Hinkin (2021) and Rothfelder et al. (2022) confirm that transformational leadership positively influences job satisfaction by inspiring employees.

1. **H1:** Transformational leadership has a significant effect on job satisfaction.
Intrinsic motivation, defined as the internal value derived from enjoying a task, also influences job satisfaction. Chuang (2021) supports the positive relationship between intrinsic motivation and job satisfaction.
2. **H2:** Intrinsic motivation has a significant effect on job satisfaction.
Fauzi et al. (2020:785) state that leadership behavior affects cooperation and efficiency, while Baskarada et al. (2020:507) highlight transformational leadership as a key determinant of employee performance. Ardias et al. (2019) and Tondok & Andarika (2020) also confirm its significant impact.
3. **H3:** Transformational leadership has a significant effect on employee performance.
Camilleri (2021) notes that intrinsic motivation stems from psychological needs such as relatedness, competence, and autonomy, and it has a significant effect on performance.
4. **H4:** Intrinsic motivation has a significant effect on employee performance.
Siagian (2021:140) and Fitri (2018:29) assert that job satisfaction influences performance, as satisfied employees are more likely to excel. This is supported by Tsai et al. (2019), Maharani et al. (2020), Rahayu et al. (2020), and Elgelal & Noermijati (2020).
5. **H5:** Job satisfaction has a significant effect on employee performance.
Job satisfaction mediates the effect of transformational leadership on performance. Studies by Paracha et al. (2020), Risambessy et al. (2020), and Fian Ardiat et al. (2020) support this mediating role.

6. **H6:** Transformational leadership indirectly affects employee performance through job satisfaction.

Similarly, intrinsic motivation influences performance both directly and indirectly through job satisfaction. Funmilola, Sola, and Olusola (2020) confirm that job satisfaction components significantly impact performance.

7. **H7:** Intrinsic motivation indirectly affects employee performance through job satisfaction.

3. Research Methodology

3.1 Research Location and Time

This study was conducted at the East Jakarta City Land Office, located in Cakung District, East Jakarta, Special Capital Region of Jakarta. Website: <https://kot-jaktim.atrbpn.go.id/>, Email: otjaktim@atrbpn.go.id, Postal Code: 13950. The research was carried out over a period of approximately nine (9) months.

Table 3.1 Research Schedule

Activity	Oct-Dec 2024	Jan-Mar 2025	Apr-May 2025	Jun-Jul 2025
Study Introduction	✓			
Proposal Preparation	✓	✓		
Data Collection		✓	✓	
Data Analysis			✓	✓
Report Writing				✓

Source: Author, 2025

3.2 Research Design

This study employs an associative quantitative approach aimed at identifying the influence of two or more variables. According to Sugiyono (2019), associative research investigates the causal relationships between variables and is suitable for developing, predicting, and controlling phenomena. This

research explores the influence of employee competence (X1) and work culture (X2) on service quality (Y), with information technology (M) as a moderating variable.

Figure 3.1 Design Study

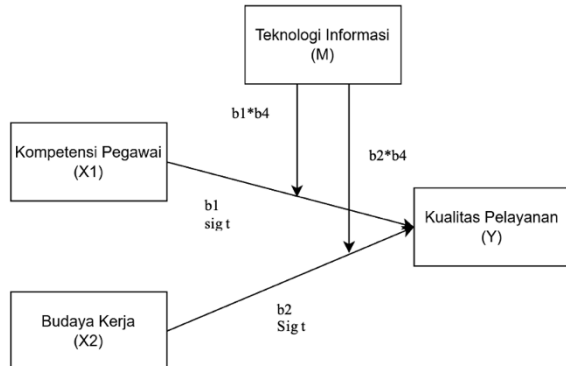


Figure 3.1 Research Framework

(A conceptual framework diagram is to be inserted here showing the interaction between X1, X2, M, and Y.)

3.3 Operational Definition of Variables

Operational definitions provide a practical interpretation of concepts measured in the research.

