

ROLE OF ISO CERTIFICATION ON ORGANIZATIONAL PERFORMANCE IN STATE CORPORATIONS IN KISUMU TOWN, KENYA

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Abstract: ISO Certification involves integration of processes in an organization in such a manner that there is continuous improvement which is aimed at attaining customer satisfaction and achieving organizational targets and goals. State corporations in Kenya have had their fair share of challenges in achieving their organizational performance targets and as a result they have adopted ISO certification as one of the management measures to mitigate these challenges. It is for this reason that this study examined the role of ISO certification on organizational performance in state corporations in Kenya. The target population was 1,120 employees of five ISO certified state corporations in Kisumu town, Kenya. Using Krejcie and Morgan table, 275 respondents were sampled through systematic random sampling design. Data collection instruments that were used were questionnaires and document analysis. Content validity was achieved through peer review of questionnaires while reliability was measured using test-retest method. Data analysis was analyzed using descriptive statistics with the aid of SPSS 18.0 and presented through distribution tables. Pearson Correlation Co-efficient for organizational targets was 0.546, while for management commitment was 0.596, for customer focus was 0.717 and for monitoring of processes was 0.688; all showed a positive and significant correlations with Organizational Performance. Regression analysis indicated that all ISO Certification variables contributed to significant and positive change in performance. The researcher therefore concluded that ISO Certification play a role on Organizational Performance in state corporations in Kenya.

Keywords: ISO – International Organization on Standardization, KEBS – Kenya Bureau of Standards, QMS – Quality Management System, TQM – Total Quality Management.

1. INTRODUCTION

Due to increased competition, globalization, internationalization, emphasis on customer focus, result oriented focus, many organizations; both private and public are devising ways of coping with the demands and the dynamics of the current business world. According to Delloitte annual report (2013); “Human Capital Trends 2013: Leading Indicators”, organizations have to do more in the face of dramatic shifts in technology, globalization, demographics and regulation. Pressure for performance has increased as business decisions are becoming more and more complex and challenging. The market environment, worldwide, presents to the organizations myriads of challenges each day. This explains why almost every organization in each financial year set apart large sums of money in their budgets for the purposes of researching on how to overcome these challenges (Lal, 2008).

One of the strategic measures adopted by many organizations in order to cope with these challenges is ISO Certification. This means that the systems of the organizations are certified the quality management standards such as ISO 9001:2008, ISO 18001, OHSAS, ISO 22000, and ISO 14001 with the most common of these being ISO 9001:2008. A set of eight core quality management principles that act as a common foundation for all standards relating to quality management comprise the items:- improved consistency with traceability, enhanced customer focus, focused leadership, involvement of people, a system approach to management, continual improvement, a factual approach to decision making and mutually beneficial supplier relationships. ISO 9001: 2008 is a generic standard that is implemented at various functional levels in all the organizations irrespective of their nature and size. According to Tripti and Greetika (2011) the benefits of ISO certification are shareholders wealth maximization, increased job satisfaction, customer needs are better met, improved corporate image and long term customer relationships.

In Kenya, ISO is represented by Kenya Bureau of Standards. The Kenyan government encourages public Institutions to go for ISO Certification in order to improve the quality of their products and services and more so because the ISO management system places greater emphasis on meeting customer needs and customer satisfaction. The standards serve to increase efficiency and effectiveness and hence every organization must take initiatives to ensure their effective application in order to remain relevant (Besterfield 2011). According to KEBS Certification Body (2014), 233 firms have been certified to various ISO standards as follows: ISO 9001:2008, QMS – 167 firms, FSSC 22000:2011 – 7 firms, KNWA 01:2009 – 7 firms, ISO 18001, OHSAS – 7 firms, ISO 22000, FSMS – 32 firms and ISO 14001, EMS – 32 firms. Certified state corporations and other government departments are about 168 forming about 72% of all ISO certified firms. Bureau Veritas, which is KEBS main competitor in ISO certification in Kenya, has certified 54 KTDA (Kenya Tea Development Authority) factories and nine other firms. This means 283 firms in Kenya are ISO certified with state corporations and other government departments' number standing at 223, which is about 79% of the total number. This high percentage of ISO certified state corporations and other government departments indicate how serious ISO certification is taken by government of Kenya. For this reason, this study focused on finding out the role played by ISO certification on organizational performance in State corporations in Kenya; whether the expected benefits of ISO Certification are realized.

