Influence of Seizing Capability on Sustainability of Water Service Providers in Kenya

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Abstract
Sustainability of water and sanitation services is a global challenge amidst a projection that rising water scarcity will cost an estimated 6% of the Gross Domestic Product in Kenya by 2050, adversely impacting agriculture, health and employment. This study examined influence of seizing capability in predicting the level of sustainability of Water Service Providers (WSPs) Kenya. The study used a positivism research paradigm, a cross-sectional descriptive research design, targeting 332 managers from 88 water service providers (WSPs) in Kenya. Primary data was collected using a structured questionnaire while secondary data using secondary data collection sheet. The tool was evaluated for internal consistency using Cronbach alpha coefficient and for numerical construct validity, using Kaiser-Meyer Olkin Coefficient from Principal Factor Analysis. The weighted data from 67 WSPs was tested for gaussian distribution, collinearity, pairwise linearity, outliers and independence. Simple Linear Discriminant Analysis was used for testing the hypothesis. The study found that Linear Discriminant analysis model had an associated canonical correlation of 0.919 and Wilks' Lambda of 0.156 with adequately differentiated functions at group centroids of (2.528), (.207) and 3.156 respectively for the three categories of sustainability. The study further found that the seizing capability explained approximately 84.45% of the variations in sustainability classifications among WSPs in Kenya. The hit ratio 94.0% for the confusion matrix and 92.5% Jack-Knife correct classifications. The study concluded that seizing capability has a statistically significant discriminating power on sustainability of WSPs in Kenya. The study recommends that WSPs should adopt best practices in project implementation and reporting projects, schedule performance for all innovation projects, adequately fund all innovative projects approved as a firm's policy and ensuring that water coverage becomes one of the strategic focus areas in the medium- and long-term planning horizon as a key strategy towards driving firms' sustainability.

Keywords: sustainability, seizing capability, linear discriminant, water service providers.

1.0 Introduction

1.1 Background of the Study

Low levels of access to clean drinking water and safe sanitation remains a widespread global challenge. In order to progressively achieve the targeted access levels to both sanitation services and quality drinking water, sustainability of WSPs is pivotal (Union, 2015). These institutions operate within a regulated framework. They are also known to face various challenges and pressures (WASREB, 2023). It is reported that "sub-Saharan Africa is home for 50% of the extremely poor globally, with the proportion ranging from 36% to 58%" (World Bank, 2021). While the large majority of these individuals live in rural areas, it is noteworthy that poverty is also an urban phenomenon (Jain, 2021). Increased access to water presents inherent economic opportunities and offers a pathway out of poverty (World Bank, 2018).

One of the critical areas of focus for Agenda 2063 is ensuring access to basic services especially safe sanitation and clean drinking water for all Africans. According to Agenda 2063, the African Union aims to ensure provision of adequate and equitable levels of water for all by the year 2030. Agriculture stands out as the dominant sector among Kenya's seven economic pillars. Transforming agricultural water management to empower farmers and adapt to changing conditions requires innovative and accountable approaches (World Bank, 2021). According to the Water Act 2016, "the responsibility for providing water services in Kenya is mandated to WSPs which are licensed and regulated by WASREB" (WASREB, 2023). The WSPs are fully owned by County governments, reflecting the devolved function of water service provision as per the Constitution of Kenya. Hence, Public water companies are the institutions mandated to facilitate appropriate delivery of efficient services to consumers. Firm sustainability, in the context of WSPs in Kenya, implies the ability of a WSP to consistently provide high-quality water services in line with regulatory standards, operate efficiently with optimal resource utilization and economic viability while maintaining operational stability over time. This includes the capacity to meet operation and maintenance costs, effectively manage non-revenue water, ensure financial self-sufficiency and adapt to emerging challenges while working towards achievement of sector goals and the sustainable development of the community it serves (WASREB, 2023). Sustainability in water services is imperative for ensuring the long-term availability of water resources and the strategic viability of WSPs, particularly in resource-constrained environments like Kenya. A strategic emphasis on firm sustainability involves balancing economic, social and environmental considerations to enhance the resilience and effectiveness of WSPs over time. This approach is aligned to the broader goals of sustainable development, particularly SDG 6, which aims to ensure the availability and sustainable management of water and sanitation for all" (United Nations, 2015).

