

DETERMINATION OF COMPETENCE, SERVICE EXCELLENCE, **APPLICATION SYSTEM MANAGEMENT AND OF** INFORMATION ON THE PERFORMANCE OF DISTRICT **EMPLOYEES** IN **KARIMUN** REGENCY **THROUGH** SATISFACTION AS AN INTERVENING VARIABLE

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#### **Abstract:**

The performance achievement of employees in the Karimun Regency Districts was not achieved according to the target, due to employee dissatisfaction, competence, excellent service and the application of management information systems. This mixed-method study aimed to determine the role of job satisfaction on competence, excellent service and the application of management information systems on employee performance. It was concluded that competence and positive job satisfaction significantly determine employee performance. Excellent service and the application of management information systems do not significantly determine employee performance. Furthermore, competence, excellent service and the application of management information systems positively and significantly determine job satisfaction. Then job satisfaction is able to intervene positively significantly with perfect determination of competence, excellent service and the application of management information systems on employee performance. This means that competence and satisfaction have a significant impact on employee performance. At the same time, excellent service and the application of management information systems have not had a significant impact.

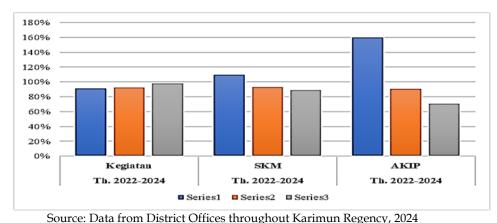
Furthermore, competence, excellent service and the application of management information systems have a significant impact on job satisfaction. Then job satisfaction can perfectly strengthen the influence of excellent service and the application of management information systems on employee performance, but competence can be partially strengthened.

**Keywords**: Service Excellent, Job Satisfaction Management Information System Application, Employee Performance

### **INTRODUCTION**

The District Offices throughout Karimun Regency have goals and objectives oriented towards accommodating the interests of the community, including the following: 1) Striving to improve Performance Accountability and 2) Striving to improve the Quality of Public Service. However, related to this, information has been found showing fluctuations in the performance achievements of District Offices throughout Karimun Regency, as illustrated in the following graph:





**Figure 1.** Graphic Image of District Office Performance Achievements throughout Karimun Regency, 2022-2024.

The graph above shows the performance achievements of District Offices throughout Karimun Regency from 2022 to 2024. The Activity Realization indicator has increased, but the IKM and AKIP indicators have decreased. According to Ministerial Regulation No. 6 of 2022 on Administrative and Bureaucratic Reform (PANRB), if an organizational unit's performance is "poor," then ideally, the performance of most employees should also be considered poor.

The 2024 performance report for sub-district offices across Karimun Regency explains that the lowest IKM scores are generally dominated by elements of implementer competency, behavior in handling complaints, and suggestions and input. Each sub-district office further explained that this was due to limited public service infrastructure, the lack of specific training for service excellence among service personnel, and the need to optimize the use of existing Management Information System (MIS) applications. To address this issue, most sub-district offices recommended improving service quality through service excellence training and optimizing existing management information system applications. Based on this information, several problematic phenomena can be identified, including:

- 1. The performance of each sub-district in Karimun Regency remains low and does not meet targets.
- 2. Job Satisfaction, as the performance of District Offices throughout Karimun Regency from 2022 to 2024, based on the IKM indicator, consistently experienced a significant decline. This also indicates employee dissatisfaction with their working conditions.
- 3. Employee Competence, as the lowest IKM value, is due to a lack of sufficient competency to provide services. This is evident in the employees who carry out their duties and responsibilities, which are dominated by the element of executive competence, the behavior of the complaint handling system implementers, suggestions and input from employees, and the IKM value of each district, which is dominated by the indicator value of the element of executive competence, which has the lowest value compared to the other elements.
- 4. Service Excellence, demonstrated by each District Office, explains that suboptimal performance achievement is based on the IKM indicator and AKIP value because service personnel have never received specific training related to service excellence.
- 5. The Management Information System (MIS) application, as viewed at each sub-district office, indicates that performance achievements are suboptimal based on the IKM (Information and







Service Quality) indicators and AKIP (Information and Service Quality) values due to the need to optimize the utilization of the existing MIS application.