Statement of the Study Problem: Despite the increase in the number of certified firms and the growing popularity of ISO Certification, poor quality is still reported in many organizations (CQI, 2014). Such failure to manage quality has damaged the financial returns and competitive advantage of the organizations and leading to the problems of low investment efficiency and sustainability. Analyses of the studies carried out on ISO Certification indicate that benefits accrued out of the certification are more theoretically-based than practically-based. That is why most state corporations still experience the challenges despite being ISO certified. This necessitated the need to investigate the role played by ISO certification on organizational performance in ISO certified state corporations in order to establish the relationship between theoretical benefits of ISO certification and the actual gains in state corporations in Kenya.

Objectives of the Study: The general objective of this research was to establish the role of ISO Certification on organizational performance in state corporations in Kenya. The study was guided by the following specific objectives:

- i. to determine the influence of organizational targets on organizational performance in state corporations in Kenya
- ii. to examine the relationship between management commitment and organizational performance in state corporations in Kenya
- iii. to find out the effect of customer focus on organizational performance in state corporations in Kenya.
- iv. to establish the relationship between monitoring of processes and organizational performance in state corporations in Kenya.

Hypotheses of the Study: The study was guided by the following research hypotheses:

Ho1: There is no significant relationship between organizational targets and organizational performance in state corporations in Kenya

Ho2: There is no significant relationship between management commitment and organizational performance in state corporations in Kenya

Ho3: There is no significant relationship between customer focus and organizational performance in state corporations in Kenya.

Ho4: There is no significant relationship between monitoring of processes and organizational performance in state corporations in Kenya.

Significance of the Study: This study is expected to contribute to better understanding of the benefits of ISO certification. Stakeholders such as the government may also be interested in knowing how ISO certification is helping the state corporations to realize their targets and whether it is worthwhile to encourage them to invest in the certification programmes. In addition, the research findings will add to the repertoire of knowledge in the subject of study.

Scope of the Study: The research concentrated on the role of ISO Certification on organizational performance in five ISO Certified state corporations in Kisumu Town, Kisumu County. The period targeted was from the time most organizations got the ISO certification to the time of the research, that is, from 2009 to 2014.

Assumptions of the Study: One of the assumptions of this study was that the respondents targeted would be honest to give correct non-biased information pertaining to ISO certification. This assumption was maintained by assuring the respondents of high degree of confidentiality and using unidentified questionnaires in which the identity of the respondents was not revealed. This study was also guided by the assumption that the sample chosen for the study would be representative of the population inferences were made to. This assumption was maintained by use of systematic random sampling design which ensured that each respondent in the accessible population had equal chance of being chosen.

Limitations of the Study: Because of lack of list of staff of the sampled organizations the researcher resorted to using systematic random sampling design. This sample design was considered appropriate because it resulted in a sample that represented the population, that is, it provided accuracy hence reducing systematic variance and precision of estimate. This study was also limited by factors such as financial resources and pressure of time.

Literature Review: ISO Certification is one of most recent management strategy that is sweeping across many organizations and companies. Because it is a relatively new development in management and attracting several organizations, a few studies on it have been carried out. According to ISO Survey, 2012, there has been a steady healthy growth across the board for all of the ISO management standards, with a worldwide total of 1,504,213 certificates issued. This growth result from anticipated benefits accrued from ISO Certification. Oluoch (2010), points out that ISO certification enhances quality inspection, improve customer satisfaction and improve customer communication within and without the organization. While Kimani (2008), indicates that ISO certification gives the organization competitive advantage in form of better quality over their rivals. ISO Certification places a lot of emphasis on customer satisfaction. Mukherjee (2008) points out that customer is said to be satisfied when his stated and implied needs are fulfilled. Customer satisfaction is evidenced by repurchase or repeated business, increased market share and increased sales as well as the customer becoming goodwill ambassador of the organization.

Process approach is very important when implementing quality management system based on ISO 9001:2008 Standard. Mukherjee (2008), states that process approach is a powerful way of organizing and managing how work activities create value. Process approach organizes and manages work horizontally the way work activities create customer value. The approach directly links process inputs that come from suppliers to the outputs of the process that go to customers.