1.2 Problem Statement.

The sustainability of water and sanitation services is categorized as a global problem. Water and sanitation is ranked top six in the UN's seventeen sustainable development goals and an enabler to the achievement of all the other SDGs. Watsan sustainability involves improved access, acceptable water quality against growing demand. Access to Watsan is a primary

challenge globally due to its multifaceted nature. At the global level, Africa has the lowest freshwater resources at 9%, followed by Europe at 15.5%, then Asia at 28% while America has the highest (45%). It is documented that the sustainability challenge of WSPs is deeper from a demographic point of view with 87% in the rural Africa experiencing poor access to water compared to 51% in urban populations. While the world is focused on reaching the 2030 water target, Sub-Sahara Africa lags behind significantly.

Kenya's ambitious Vision 2030 Development Agenda anticipates achievement of significant economic growth and improvement of the nation's overall well-being. Improving firm sustainability and access to water services is a major commitment of the country. Access to water services stands at 59%. Despite the rigorous water sector reforms which has achieved improvements, the challenges on coverage, quality and reliability still persist. Additionally, there is limited capacity of institutions in the sector to discharge their mandates coupled with, elevated levels of Non- Revenue Water (NRW) adversely affecting financial viability of sanitation and water companies in Kenya. Access to reasonable sanitation and clean water services is deemed a vital component of poverty reduction and public health improvement. Kenya is classified as a water scarce country. It is projected that rising water scarcity will cost an estimated 6% of the GPD by 2050 due to its impacts on agriculture, health and employment. To thrive and achieve superior performance, these Watsans should create and leverage on dynamic capabilities which support them to sense and seize market opportunities and transform or reconfigure their resource base effectively. Additionally, the strategic orientation of WSPs, particularly their competition orientation and customer orientation, can significantly influence their performance outcomes and in turn sustainability (Kiiru, 2015). Despite the fact that dynamic capabilities and strategic orientation for WSPs are deemed so important, a research gap exists in understanding how these variables interact and influence firm sustainability within the context of regulated WSPs in Kenya. Therefore, this study focused on regulated public WSPs in Kenya seeking to fill the gap by exploring the effect of seizing dynamic capabilities on firm sustainability. The study utilized a discriminant analysis model aiming to provide insights focusing on the practices utilized by public WSPs in Kenya, aimed at enhancing sustainability. The broad goal is to determine if seizing capability of a firm can help in predicting if it will meet sustainability standards of the regulator (WASREB) in the long run consequently improving sustainability of WSPs in Kenya.

1.3 Literature Review

1.3.1 Stakeholder Theory

Stakeholder Theory, which was developed by Freeman (1980), opines that firms are accountable to a wide range of stakeholders alongside shareholders with a variety of interests and influence in the firm's activities and decisions. Stakeholder Theory states that firms need to put into consideration the needs, expectations, and concerns of each of the stakeholders, comprising of communities, employees, suppliers, customers and regulatory bodies. By recognizing and managing these diverse stakeholder interests, organizations can attain long lasting success and firm sustainability. The Stakeholder theory guided in understanding the relationship between the water services providers and their stakeholders.

1.3.2 The Triple Bottom Line Model

The Triple Bottom Line (TBL) Model was developed by Elkington in 1994 as a framework for evaluating business success beyond traditional financial metrics. The model emphasizes a three dimensional approach to sustainability, focusing on economic, environmental and social performance (Elkington, 1997). It challenges firms to balance economic growth, environmental stewardship, and social well-being, arguing that long-term sustainability can only be achieved when these three dimensions are integrated into corporate decision-making (Zaharia & Zaharia, 2021)

1.3.3 Dynamic Capability Theory

Teece et al. (1997) assert that dynamic capabilities stress on two aspects; the volatility of business environment ('dynamic') and the part played by strategic management in adjusting to or adapting, integrating and transforming the business external and internal skills, competencies and resources towards the environment ('capabilities'). The theory lays emphasis on the significance of an organization's ability to sense, seize, and transform or reconfigure opportunities and threats resulting to sustainable competitive advantage, excellent performance and firm sustainability. The theory remains a fundamental concept in explaining how firms can adjust and thrive in dynamic and uncertain environments. In summary, dynamic capabilities framework is an appropriate theoretical framework for studying firms' identification and response to external business environment changes, those which could drive sustainability. These study findings contribute to the current existing literature by testing if seizing identifying as a subset of dynamic capability could predict sustainability of sustainability of water service providers in Kenya.