Independent Variables:

- Employee Competence (X1):** Ability based on skills, knowledge, attitude, traits, and motives (Trisdiana, 2023).
- Work Culture (X2):** Shared values and behaviors including integrity, professionalism, management support, innovation, and communication (Rohmah, 2023).

Dependent Variable: 3. Service Quality (Y): Ability of service to meet or exceed customer expectations (Majid, 2021). Indicators include reliability, responsiveness, assurance, empathy, and tangibles.

Moderating Variable: 4. Information Technology (M): Frequency, intensity, and types of IT used in service delivery (Turban, 2021).

Table 3.2 Operationalization of Variables

No	Variable	Indicator	Scale
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1	Employee Competence	Skills, Knowledge, Attitude, Traits, Motives	Likert 1-5
2	Work Culture	Integrity, Professionalism, Management Support, Innovation, Communication	Likert 1-5
3	Service Quality	Reliability, Responsiveness, Assurance, Empathy, Tangibles	Likert 1-5
4	Information Technology	Frequency of Use, Intensity of Use, Software Used	Likert 1-5

3.4 Population, Sample, and Sampling Technique

3.4.1 Population

The population consists of all employees of the East Jakarta City National Land Agency (BPN), totaling 60 individuals as shown in Table 3.3.

Table 3.3 Total Employees

No	Department	Number of Employees
1	Head	1
2	General Affairs	10
3	Survey and Mapping	19
4	Rights Determination and Registration	8
5	Structuring and Empowerment	7
6	Land Procurement and Development	9
7	Control and Dispute Resolution	6
Total		60

3.4.2 Sample

This study applies a saturated sampling technique where the entire population of 60 employees is used as the research sample.

3.4.3 Sampling Technique

Saturated sampling is a non-probability method used when the population is relatively small and entirely sampled to ensure minimal error and comprehensive data.

3.5 Data Collection Methods

3.5.1 Primary Data

Collected through:

1. **Surveys:** Using structured questionnaires.
2. **Interviews:** Conducted either face-to-face or via telephone.

Likert Scale Interpretation

Response	Score
Strongly Agree (SA)	5
Agree (A)	4
Neutral (N)	3
Disagree (D)	2
Strongly Disagree (SD)	1

3.5.2 Observation Method

Includes:

- **Direct Observation:** To observe behavior and environment.
- **Content Analysis:** Evaluating documents and media.
- **Mechanical Observation:** Assessing physical or biometric data.

3.5.3 Secondary Data

Consists of:

- **Internal Data:** Employee records, attendance, and organizational documents.
- **External Data:** Collected from external studies and reports.

3.6 Instrumentation of Variables

3.6.1 Validity Test

Instrument validity is assessed by comparing the Corrected Item-Total Correlation with the r-table. An item is valid if r-count > 0.3.

3.6.2 Reliability Test

Reliability is tested using Cronbach's Alpha. A value > 0.6 indicates the instrument is reliable (Mulyanto & Wulandari, 2010).

3.7 Data Analysis and Hypothesis Testing

3.7.1 Descriptive Statistics

Descriptive statistics describe data using mean, standard deviation, minimum, maximum, skewness, and kurtosis (Ghozali, 2016).

3.7.2 Multiple Linear Regression

Used to examine the influence of independent variables on the dependent variable.

3.7.3 Assumption Testing

1. **Normality:** PP plot used to verify normal distribution.
2. **Multicollinearity:** Checked through VIF (<10) and tolerance (>0.2).
3. **Autocorrelation:** Evaluated using Durbin-Watson statistic.
4. **Heteroscedasticity:** Analyzed through scatterplots to ensure randomness.

3.8 Hypothesis Testing

3.8.1 Coefficient of Determination (R^2)

Assesses how much variance in the dependent variable is explained by the model.

3.8.2 F-Test

Tests the simultaneous influence of independent variables. If the significance value < 0.05, the model is considered significant.

3.8.3 t-Test

Evaluates the partial effect of each independent variable. If t-count > t-table and p-value < 0.05, the variable significantly affects the dependent variable.

3.9 Moderated Regression Analysis (MRA)

MRA is used to determine whether information technology moderates the relationship between employee competence and work culture on service quality.