Due to time and infrastructure limitations, the author examined five variables: the first independent variable, Employee Competence (X1), Service Excellence (X2), Management Information System Application (X3), Job Satisfaction (Z), and Employee Performance of Sub-districts throughout Karimun Regency, Riau Islands Province (Y). The research problem formulation and objectives are to find answers to the following questions:

- 1. How does competence determine employee performance in sub-districts throughout Karimun Regency?
- 2. How does service excellence determine employee performance in sub-districts throughout Karimun Regency?
- 3. How does the MIS application determine employee performance in sub-districts throughout Karimun Regency?
- 4. How does competence determine job satisfaction among employees in sub-districts throughout Karimun Regency?
- 5. How does service excellence determine job satisfaction among employees in sub-districts throughout Karimun Regency?
- 6. How does the SIM application determine job satisfaction among employees in sub-districts throughout Karimun Regency?
- 7. How does job satisfaction determine performance among employees in sub-districts throughout Karimun Regency?
- 8. How does competence determine performance through job satisfaction among employees in sub-districts throughout Karimun Regency?
- 9. How does service excellence determine performance through job satisfaction among employees in sub-districts throughout Karimun Regency?
- 10. How does the SIM application determine performance through job satisfaction among employees in sub-districts throughout Karimun Regency?

The results of this study are likely useful in strengthening theories regarding the intervening role of job satisfaction on competence, service excellence, and the SIM application in their influence on employee performance.

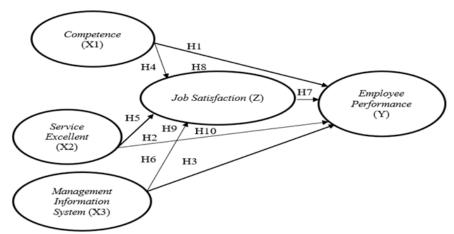


Figure 2. Conceptual Framework Chart Image







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### **METHODS**

**Research Design.** A quantitative approach was used, using a questionnaire distributed to employees in all sub-districts in Karimun Regency, Riau Islands Province. The study was conducted from January to June 2025.

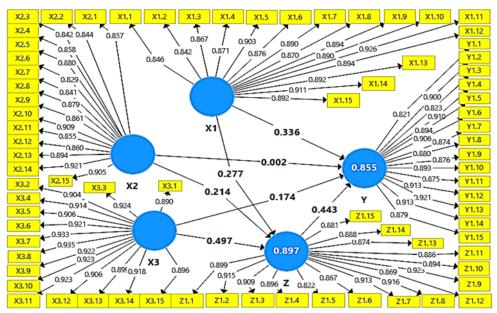
**Research Variables and Operational Definitions.** The operational variables in this study were exogenous variables: Employee Competence (X1), Service Excellence (X2), Management Information System Application (X3), and Job Satisfaction (Z) as an intervening variable. Employee Performance (Y) served as an endogenous variable.

**Population, Sample, Type.** The population in this study was all Civil Servants (PNS) in all sub-districts in Karimun Regency, Riau Islands Province, totaling 292 employees. Sampling in this study used the Slovin formula, as follows:  $n = N/1 + (N \times e^2)$  Where:

- n: Sample size, N: Population, e2: Desired sampling error percentage (error rate). With a 95% confidence level and a 5% margin of error, the calculation is as follows:
- $n = 292 / [1 + (292 \times (0.05)2] = 168.79$ . The calculation using the Slovin formula above yields a value of 168.79, so it is rounded up to 169 employees for the sample.

**Types, Sources, Data Collection, and Analysis Techniques.** Primary data were obtained directly from respondents through observation, interviews, and questionnaires. Secondary data were obtained through literature research and data related to the five variables. The data analysis techniques used to test the hypotheses in this study were Descriptive Analysis and PLS (Partial Least Squares) Analysis. This was chosen because it is simpler and provides accurate results. (Duryadi, 2021:31-38).