1.4 Empirical Literature

A study conducted by Lee and Poh (2023) in Malaysia had findings highlighting the substantial mediating role played by dynamic capabilities in sensing, seizing and transforming. These dynamic capabilities were found to be instrumental in enhancing organizational performance, indicating their importance in the logistics sector. The outcomes of this scrutiny unveiled that the cultivation of dynamic capabilities within a firm can substantially enhance its organizational performance. In a separate cross-sectional survey orchestrated by Iqra and Ahmed (2019 in Pakistan findings of which provided compelling evidence that dynamic capabilities serve as predictive factors for firm performance were generated. Kitenga, Kilika and Muchemi (2020) carried out a study in Kenya, targeting 70 food manufacturers, on exploring the mediating effect of organizational competence on the relationship between dynamic capabilities and firm performance. The study concluded that there existed a significant direct effect of dynamic capabilities on firm performance. They also found out that there existed a partially mediating effect of organizational competence on the relationship between dynamic capabilities and firm performance. A study carried out in Kenya by Kiiru (2015) on "Dynamic capabilities, strategic orientation and competitive advantage of small and medium-retail enterprises in Kenya" noted that there exists a significant mediating effect of Strategic orientation on the relationship between seizing capabilities and Competitive advantage of small and medium-retail enterprises exists. The above reviewed studies are mainly on private sector organizations and not public sector

especially the water sector; the studies cover several geographical contexts but they lack a focus on public water utilities in Kenya. None of the studies reviewed adopts a linear discriminant analysis. Further, none of these studies were carried out in Kenya's water sector. This literature advances that it is expected using linear Discriminant model (LDA), the scale of WSPs sustainability can be predicted statistically by the level of seizing capability of respective water service Providers.

1.5 Conceptual Framework of the Study

Seizing capability was conceptualized as the seizing capability for sustainability categories of Water Service Providers in Kenya.
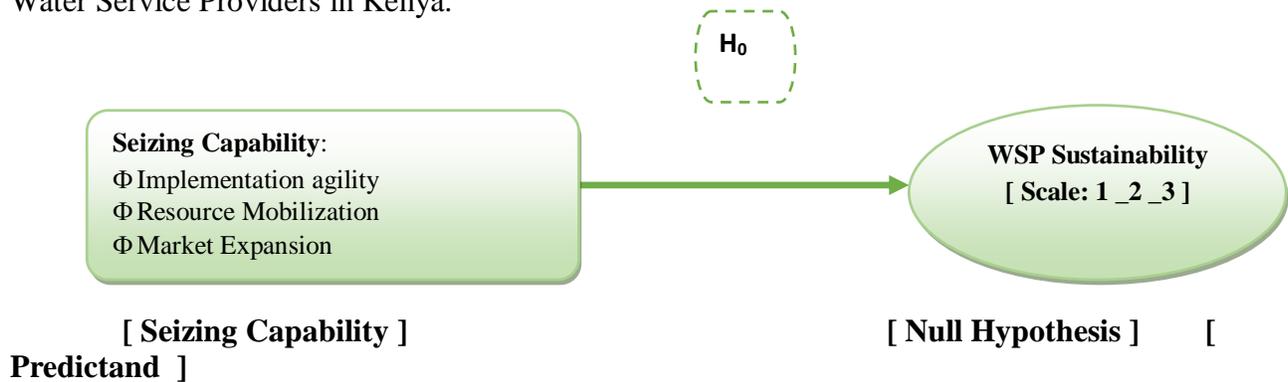
H_0

Seizing Capability:
Φ Implementation agility
Φ Resource Mobilization
Φ Market Expansion

WSP Sustainability
[Scale: 1 _2 _3]

[Seizing Capability]   **[Null Hypothesis]**   **[Predictand]**

Figure 1: *Conceptual Framework for Seizing Capability and Sustainability among WSPs in Kenya*

1.6 General Objective

The general objective of this study was to assess the influence of seizing capability on sustainability of public water service providers in Kenya.