ISO certification practice which is based on TQM theory applies the requirements of series of ISO standards in management of organizational processes. TQM is not merely a technique, but a philosophy anchored in the belief that long-term success depends on a uniform commitment to quality in all facets of an organization (Naagarazan 2009). It promotes an organizational culture that meets consumers' perceptions of quality.

Despite the benefits gained from ISO certification some disadvantages have been identified which indicate that the path of growth for ISO Certification has not been so smooth as such. This is further compounded by the increase in the number of ISO certificates that are withdrawn each year. According ISO Survey (2012), a total of 360,790 ISO 9001 certificates were withdrawn globally. In Africa, South Africa was the leading with 1,234, Egypt followed with 635, Morocco had 145 while in Kenya 36 Certificates were withdrawn.

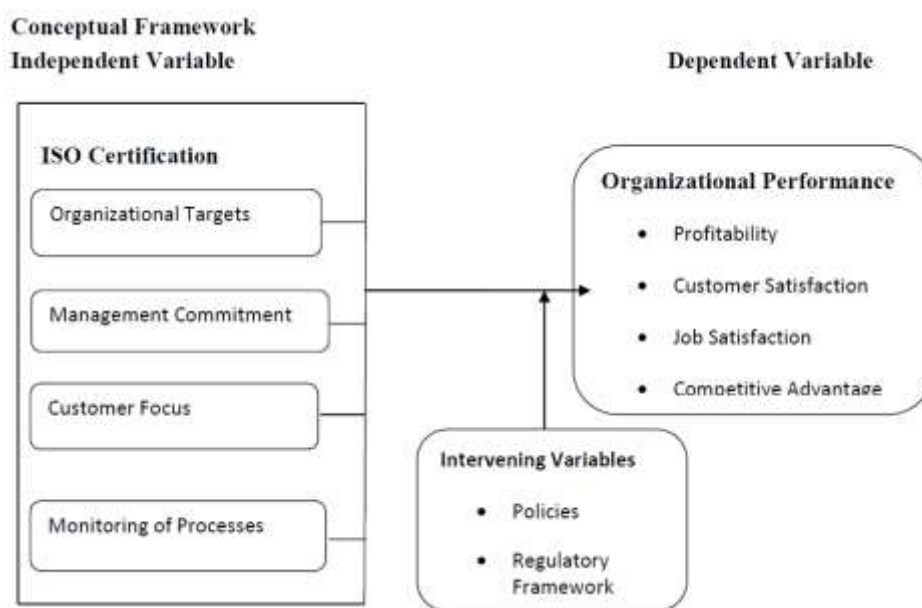


Figure 1: Conceptual Framework (Author's Conceptualization 2014)

In this research, independent variable was ISO certification while the dependent variable was organizational performance. ISO Certification was the cause while Organizational performance was the effect. Hence organizational performance was variable of primary concern because this study focused on how the variable was influenced by ISO certification. The indicators of organizational performance were profitability, customer satisfaction, job satisfaction and competitive advantage.

2. METHODOLOGY

Research Design: This study basically employed a descriptive survey research design. Through this design the researcher described the state of variables while at the same time examining the relationship between them (Korb, 2013). Descriptive survey design was appropriate to this study because it enabled the researcher to adopt both qualitative and quantitative approaches to data collection.

Target Population: In this research, the study population was 1,120 employees of five ISO Certified state corporations in Kisumu town; Kisumu County because this was the accessible population from which research sample was selected. All the five organizations were targeted so as to increase the sample size and hence reduce the systematic variance and increase the probability that the sample would represent the target population.

Sampling Design: Systematic random sampling was employed in this research in order to obtain a sample that adequately represented the target population on the variables (Korb, 2013). The sampling method was used because it gave equal probability to each respondent.

Sampling Size: Using Krejcie and Morgan a total of 275 respondents which was 24.55% of the target population were sampled for the study. This sample had a margin of error of about 5.1% at the confidence level of 95% (Babbie, 2010). The sample was appropriate for this study because it would reduce the standard error and increase the probability of the sample being representative of the population.