## RESULT AND DISCUSSION Validity and Reliability Test Results



Source: Primary data processed with smartPLS in 2025

**Figure 3.** Outer Model Test Results







# AND AUDITING

The figure above shows that all variables have outer loading values greater than 0.7, thus meeting the convergent validity criterion (Duryadi, 2021:109).

Table 1. Cross Loading Values

	Employee	Excellent	SIM Application	Employee	Job Satisfaction
	Competence (X1)	Service (X2)	(X3)	Performance (Y)	(Z)
X1.1	0.846	0.738	0.672	0.712	0.734
X1.2	0.842	0.720	0.674	0.729	0.741
X1.3	0.867	0.769	0.733	0.738	0.765
X1.4	0.871	0.752	0.746	0.767	0.754
X1.5	0.903	0.852	0.760	0.811	0.796
X1.6	0.876	0.780	0.751	0.752	0.766
X1.7	0.890	0.854	0.810	0.823	0.836
X1.8	0.870	0.840	0.826	0.806	0.836
X1.9	0.894	0.832	0.763	0.815	0.816
X1.10	0.890	0.796	0.798	0.797	0.808
X1.11	0.926	0.831	0.820	0.796	0.852
X1.12	0.894	0.814	0.760	0.767	0.797
X1.12	0.892	0.831	0.796	0.834	0.814
X1.14	0.911	0.814	0.795	0.790	0.818
X1.14 X1.15	0.892	0.810	0.796	0.840	0.839
X2.1	0.820	0.857	0.740	0.727	0.797
X2.1	0.772	0.844	0.702	0.693	0.739
X2.2 X2.3	0.762	0.842	0.666	0.672	0.709
X2.3 X2.4	0.762	0.858	0.701	0.700	0.750
X2.4 X2.5	0.777	0.880	0.687	0.724	0.760
X2.5 X2.6	0.754	0.829	0.725	0.670	0.740
X2.7	0.704	0.841	0.723	0.664	0.694
X2.7 X2.8	0.773	0.879	0.734	0.743	0.762
X2.9	0.773	0.861	0.748	0.745	0.762
X2.9 X2.10	0.783	0.909	0.782	0.761	0.782
X2.10 X2.11	0.767	0.855	0.753	0.736	0.755
X2.11 X2.12	0.785	0.860	0.733	0.746	0.779
X2.12 X2.13	0.828	0.894	0.755	0.794	0.809
X2.13 X2.14	0.840	0.894	0.755	0.794	0.843
X2.14 X2.15	0.856	0.905	0.785	0.795	0.847
X3.1	0.712	0.738	0.890	0.793	0.779
X3.1 X3.2	0.712	0.736	0.904	0.771	0.801
X3.2 X3.3	0.727		0.924		
		0.819		0.828	0.862
X3.4	0.796	0.763	0.914	0.813	0.819
X3.5	0.751	0.733	0.906	0.797	0.810
X3.6	0.808	0.767	0.921	0.858	0.847
X3.7	0.833	0.799	0.933	0.795	0.858
X3.8	0.846	0.828	0.935	0.839	0.872
X3.9	0.820	0.775	0.922	0.796	0.885
X3.10	0.784	0.763	0.923	0.807	0.860
X3.11	0.801	0.786	0.923	0.815	0.847
X3.12	0.800	0.794	0.906	0.776	0.840
X3.13	0.771	0.741	0.899	0.734	0.825
X3.14	0.822	0.772	0.918	0.804	0.855