1.7 Research Hypothesis

This study tested the hypothesis that H0: Seizing capability is not statistically significant in predicting sustainability of Public Water Service Providers (WSPs) in Kenya.

1.8 Research Gaps

Many studies have been carried out to analyze the performance and sustainability of water sector in Kenya. The studies have assumed an explanatory approach to the problem of sustainability. This study therefore supports seeking an answer to the strategic question; does seizing capability predict sustainability of water service providers in Kenya? The results can provide WASREB, managers of the WSPs and other stakeholders with foresight on whether seizing capability practices do matter to drive sustainability of WSPs.

1.9 Significance of the Study

The research paper provides insights among the sector players in Kenya, in development of the seizing capability policies, and regulations for driving sustainability among Water Service Providers in Kenya.

2.0 Method

2.1 Philosophy, Research Design and Measurement and Data collection

This study applied a positivism research paradigm, a cross-sectional descriptive research design. The unit of response was four senior officers from each of the Water Service Providers; chief executive or managing director and manager(s) in charge of corporate services, technical services and internal audit. The target population in this study consisted of the 88 Water Service Providers in Kenya, licensed by Water Service Regulatory Board (WASREB) as at December 2022. A census approach was taken in this study. Primary data (for the Seizing_capability) was collected using a structured questionnaire through a drop and pick method. Measurement in primary data was based a five-point Likert scale with the equivalences of agreement to 'no extent at all, to a small extent, to a moderate extent, to a high extent and to a very high extent (Sekar & Anandakumar, 2011). A secondary data collection sheet was utilized to summarize secondary data for the predictand. The study utilized the Statistical Package for Social Sciences (SPSS) version 26 and Python and a simple linear discriminant analysis model for inferential analysis.

2.2 Reliability and Validity of Data Collection Instrument

The ten measures used to measure seizing capability achieved a coefficient of 0.764 while the nine measures for sustainability generated a coefficient of 0.815. and the results are presented in Table 1. Confirmatory Factor Analysis (CFA) was used to analyze the construct validity. Kaiser-Meyer-Olkin (KMO) coefficient of 0.752, Chi- Square of 127.964, 45 degrees of freedom and associated p-value of $p<0.001$ was generated for the seizing capability and a KMO of 0.831, Chi-Square of 1538.527, 28 degrees of freedom and an associated p-value of $p<0.001$ for sustainability measures. Confirmatory Factor Analysis (CFA), varimax rotation generated 4 components for seizing capability and one for the sustainability with Rotations Sums of Squared Loadings (RSSL) of 77.901% and 67.8655% respectively. The factor loadings range implies that all measures for the respective variables were greater than 0.400 threshold for minimum acceptable factor loading for quality measures.

Table 1: Internal Consistency and Numerical Construct Validity Test Output

Variable	Cronbach Alpha Coefficient	KMO	Chi-Square & p-value	p-value	Rotations Sums of Squared Loadings (%)	Number of Components	Factor Loadings Range
Seizing Capability	0.714	0.764	1227.964	0.000	77.910	4	0.877 - 0.439
Sustainability	0.815	0.831	1538.527	0.000	67.8655	1	0.916 - 0.563

2.3 Data Analysis and Presentation of Results

Descriptive analysis (means and standard deviation), test of regression assumptions and Linear discriminant analysis were carried out. Seizing capability and sustainability achieved a mean of 3.05 and standard deviations of 1.356. Sustainability's nine measures achieved mean and standard deviations of: water coverage (58.3563%, 22.14), drinking water quality (81.62%, 16.9), hours of supply (16.55 hours, 5.03 personal expenditure % of operational and maintenance costs (1.721%, 0.35), operational maintenance cost % of coverage (96.268% ,16.02), revenue collection (61.845%, 7.35), non-revenue water (2.690%, 0.812), and staff productivity (92.27%, 0.0678), metering ration (67.000, 10.67). The simple linear discriminant equation used in this study was in the form; $Df\_WSP\_Sust = \alpha + V_1X_1 + \varepsilon;$ where Df was WSP_Sustainability, the predictand, α denotes the constant level of sustainability unaffected by the Seizing_capability variable, V_1 represents the discriminant coefficient for WSP's seizing capability. This equation is supported by Montgomery, Peck, & Vining, 2001.