Data Collection Instruments: In this research the instruments that were developed to measure constructs were research questionnaire and document analysis checklist. The researcher used questionnaires which were administered to respondents who were the staff of the five sampled organizations to gather both qualitative and quantitative data. All respondents were expected to answer identical questions in the same order. The data expected from these questionnaires was mainly quantitative or numerical because of the design of questionnaires. Document analysis checklist was used to collect secondary data mainly from customer and employee satisfaction surveys reports, revenue collection reports, and information on collection of debts. The expected data from document analysis was mainly quantitative.

Pilot Testing: Pilot-testing of the research instruments was conducted at Kenya bureau of Standards, Kisumu office. Kenya Bureau of Standards, Kisumu office, was considered appropriate for pilot test because it is a state corporation and it is also ISO certified implementing similar programmes as the target organizations. During the pilot study, 30 respondents equivalent to 10.9% of the sample size were requested to fill the questionnaires. After fourteen days, the same respondents were requested to fill the questionnaires again without prior notification. The results of the two tests were correlated and a coefficient of 0.89 was obtained. During the pilot testing discrepancies such as unclear instructions, repeated and confusing questions were removed before the final instrument was reproduced.

Reliability of the Study: Reliability coefficient of 0.80 and above was targeted in this study because this would indicate a high degree of reliability of data (Mugenda, 2008). Reliability was improved by using identical instructions, increasing the number of questions and ensuring the questions covered the entire range of parameters. Reliability was ensured by carrying out a pilot study.

Validity of the Study: Content validity of the study instruments was ensured through peer review of the instruments through fellow masters students as well expert judgment from the supervisors. To improve on the validity, instruments were administered during the pilot test and the validity of the data obtained was checked. Coefficient of 0.81 and above was targeted. A coefficient of 0.833 was achieved. Threats to internal validity were avoided by developing accurate instruments and standardizing data collection procedures while threats to external validity were reduced by using systematic random sampling to obtain the respondents.

Data Analysis: After data collection, the researcher processed the data by cleaning and then coding. For quantitative data, they were analyzed by using descriptive and inferential statistics. MS Excel and SPSS 18.0 were used to aid in the analysis of the data. For qualitative data, the researcher analyzed using content analysis.

3. FINDINGS

Response Rate: A total of 275 research questionnaires were developed to be used for data collection. Out of these a total of 229 questionnaires were dully filled and returned for analysis giving a response rate of 83.27% which was adequate for data analysis because it had a margin of error of 5.75% at the confidence level of 95%. This high return rate was as a result of co-operation received from the management and more especially the Human Resource and Management Departments of the organizations that were used for the study.

Factors Contributing to Improvement in Organizational Performance

Table 1: Factors Contributing to Improvement in Organizational Performance

Parameter	Average	Variable	Average
Quality Objectives	4.1198	Organizational Targets	4.0044
Service Charter	3.917		
Appropriate Communication Channels	3.8987	Management Commitment	3.7533
Allocation Resources to QMS	3.6833		
Measurement of Customer Satisfaction	3.6384	Customer Focus	3.6667
Delivery of Service Proficiency	3.6770		
Internal Audits	3.8199	Monitoring of Processes	3.7773
Data Analysis	3.7555		

The study sought to show each of the variables of ISO certification contributed to organizational performance. Respondents rated organizational targets variable as the highest factor contributing to improvement organizational performance at 4.0044(80.1%) while customer focus was the lowest at 3.6667(73.3%). Management Commitment and Monitoring of Processes contributed 3.7533(75.1%) and 3.7773(75.5%) respectively. The parameter that contributed the most was quality objectives at 4.1198(82.4%). The total contribution of ISO Certification was 3.8004 which translated to 76%.

Improvement of Performance since the Organization became ISO Certified**Table 2: Improvement in Organizational Performance**

Parameter	Average Value	Variable	Average Value
Revenue Growth	3.4500	Profitability	3.4532
Compliance to Budget	3.5354		
Cost Reduction	3.4469		
Reduction in Financial Malpractices	3.4867		
Customer Satisfaction	3.5605	Customer Satisfaction	3.6277
Handling Customer Complaints	3.7143		
Customer Awareness Creation	3.6211		
Service Delivery Timelines	3.6376		
Effectiveness of Communication	3.8106	Job Satisfaction	3.4490
Staff Competencies	3.4839		
Employee Training & Growth	3.2188		
Employee Personal Goals Alignment	3.3111		
Operational Efficiency	3.5179	Competitive Advantage	3.4277
Automated Processes	3.4545		
Compliance to work-plans	3.6306		
Innovativeness	3.3352		

The study also sought to know how organizational performance had improved since the organizations became ISO certified. Customer satisfaction was the most improved performance variable at 3.6277(72.6%) while effectiveness of communication was the most improved parameter with a value of 3.8106(76.2%). The total performance index stood at 3.4894 which translated to 69.8%.