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	Employee	Excellent	SIM Application	Employee	Job Satisfaction
	Competence (X1)	Service (X2)	(X3)	Performance (Y)	(Z)
X3.15	0.806	0.770	0.896	0.769	0.838
Y1.1	0.727	0.675	0.731	0.821	0.718
Y1.2	0.823	0.775	0.799	0.900	0.847
Y1.3	0.705	0.649	0.741	0.823	0.708
Y1.4	0.788	0.750	0.786	0.910	0.817
Y1.5	0.731	0.707	0.751	0.894	0.787
Y1.6	0.837	0.824	0.821	0.906	0.871
Y1.7	0.823	0.746	0.774	0.874	0.830
Y1.8	0.758	0.718	0.735	0.880	0.773
Y1.9	0.767	0.739	0.735	0.876	0.767
Y1.10	0.855	0.839	0.810	0.893	0.869
Y1.11	0.752	0.718	0.722	0.875	0.783
Y1.12	0.812	0.780	0.780	0.913	0.842
Y1.13	0.831	0.818	0.824	0.921	0.851
Y1.14	0.788	0.754	0.799	0.913	0.802
Y1.15	0.790	0.719	0.795	0.879	0.770
Z1.1	0.848	0.830	0.835	0.849	0.899
Z1.2	0.851	0.824	0.830	0.859	0.915
Z1.3	0.843	0.811	0.830	0.858	0.909
Z1.4	0.782	0.787	0.782	0.808	0.896
Z1.5	0.714	0.709	0.761	0.786	0.822
Z1.6	0.747	0.744	0.789	0.797	0.867
Z1.7	0.814	0.811	0.835	0.847	0.913
Z1.8	0.835	0.815	0.861	0.859	0.916
Z1.9	0.837	0.828	0.871	0.832	0.923
Z1.10	0.791	0.804	0.837	0.813	0.894
Z1.11	0.803	0.782	0.813	0.769	0.886
Z1.12	0.779	0.765	0.801	0.732	0.869
Z1.13	0.803	0.780	0.810	0.764	0.874
Z1.14	0.796	0.748	0.815	0.770	0.888
Z1.15	0.820	0.783	0.798	0.773	0.881

Source: Primary data processed with smart PLS in 2025

In the table above, all cross-loading values on the intended constructs are greater than the other values, and the standard value for each construct is greater than 0.7, thus indicating that all manifest variables are valid (Duryadi, 2021:125).

Table 2. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employee Competence (X1)	0.980	0.981	0.982	0.782
Service Excellence (X2)	0.977	0.978	0.979	0.756
SIM Application (X3)	0.986	0.986	0.987	0.836
Employee Performance (Y)	0.980	0.981	0.982	0.784
Job Satisfaction (Z)	0.981	0.982	0.983	0.793

Source: Primary Data processed with smartPLS in 2025







All variable values in the reliability test were good, as both Cronbach's Alpha and composite reliability were above 0.7, and AVE was above 0.5. Therefore, it was concluded that the tested variables were valid and reliable (Duryadi, 2021:126).

Table 3. R Squares

	R Square	R Square Adjusted
Employee Performance (Y)	0.855	0.851
Job Satisfaction (Z)	0.897	0.895

Source: Primary Data processed with smartPLS in 2025

It is shown that the R Square value of Employee Performance (Y) is 0.855, meaning that the value of the employee performance variable is 85.5% influenced by the variables of employee competence, excellent service, SIM Application and job satisfaction, while other factors influence 14.5%. The R Square value of Job Satisfaction (Z) is 0.897, meaning that the value of the job satisfaction variable is 89.7% influenced by the variables of employee competence, excellent service and SIM Application, while other factors outside the variables studied influence 10.3%.

Table 4. Construct Cross-validated Redundancy

-	Tubic 1. Construct cross varianted redunding						
	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)				
X1	2535.000	2535.000					
X2	2535.000	2535.000					
X3	2535.000	2535.000					
Y	2535.000	861.801	0.660				
Z	2535.000	747.812	0.705				

Source: Primary data processed with Smartpls, 2025

The table shows that the Q2 value for the Employee Performance (Y) variable is 0.660, and Job Satisfaction (Z) is 0.705. This research model has good predictive relevance because the Q2 values for both variables are greater than zero (Duryadi, 2021:116). The model's goodness of fit is shown in the following table:

**Table 5.** Model Fit/Goodness of Model (NFI Value)

	Saturated Model	Estimated Model
SRMR	0.046	0.046
d_ULS	6.097	6.097
d_G	15.690	15.690
Chi-Square	9602.282	9602.282
NFI	0.640	0.640

Source: Primary Data processed with smartPLS in 2025

The data shows a Standardized Root Mean Square (SRMR) value of 0.046 < 0.10, indicating a good fit. Therefore, it can be concluded that the model meets the fit criteria. Furthermore, the NFI value is 0.640, or close to 0.67 (good or strong), so it can be concluded that the model's goodness of fit is good and strong. Furthermore, after meeting these requirements and conditions, the next process is hypothesis testing using the bootstrapping procedure.