3.0 Results and Discussions

3.1 Response Rate

This study distributed three hundred and thirty-two (332) questionnaires, four to each WSP. Out of the 332 questionnaires distributed, 300 (from 75 WSPs) of them were properly filled and returned, giving a response rate of 90.36%. However, the study did not access secondary data from eight out of the seventy-five WSPs and hence were dropped from further analysis. This response rate was deemed as adequate for this study (Charandrakandan, Venkatapirabu, Sekar & Anandakumar, 2011).

3.2 Test of Linear Discriminant Analysis Assumptions

Chatterjee & Simonoff (2013) advocate that prior to hypothesis testing for ratio-scaled data, it is crucial that statistical assumptions should be evaluated. Test of Gaussian Distribution, test of independence and test of linearity were carried out.

3.2.1 Test of Normality for Sustainability

The twelve measures for sustainability and the nine measures for seizing capability were weighted and each subjected to a Q-Q plot. The Kolmogorov- Smirnoff (K-S) statistics are presented in Table 2.

Table 2: Normality Distribution test for Sustainability and Seizing Capability

Measure	Kolmogorov- Smirnoff	
	Statistic	Sig.
Sustainability	0.1066	0.3016
Seizing capability	0.0818	0.6288

Table 2 shows that seizing capability had a K-S tests statistic of 0.0818 and a p-value of 0.6288. On the other hand, sustainability had a test statistic of 0.1066 and associated p-values of 0.3016. These K-S tests statistics point that the two variables assumed a gaussian distribution. As such Linear Discriminant Analysis (LDA) could be carried out (Garson, 2012; Shapiro & Wilk, 1965)

3.2.2 Test of Autocorrelation for Seizing Capability

For this test, a Durbin-Watson d statistics of 1.909 was extracted, confirming no autocorrelation. Based on this statistic, the assumption of absence of autocorrelation in the parameters measuring seizing capability was confirmed. (Argyrous, 2011).

3.2.3 Test of Outlier and Test of Homoscedasticity

This test of outlier for the study seizing capability and WSP sustainability was carried out using violine plots. The output is presented in Figure 2 below. The results Figure 2 show a bar cutting through the violine plot, and the interquartile range for the violin plots indicated that the medians were not affected by the extreme values in each of the variables. Based on this output, LDA linear model was deemed appropriate for testing the study hypothesis.
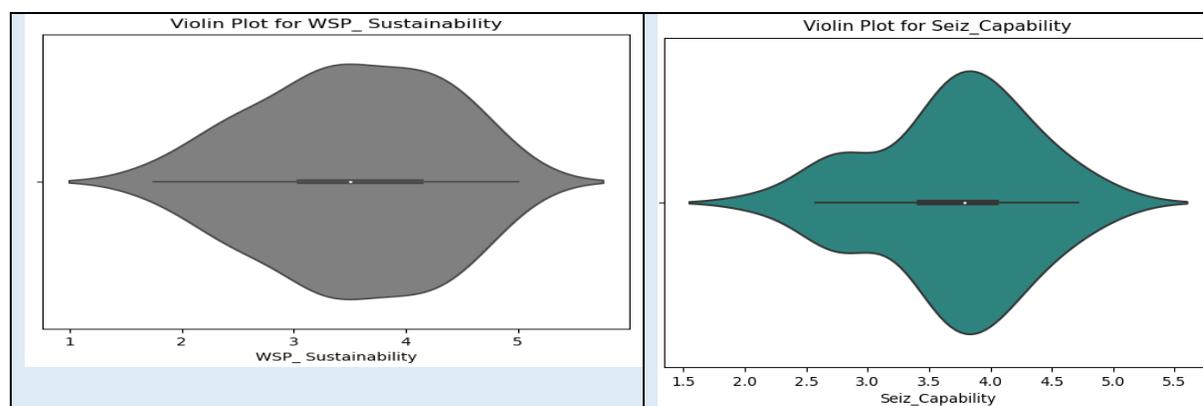