Document Analysis**Table 3: Document Analysis**

Variable	Description	Ratio	Weight of 5	Average Value
Profitability	Ratio of revenue and revenue targeted	0.743	3.710	2.8550
	Ratio of debts collected and total debts	0.400	2.000	
Customer Satisfaction	From previous customer satisfaction survey	0.798	3.990	3.990
Employee Satisfaction	From previous employee satisfaction survey	0.710	3.5480	3.5480
Competitive Advantage	Increase in customers served	1.211	6.055	4.925
	Increase in service stations	0.759	3.795	

Document analysis was done so as to check the change in organizational performance as a result of ISO certification. Competitive advantage had the highest value of change at 4.9250(98.5%). This was followed by Customer Satisfaction at 3.990(79.8%), while employee satisfaction had a value of 3.5480(71%). Profitability had the least value of 2.8550(57.1%). Average index of change in performance as per document analysis was 3.830 which was 76.59% which indicated a positive change in the positive direction.

Regression Analysis

The cases were 229 and hence the ratio of cases to independent variables was 57.25 to 1. This satisfied both the minimum and the preferred sample size for multiple regression making regression analysis appropriate. Regression analysis was therefore used to test the model-fit, statistical significance and to determine the estimated model coefficients.

Model-Fit**Table4: Model Fit Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 ^a	.606	.598	.513782

Predictors: (Constant), Monitoring of processes, Management Commitment, Organizational Targets, Customer focus

The value of R (multiple correlation coefficients) was 0.778 which indicated a good level of prediction of organizational performance by the combination of four variables of ISO certification. R Square or Coefficient of determination was used to explain the proportion of variance in the dependent variable explained by independent variables. 60.6% of variability in organizational performance in State Corporations in Kenya was attributed to the combination of Monitoring of processes, Management Commitment, Organizational Targets and Customer focus. This indicated that 39.4% of the organizational performance is attributed to other factors not investigated in this research.

Regression Equation**Table 5: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.590	4	22.398	84.848	.000 ^a
	Residual	58.338	221	.264		
	Total	147.928	225			

a. Predictors: (Constant), Monitoring of processes, Management Commitment, Organizational Targets, Customer focus

b. Dependent Variable: Performance

ANOVA table was used to check how well the regression equation fitted the data. The table indicated that the regression model fitted the dependent variable significantly well. The significant value was less than 0.05 which indicated that the regression model statistically significantly predicated the dependent variable and hence it was a good fit for the data and there was a linear relationship among the variables.

Estimated Model Coefficients**Table 6: Coefficients**

Model		Un-standardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.262	.196		1.340	.182	-.123	.648
	Organizational Targets	.076	.056	.076	1.360	.175	-.034	.187
	Management Commitment	.219	.051	.225	4.253	.000	.118	.320
	Customer focus	.338	.060	.368	5.626	.000	.220	.456
	Monitoring processes	.230	.062	.245	3.697	.000	.107	.352

a. Dependent Variable: Performance

The model to predict performance from Organizational Targets, Management Commitment, Customer Focus and Monitoring of Processes was as follows:

$$y = 0.262 + 0.076x_1 + 0.219x_2 + 0.338x_3 + 0.230x_4$$

Estimated model coefficients were used to indicate how much the dependent variable varied with an independent variable when all other independent variables are held constant. The research findings resulted in a constant of 0.262. This means that the organizational performance (y) in state corporations was at 0.262 when all the independent variables of Organizational Targets (x_1), Management Commitment (x_2), Customer focus (x_3) and Monitoring of processes (x_4) were at zero. Taking all other independent variables at zero, unit increase in Organizational Targets will lead to a 0.076 increase in performance; a unit increase in Management Commitment will lead to a 0.219 increase in performance; a unit increase Customer Focus will lead to a 0.338 increase in performance while a unit increase in Monitoring of Processes will lead to 0.230 increases in organizational performance of ISO certified state corporations in Kenya.