**Table 6.** Path Coefficient test results (Path Coefficient)

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
X1 -> Y	0.336	0.355	0.121	2.790	0.005
X2 -> Y	0.002	-0.010	0.097	0.018	0.986
X3 -> Y	0.174	0.165	0.124	1.399	0.163
$X1 \rightarrow Z$	0.277	0.275	0.117	2.372	0.018
$X2 \rightarrow Z$	0.214	0.207	0.084	2.562	0.011
$X3 \rightarrow Z$	0.497	0.506	0.105	4.750	0.000
Z -> Y	0.443	0.446	0.129	3.437	0.001

Source: Primary Data processed with smartPLS in 2025

From the data of the direct influence test results above, it is shown that all original sample values are positive. The correlation coefficient value of employee competency to employee performance with a T-statistic value of 2.790 and a P-value of 0.005. The correlation coefficient value of excellent service to employee performance with a T-statistic value of 0.018 and a P-value of 0.986. The correlation coefficient value of the SIM application to employee performance with a T-statistic value of 1.399 and a P-value of 0.163. The correlation coefficient value of employee competency to job satisfaction with a T-statistic value of 2.372 and a P-value of 0.018. The correlation coefficient value of excellent service to job satisfaction, with a T-statistic value of 2.562 and a P-value of 0.01. The correlation coefficient value of the SIM application to job satisfaction with a T-statistic value of 4.750 and a P-value of 0.000. The correlation coefficient value of job satisfaction on employee performance with a T-statistic value of 3.473 and a P-value of 0.001.

**Table 7.** Specific Indirect Effects Test Results

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
X1 -> Z -> Y	0.123	0.121	0.061	1.996	0.047
X2 -> Z -> Y	0.095	0.092	0.048	1.979	0.048
X3 -> Z -> Y	0.220	0.227	0.087	2.525	0.012

Source: Primary Data processed with smartPLS in 2025

From the indirect influence test data above, it is shown that all original sample values are positive. The correlation coefficient value of employee competency determines performance in intervening job satisfaction with a T-statistic value of 1.996 and a P-value of 0.047. The correlation coefficient value of service excellence determines performance in intervening job satisfaction with a T-statistic value of 1.979 and a P-value of 0.048. The correlation coefficient value of the SIM Application determines performance in intervening job satisfaction with a T-statistic value of 2.225 and a P-value of 0.012.

### **CONCLUSION**

- 1. Employee competence has a direct, positive, and significant effect on employee performance in sub-districts throughout Karimun Regency.
- 2. Service excellence has a direct, positive, and insignificant effect on employee performance in sub-districts throughout Karimun Regency.
- 3. The MIS application has a direct, positive, and insignificant effect on employee performance in sub-districts throughout Karimun Regency.
- 4. Employee competence has a direct, positive, and significant effect on job satisfaction in subdistricts throughout Karimun Regency.





- 5. Service excellence has a direct, positive, and significant effect on job satisfaction in sub-districts throughout Karimun Regency.
- 6. The MIS application has a direct, positive, and significant effect on job satisfaction in subdistricts throughout Karimun Regency.
- 7. Job satisfaction has a direct, positive, and significant effect on employee performance in subdistricts throughout Karimun Regency.
- 8. Employee competence has a positive and significant influence on employee job satisfaction in sub-districts throughout Karimun Regency, with job satisfaction as a partial intervening variable.
- 9. Service excellence has a positive and significant influence on employee performance in subdistricts throughout Karimun Regency, with job satisfaction as a perfect intervening variable.
- 10. The MIS application has a positive and significant influence on employee performance in subdistricts throughout Karimun Regency, with job satisfaction as a perfect intervening variable.

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