Figure 2: Violin Plot for WSP_ Sustainability and Seizing _Capability

3.3 Inferential Results

In order to identify unique categories of sustainability, the scores of the respondents from sixty-seven (67) WSPs were weighted. The weighted scores were grouped into three with the thresholds [IF(Y'i>=12, "3", IF (Y'i >=9,"2", IF Y'i<9, "1". Based on this logic formulae, three categories of sustainability were adopted. These categories were labeled as "Good", "Acceptable" and "Not Acceptable" in the rating scale by Water Sector Regulatory Board (WASREB) impact report 2021/22. Using SPSS, Linear Discriminant Analysis (LDA) was used to test the null hypothesis H_01: ***Seizing capability is not statistically significant in predicting sustainability of Public Water Service Providers (WSPs) in Kenya.*** The results overall configuration of the LDA output, Table 3.

Table 3: Group Statistics and Test of Equality of Means- Seizing_capability

Group Statistics					
WSP_Sustainability		**Mean**	**Std. Deviation**	**Valid N (listwise)**	
				Unweighted	Weighted
1	Seizing_capability	2.69507	0.339977	23	23.000
2	Seizing_capability	3.35317	0.328527	24	24.00
3	Seizing_capability	4.30690	0.079431	20	20.00
Total	Seizing_capability	3.41195	0.707823	67	67.000
Tests of Equality of Group Means					
	Wilks' Lambda	F	df1	df2	Sig.
Seizing_capability	0.156	173.658	2	64	0.000

The results in Table 3 presents the group statistics for the seizing capability across the three different classifiers of sustainability. These statistics show that seizing capability is a good classifier in the Linear Discriminant Model as the means are fairly different and the standard deviations are low, (<0.079431) for all the three categories of WSP sustainability.

The Table further presents the test of equality of group means for seizing capability. The Tables shows that Wilk's Lambda (Λ) was 0.156 [($\rightarrow$ 0)], F statistics of 173.658 and an associated p-value of $p< 0.001$. This means that a significant proportion of the variations in the WSP sustainability is explained by seizing capability among WSP in Kenya. This means that seizing capability has a strong discriminant power in the LDA model. In addition to these findings, the associated summary of Canonical Discriminant Function coeficients were generated and the results are presented in Table 4.

Table 4: Summary of Canonical Discriminant Functions- Seizing Capability

Eigenvalues				
Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	5.427[a]	100.0	100.0	0.919

a. First 1 canonical discriminant functions were used in the analysis.

Wilks' Lambda				
Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	0.156	119.071	2	0.000

	Structure Matrix	Canonical Discriminant Function Coefficients	Functions at Group Centroids*		
	Function	Function	WSP_Sustainability		
	1	1	1	2	3
Seizing_capability (Constant)*	1.000	3.527 -12.034	-2.528	-.207	3.156

The results in Table 4 shows that the seizing capability had an Eigenvalue of 5.427[a] and an associated canonical correlation of 0.919, meaning that the discriminant function of seizing capability had high discriminant power in the different categories on sustainability. This Eigenvalue implies that seizing capability contributed a ratio of 5.427 to the between groups sums of squares to the within-group sum of squares and the overall classification accuracy of the Linear Discriminate Model of this seizing capability and sustainability. The Wilk Lambda of 0.156 (p-value of $p< 0.001$) imply that only 15.6% of the variation in the WSP sustainability categories (Good, acceptable and not acceptable categories) is not explained by the function between seizing_ capability and sustainability among Water Service Providers in Kenya. These results mean that the LDA model can explain approximately 84.4% of the variations in the different categories of sustainability. Based on these statistics, this study *rejects the null hypothesis that seizing capability is not statistically significant in predicting sustainability among Water Service Providers in Kenya.*

The Table further show that the structure matrix/ structure coefficient loadings associated with seizing capability is 1.00. This indicates that seizing capability contributes a weight of 1.00 in the discriminant model of sustainability among the three categories of WSPs -sustainability. Further, the Table shows that the seizing capability is associated with a coefficient of 3.5275, and a constant of -12.034, meaning seizing capability contributes towards the separation of the three categories of sustainability among WSPs. These statistics imply that the Linear Discriminant Model for government financing g mechanism and sustainability among STPs in Africa is.