Regression Model: $Y = a + b_1X_1 + b_2X_2 + b_3M + b_4X_{1M} + b_5X_{2M} + e$

Where:

- Y = Service Quality
- a = Constant
- b_1 – b_5 = Regression Coefficients
- X_1 = Employee Competence
- X_2 = Work Culture
- M = Information Technology
- e = Error Term

4. Results and Discussion

4.1 Description of the Object of Study

The Investment and One-Stop Integrated Services Agency (DPMPTSP) of DKI Jakarta Province serves as the regional apparatus responsible for managing investment affairs and delivering licensing and non-licensing services throughout DKI Jakarta. The agency operates 316 service points distributed across sub-districts, districts, municipal/regency administrative offices, and public service malls.

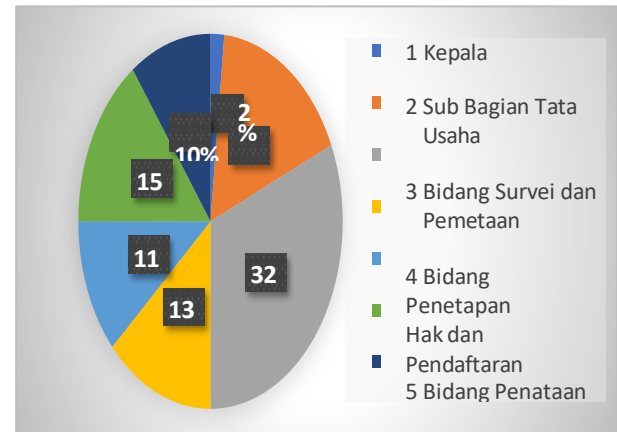
The establishment of DPMPTSP is rooted in Regional Regulation No. 12 of 2013 concerning the Implementation of One-Stop Integrated Services. It officially came into effect on January 2, 2015, initially named the Provincial One-Stop Integrated Services Agency (BPTSP). To enhance investment administration, the name was changed to DPMPTSP in 2017, as regulated by Governor Regulation No. 160 of 2019 on the Organizational Structure and Work Procedures of DPMPTSP.

DPMPTSP also manages Public Service Malls across DKI Jakarta, as a continuation of several regulatory frameworks including Ministerial Regulation No. 23/2017, Governor Regulation No. 142/2017, and Governor Decree No. 1856/2017. These malls aim to improve public service quality by integrating services that are fast, easy, affordable, secure, and convenient.

4.2 Characteristics of Respondents

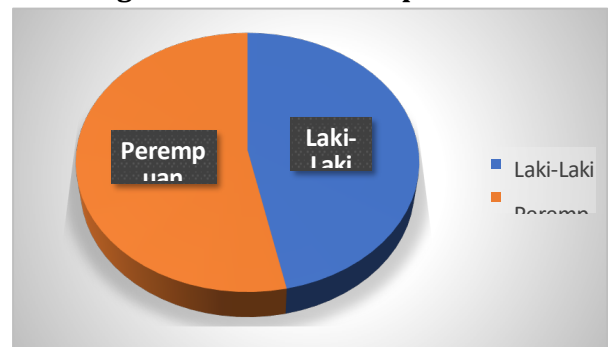
The study involved 60 employees of DPMPTSP as research respondents. Their distribution across divisions is visualized in the diagram below:

Figure 1. Distribution of Employees by Division



Source: Processed Primary Data, 2025

Figure 2. Gender of Respondents



Source: Processed Primary Data, 2025

As seen in Figure 2, 53% of respondents were female and 47% were male.

4.3 Data Analysis

4.3.1 Validity and Reliability Test

Table 1. Validity Test

Variables	R Table	R Count	Information
Competence Employee	0.254		
X1.1		0.612	Valid
X1.2		0.733	Valid
X1.3		0.625	Valid
X1.4		0.650	Valid

X1.5		0.527	Valid
Culture Work			
X2.1		0.605	Valid
X2.2		0.506	Valid
X2.3		0.431	Valid
X2.4		0.738	Valid
X2.5		0.490	Valid
Information Technology			
M3.1		0.506	Valid
M3.2		0.397	Valid
M3.3		0.552	Valid
M3.4		0.589	Valid
M3.5		0.541	Valid
Quality Service			
Y.1		0.733	Valid
Y.2		0.580	Valid
Y.3		0.505	Valid
Y.4		0.770	Valid
Y.5		0.509	Valid

Source: Processed Data, 2025

All items show Pearson correlation values (r-count) higher than the r-table value (0.254), indicating that all measurement indicators for the variables are valid.