4. SUMMARY

The general objective of this research was to establish the role of ISO Certification on Organizational Performance in state corporations in Kenya. The probability of F statistic of value 84.848 for the overall relationship was greater than 0.000 and less than the level of significance of 0.05. The null hypothesis that there was no relationship between the set of dependent variables and the independent variables ($R^2=0$) was therefore rejected. The research hypothesis that there is a statistically significant relationship between the set of independent variable and the dependent variable was therefore supported. Multiple R for the relationship between the set of independent variables and the dependent variable was 0.778 which indicated a strong relationship.

The first specific objective of the study was to examine the relationship of Organizational Targets to Organizational Performance. The Pearson Correlation co-efficient was 0.546 which indicated that there was a positive and moderate relationship between organizational targets and organizational performance. The significance level was less than 0.05. Hence, the null hypothesis that there is no significant relationship between Organizational Targets and Organizational Performance was rejected and concluded that there is statistically significant relationship between organizational targets and performance. The correlation co-efficient associated with organizational targets was positive which indicated that there was direct relationship with organizational performance meaning that change in organizational targets was associated with change in organizational performance in the same direction. Regression analysis resulted in a model coefficient of 0.076 for organizational targets.

The study also sought to examine the relationship between Management Commitment and Organizational Performance in State Corporations in Kenya. The correlation coefficient was 0.596 while the significance level was 0.000 which was less than the level of significance of 0.05. The null hypothesis that the slope associated with management commitment is equal to zero ($b=0$) was therefore rejected and concluded that there is a statistically significant relationship between management commitment and organizational performance. The R^2 value was 0.356 which indicated that management commitment explained 35.6% of variability in organizational performance. A further analysis through regression analysis produced a coefficient of 0.219 which meant that when the other independent variables are at zero, management commitment variable resulted in 0.219 increase in performance.

In addition, the study sought to find out the effect of Customer Focus on Organizational Performance. For the independent variable of customer focus the Pearson Correlation co-efficient was 0.717 while the significance level was 0.000 which was less than the level of significance of 0.05. Hence the null hypothesis that there is no relationship between Customer Focus and Organizational Performance, that is, b is equal to zero ($b=0$) was rejected and concluded that there is a statistically significant relationship between customer focus and organizational performance. Since the correlation coefficient was positive it meant that change in customer focus variable let significant change in organizational performance. The R^2 value was 0.514 which meant that customer focus variable explained 51.4% of variability in organizational performance. The regression model coefficient of customer focus variable was 0.338 which indicated that when the variables are at zero, customer focus variable produced 0.338 increase in organizational performance.

Finally, for the independent variable of Monitoring of Processes the Pearson Correlation co-efficient was 0.688 and the significance level was less than 0.05. Thus the null hypothesis that there is no significant relationship between Monitoring of Processes and Organizational Performance, that is, the slope associated with monitoring of processes is equal to zero ($b=0$) was rejected and concluded that there is statistically significant relationship between Monitoring of Processes and Organizational Performance. R value was 0.688 which indicated a relatively high degree of correlation between monitoring of processes and organizational performance. R^2 value was 0.473 while the regression model coefficient

was 0.230 which meant that 47.3% of variability in organizational performance was explained by monitoring of processes variable which contributed to 0.230 increases in organizational performance when the other factors were held constant at zero.

5. CONCLUSION

Correlation analysis revealed a relatively strong positive relationship between ISO Certification and Organizational Performance. Independent variables: - Organizational Targets, Management Commitment, Customer Focus and Monitoring of Processes that were correlated with the dependent variable of Organizational Performance resulted in positive correlations co-efficient. A further test through regression analysis indicated that there is a cause-effect relationship between the two variables. The four independent variables had positive Pearson Correlation Co-efficient which ranged from moderate to strong. The correlation was statistically significant while the regression model co-efficient were also positive and significant. This therefore means that ISO certification plays a positive role on Organizational Performance in state corporations in Kenya.

6. RECOMMENDATIONS

Although the correlation coefficients between ISO Certification variables and Organizational were positive and significant, they were not perfectly positive. The R square values were not 1.00. This means that the predictive ability of ISO Certification was not perfect and strong enough. A further research should be carried out in order to establish the other factors that explain the percentage of variability in organizational performance that was not explained by ISO variable that were used.

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