Open_ Innovation = - 12.034 + 3.527 (Seizing Capability

The Table also shows that a well differentiated functions at group centroids for the three categories of WSP's sustainability. To visually analyze the three group's distribution, the canonical discriminant function and group means and standard deviations are presented in Figure 3.
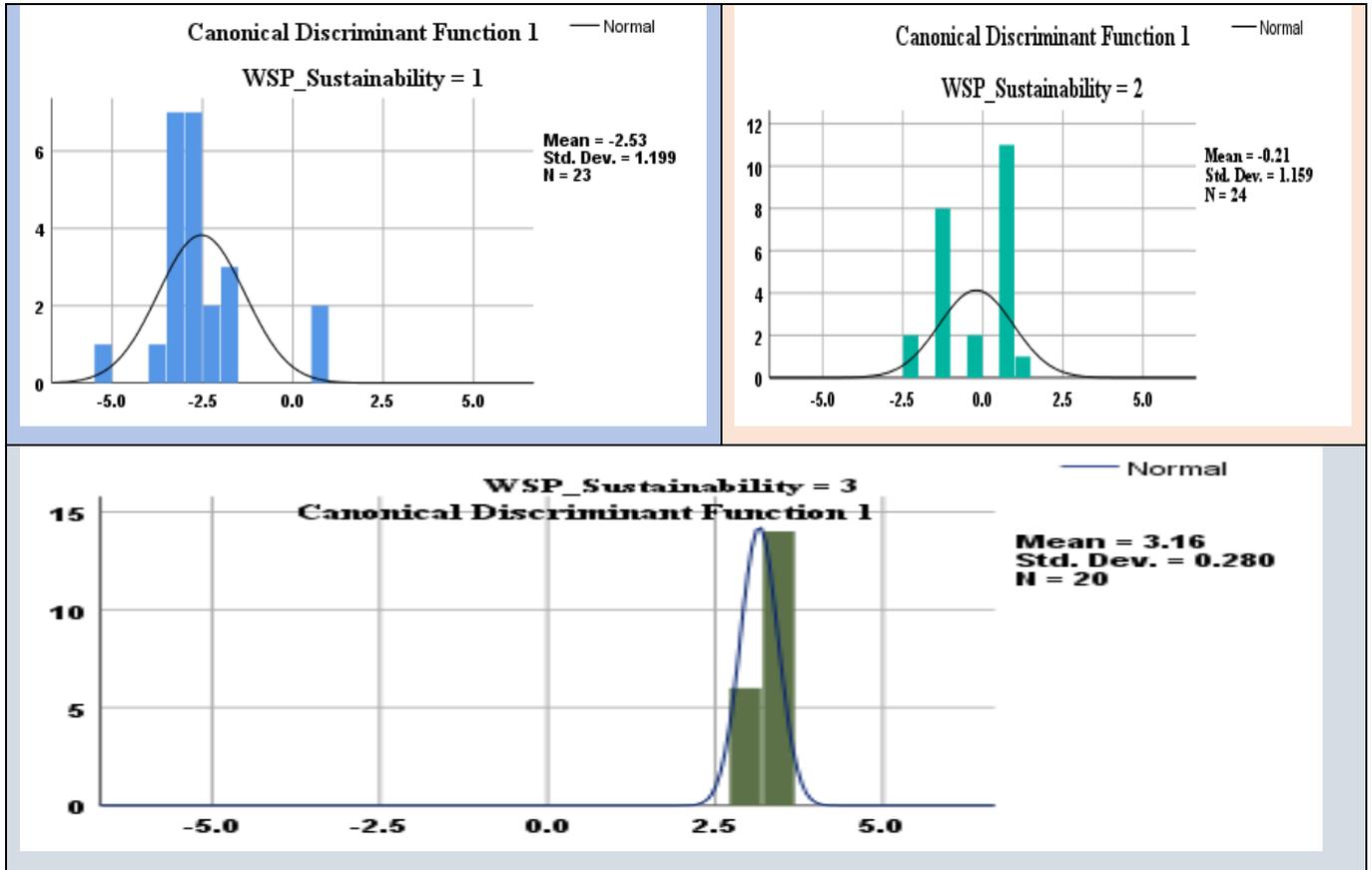