Table 2. Reliability Test

No.	Variables	Mark r Alpha	Information
1	Competence Employee	0.828	Reliable
2	Culture Work	0.774	Reliable
3	Information Technology	0.726	Reliable
4	Quality Service	0.822	Reliable

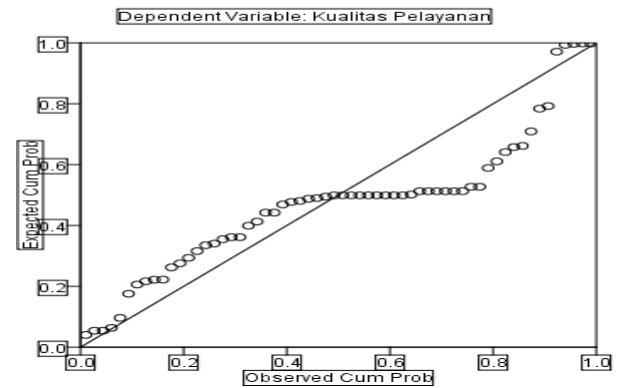
Source: Processed Data, 2025

All variables show Cronbach's Alpha > 0.6, indicating high internal consistency and acceptable reliability.

4.3.2 Classical Assumption Test

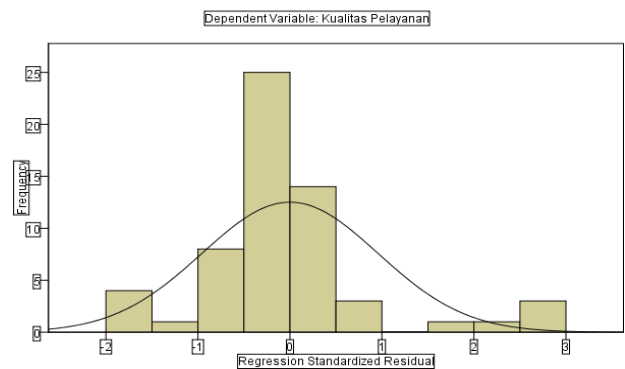
1. Normality Test

Figure 3. Normal P-P Plot
The distribution of residuals in both graphs resembles a normal distribution, fulfilling the normality assumption.



2. Multicollinearity Test

Table 3. Multicollinearity Test

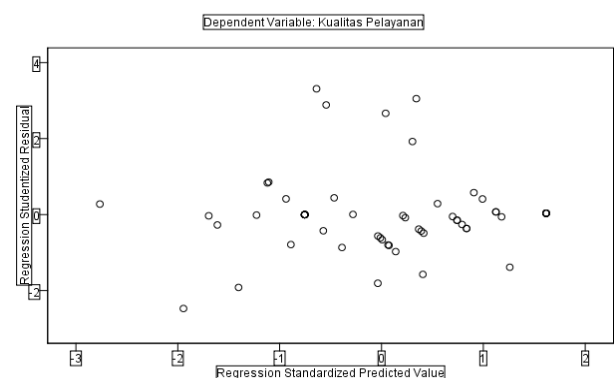


Source: SPSS Output, 2025

All variables exhibit Tolerance > 0.10 and VIF < 10, indicating no multicollinearity issues.

3. Heteroscedasticity Test

Figure 5. Scatterplot



The residuals are randomly distributed, indicating that the regression model meets the homoscedasticity assumption.

4. Autocorrelation Test

Table 4. Autocorrelation Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.919 ^a	.845	.830	.939	1.318

a. Predictors: (Constant), X2*M, Kompetensi Pegawai, Budaya Kerja, Teknologi Informasi, X1*M

b. Dependent Variable: Kualitas Pelayanan

Durbin-Watson value = 1.318 falls within the acceptable range ($1.21 < DW < 1.65$), indicating no autocorrelation.

5. F Test

Table 5. ANOVA F Test

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	258.962	5	51.792	58.729	.000 ^a
	Residual	47.622	54	.882		
	Total	306.583	59			

a. Predictors: (Constant), X2*M, Kompetensi Pegawai, Budaya Kerja, Teknologi Informasi, X1*M

b. Dependent Variable: Kualitas Pelayanan

F-count = 58.729 > F-table = 2.386, p-value = 0.000 < 0.05. This confirms the model's overall significance.

4.3.3 Moderated Regression Analysis

Table 6. Moderated Regression Result

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-38.243	12.107		-3.159	.003
	Kompetensi Pegawai	3.218	.705	3.037	4.567	.000
	Budaya Kerja	.314	.101	.998	3.098	.003
	Teknologi Informasi	1.919	.574	2.158	3.343	.002
	X1*M	.149	.036	5.923	4.176	.000
	X2*M	.072	.028	2.800	2.597	.012

a. Dependent Variable: Kualitas Pelayanan

Regression equation:

$$Y = -38.243 + 3.218X_1 + 0.314X_2 + 1.919M + 0.149X_1M + 0.072X_2M + e$$

- **X1 (Employee Competence):** Positive and significant effect ($p = 0.000$)
- **X2 (Work Culture):** Positive and significant effect ($p = 0.003$)
- **M (Information Technology):** Positive and significant effect ($p = 0.003$)
- **X1*M:** Moderating effect significant ($p = 0.000$)

- **X2*M:** Moderating effect significant ($p = 0.012$)

Table 7. Coefficient of Determination (R^2)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919 ^a	.845	.830	.939

$R^2 = 0.845$ implies 84.5% of service quality variance is explained by the model.

4.4 Hypothesis Testing

Table 8. Hypothesis Testing Summary

Insert Table Here

- **H1:** Accepted – Employee competence positively affects service quality.
- **H2:** Accepted – Work culture positively affects service quality.
- **H3:** Accepted – Information technology positively moderates the relationship between employee competence and service quality.
- **H4:** Accepted – Information technology positively moderates the relationship between work culture and service quality.

4.5 Discussion

4.4.1 The Influence of Employee Competence on Service Quality

The findings confirm that employee competence significantly influences service quality. Competent employees—those with adequate knowledge, skills, and appropriate attitudes—are better equipped to perform effectively, which ultimately enhances customer satisfaction. These results corroborate prior research conducted by Efendi (2024), which examined the effect of work motivation and employee competence on service delivery in village offices across Ampel District. The study revealed that higher employee competence directly correlates with improved service quality.

This implies that organizations should invest in structured competency development programs, particularly in the digital era where agility and responsiveness are crucial.

Competence is not only technical but also includes interpersonal and adaptive skills, which are increasingly valuable in dynamic service environments.

4.4.2 The Influence of Work Culture on Service Quality

The analysis reveals a significant positive relationship between work culture and service quality. A strong and well-internalized organizational culture fosters behaviors that align with customer-centric service delivery. Values such as integrity, collaboration, and accountability are essential in shaping consistent and high-quality services.

These findings are aligned with Ruffiah and Muhsin (2018), who examined the impact of organizational culture and leadership style on service quality. Although they noted that culture alone might not significantly impact outcomes, it becomes effective when reinforced through leadership and technological support. This study suggests that cultural values, when embedded in daily routines and supported by management, substantially improve service quality.

4.4.3 The Influence of Information Technology on Service Quality

Information technology (IT) was found to have a significant and positive effect on service quality. Modern IT systems enable more efficient workflows, faster data processing, and improved communication—all of which contribute to enhanced service delivery.

This aligns with research by Elizah and Wahyono (2019), which found that while the Population Administration Information System (SIAK) does not directly influence public satisfaction, it improves service quality, which in turn enhances satisfaction indirectly. This supports the argument that IT plays a foundational role in building responsive and efficient public services.