Figure 3: Separate Groups Graph and for Seizing Capability and WSP Sustainability

To evaluate the performance of the LDA function for the seizing capability, the confusion Table and the 'Jack-Knife'/ cross validated classification Table was extracted. The results are presented in Table 5.

Table 5: Confusion Matrix and Jack-Knife Classification Table for Seizing Capability

Classification Results[a,c]		WSP_Sustainability	Predicted Group Membership			Total
			1	2	3	
Original	Count	1	21	2	0	23
		2	2	22	0	24
		3	0	0	20	20
	%	1	91.3	8.7	.0	100.0
		2	8.3	91.7	.0	100.0
		3	.0	.0	100.0	100.0
Cross-validated[b]	Count	1	21	2	0	23
		2	2	21	1	24
		3	0	0	20	20
	%	1	91.3	8.7	.0	100.0
		2	8.3	87.5	4.2	100.0
		3	.0	.0	100.0	100.0

a. 94.0% of original grouped cases correctly classified.
b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.
c. 92.5% of cross-validated grouped cases correctly classified.

The table above show the observed categories of WSP sustainability and the predicted categories. The counts and the percentage of corrected predicted cases are presented in the diagonal line: 91.3 % of the cases in original count in category 1 (good), while 87.5% of those in category two (acceptable) and 100% of those in category three (not acceptable) were correctly classified. Overall prediction shows 94% correct classification in the confusion matrix and 92.5% in the cross validated scores. Seizing capability reported a hit ratio of 92.5%. This hit ratio is also greater that a hit ratio of 75% which is the minimum acceptable for a good classifier. These results imply that seizing capability is a good predictor of WSP's sustainability.

These results agree with Lee and Poh (2023) finding in a study conducted in Malaysia highlighting the instrumental role of dynamic capabilities in sensing, seizing and transforming in enhancing organizational performance, indicating their importance in the logistics sector. Kitenga, Kilika and Muchemi (2020) carried out a study in Kenya, targeting 70 food manufacturers, on exploring the mediating effect of organizational competence on the relationship between dynamic capabilities and firm performance. The study concluded that there existed a significant direct effect of seizing dynamic capabilities on firm performance. Kiiru (2015) in her study is Kenya also had findings agreeing with this study.

4.0 Conclusions and Recommendations

4.1 Conclusions

The test of equality of group means and summary of canonical discriminant functions had a Wilk's Lambdas (Λ) of $0.156 \approx 0$, Chi- Square of 173.658 and a p-value of $p<0.001$ at 95% degree of confidence. The associated canonical correlation for this variable was 0.919. Based on these statistics, this study rejected the null hypothesis that seizing capability is not statistically significant in predicting sustainability of Water Service Providers in Kenya. As such, the study further finds that seizing capability is one of the strategic practices informing sustainability of water service providers in Kenya.

4.2 Recommendations

Seizing capability can be a predictor of sustainability of WSP in Kenya. This research found that there are certain seizing practices in which firms did not score favorably despite their importance in driving sustainability. These include; adopting best practices in project implementation, reporting on projects schedule performance for all innovation projects, adequately fund all innovative projects approved as a firm's policy and ensuring that water coverage becomes one of the strategic focus areas in the medium- and long-term planning horizon. In the case of transforming capability, the firms appeared to score less favorably in some practices which included; management goodwill to re-allocate resources within projects when feasible, establishment of a functional active collaboration and linkages office and investing in culture assessments for adaptability. Policymakers and the regulator (WASREB) could closely monitor seizing practices of respective WSPs for predicting sustainability and take corrective policy enforcements where necessary to sustain the WSPs.

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