4.4.4 The Moderating Role of IT in the Relationship between Employee Competence and Service Quality

The interaction between employee competence and information technology ($X1*M$) significantly affects service quality. The positive coefficient indicates that IT strengthens the effect of employee competence. In other words, competent employees achieve better performance when they are supported by well-integrated technological systems. This interaction reflects the synergy between human and digital capabilities in public service improvement.

4.4.5 The Moderating Role of IT in the Relationship between Work Culture and Service Quality

Likewise, IT also positively moderates the relationship between work culture and service quality ($X2*M$). This means that a positive work culture is more effective when reinforced by technology. IT facilitates communication, transparency, and collaboration, thus reinforcing cultural values. These findings resonate with research by Emil (2024), which emphasized the joint role of IT and training in improving performance, although organizational culture alone did not have a moderating effect.

4.5 Managerial Implications

4.5.1 Enhancing Employee Competence

To improve service quality, managerial focus should prioritize competency development through structured training, mentoring, and professional development programs. Emphasis should be placed on digital literacy, adaptability, and collaboration. Employees must be able to leverage IT tools and systems efficiently to maximize their impact in service delivery.

4.5.2 Fostering a Positive Work Culture

Management must establish and maintain a supportive, innovative, and disciplined work culture. This involves setting clear organizational values, strengthening internal

communication, and encouraging employee participation in decision-making. A strong culture drives ownership and engagement, both of which are critical to delivering consistent service excellence.

4.5.3 Optimizing Information Technology Use

Public service institutions should continually assess and upgrade their IT infrastructure to support seamless, accessible, and transparent services. Developing integrated digital service platforms and ensuring that all employees are trained in their use will bridge the gap between expectations and service delivery.

4.5.4 Aligning Competence Development with Technology Integration

Organizations should ensure that competence development programs are aligned with technological changes. For instance, Standard Operating Procedures (SOPs) must be digitized and easily accessible, while work teams should be structured to combine technical expertise with an understanding of digital processes. Cross-functional collaboration supported by IT will result in more innovative and responsive services.

5. Conclusion

5.1. Conclusion

Based on the findings of the study, the following conclusions can be drawn:

1. **Employee competence has a positive and significant effect on service quality.** This finding implies that higher levels of knowledge, skills, and professionalism among employees lead to improved service delivery and enhanced customer satisfaction.
2. **Work culture positively and significantly influences service quality.** A strong and supportive organizational culture fosters a conducive work environment, which motivates employees to provide optimal services.
3. **Information technology has a significant impact on service quality.** The implementation of information systems improves the efficiency and effectiveness of service processes by enabling faster, more accurate, and transparent communication with customers.
4. **Information technology positively moderates the relationship between employee competence and service quality.** This indicates that the effect of employee competence on service quality is amplified when supported by robust technological infrastructure.
5. **Information technology also moderates the relationship between work culture and service quality.** A positive work culture, when combined with appropriate technology adoption, has a stronger impact on service excellence.

5.2. Recommendations

In light of the conclusions above, the following managerial recommendations are proposed:

1. **Enhance Employee Competence:** Management should invest in continuous training and development programs, focusing on both technical skills and service-oriented behavior. This will ensure that employees remain capable and responsive to dynamic service demands.
2. **Strengthen Organizational Culture:** A productive and value-driven work culture should be cultivated through the promotion of core values such as integrity, discipline, responsibility, and teamwork. Leadership must consistently model these values to sustain cultural alignment across the organization.
3. **Optimize Information Technology Utilization:** Organizations should prioritize the enhancement of their information technology infrastructure to support integrated service systems. This includes providing modern equipment and

ensuring all employees are proficient in its use through regular training and support.

4. **Integrate Human Resources and Technology:** A strategic alignment between employee competencies, organizational culture, and technological systems should be pursued. This integration will create synergistic effects that improve both internal efficiency and external service quality.
5. **Implement Continuous Evaluation:** Organizations should routinely evaluate their service systems and IT tools to ensure alignment with evolving customer expectations and industry developments. Feedback mechanisms and performance monitoring are essential for adaptive and responsive service innovation.

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