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Research Article

Change Management And Adaptation Strategies In Renewable Energy Organizations For Analyzing The Impact On Human Resources

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ABSTRACT

The purpose of this research is to investigate the role of Training & Development and Leadership Support in Talent Management and Competitive Advantage in Gujarat based Renewable Energy Organizations with special reference to Change Management and Adaptation Strategies. The study uses both quantitative and qualitative data from structured questionnaires and interviews with CEOs, HR directors, and sustainability managers. The research employs stratified random sampling in order to obtain a sample of organizations operating in the renewable energy sector of different types and sizes, which will help to determine the representativeness of the sector.

This paper has established that Training & Development and Leadership Support are the most vital in improving Talent Management and Competitive Advantage which are two significant measures of strategic HRM in the context of change. The findings of the study indicate that both the variables have a positive impact and play an important role towards enhancing Talent Management, thus enabling organizations to attract, maintain, and train employees. Although these factors also have direct positive impact on Competitive Advantage, the impact is comparatively lower, which implies that there are other external factors as well that affect Competitive Advantage.

This is further amplified by demonstrating how Change Management and Adaptation Strategies are effectively implemented by well-developed Training & Development and Leadership Support frameworks. The qualitative data supports these findings by highlighting the role of these practices as critical for managing the various risks inherent to the renewable energy sector such as regulatory changes and technological developments. The study offers practical implications for the managers and policymakers as it indicates that it is necessary to develop high-quality internal human resource management practices coupled with the assessment of the external environment to support organizational performance. This research helps to fill the existing knowledge gap on the relationship between Change Management, HR strategies and organizational performance in the renewable energy sector.

Keywords **-** Training & Development, Leadership Support, Talent Management, Competitive Advantage, Change Management, Adaptation Strategies, Renewable Energy Organizations

1 INTRODUCTION

In the context of understanding the need for strategic change thinking in the Renewable Energy Organizations in Gujarat, one needs to understand that these organizations are required to sustain and grow in the environment where the world is changing at a very fast pace in terms of economic, social, political, and technological environment. The industry that is most affected by these rapid changes is the renewable energy sector since it involves technology, policy, and market factors that significantly impact society, governments,

and businesses. For these organizations to be effective and sustain themselves, they have to be alert and adapt to the internal and external environment.

It is important to note that change is inevitable in every organisation, however, change is always seen as the abnormality or the negative which then causes either resistance or neglect (Ha, 2014). But when change is managed, executed, and aligned to the needs of the organisation, then it is a key factor to success. As the case of renewable energy shows, strategy change can lead to many effects on the firm, ranging from organizational to operational levels (Bubenik et al. , 2022). On the other hand, if changes are not well managed, then there can be problems in implementation, higher levels of resistance from employees and high costs which can pose a threat to profitability and realization of organizational objectives (Tang, 2019).

The literature shows that strategic change strongly impacts the performance of the organization (Makina & Kengara, 2018; Kim & Choi, 2022; Le & Kroll, 2017; Machimbi & Kilika, 2022). In the case of the Renewal Energy Organizations in Gujarat, both the internal and the external environment is very influential in the formulation of a sound strategic plan for change (Kujala, 2022; Dutta, 2018). As this is a highly dynamic and highly competitive market, companies that do not adapt are likely to become stagnant or fail (Rossi & Sengupta, 2022; Makina & Kengara, 2018; Capssa et al. , 2022).

The key issues that organizational managers experience in the renewable energy sector while implementing change include resistance, loss of resources and profits, dissatisfaction, and low awareness of the significance of the strategic change and adaptability within the organization. However, as it has been seen from the challenges above, studying of strategic management is important in helping organisations to assess the areas of weakness in their strategic change and adaptability process. In light of this, the present study aims to undertake a systematic review of the literature in order to understand the empirical and theoretical aspects of strategic change and adaptation, and the factors that facilitate successful strategic change, to gain insights on how Renewable Energy Organizations in Gujarat can effectively manage the challenges that characterise today's uncertain business environment.

2 REVIEW OF LITERATURE

Managing change and adaptation are critical elements in the improvement of organizational performance especially in the current dynamic business world. As stated by Rossi & Sengupta (2022), Makina & Kengara (2018), and Capssa et al. (2022), the failure to adapt and change in the organization can lead to the organization being left behind or becoming irrelevant in today's competitive market. This simply means that more often than not, there is need to review strategies in order to stay relevant in the market. It is crucial for companies to adapt to changes in the market, customers' needs, and new technologies and act quickly and efficiently to these changes (Le & Kroll, 2017; Atieno & Kyongo, 2020). Strategic change process can have a great impact on the performance of an organization especially in business process reengineering, restructuring and innovation (Atieno & Kyongo, 2020).

Moreover, the effective management is crucial in the monitoring and evaluation of the selected processes that are in line with the organization's strategy to facilitate the systematic implementation of changes and thus maintain business continuity (Bubenik et al. , 2022). In their study, Morgan et al. (2021) suggested that organisations with low reputation, which are currently operating a closed innovation model might find value in opening up the innovation process to moderate or high levels of change. However, for the companies that have a negative image, customers' involvement in the innovation process may not be Competitive advantage ous. Leick (2019) noted that Leadership Support in the market and market growth are two of the adaptive business strategies that enhance organisational performance.

The impact of the external and internal environment in shaping the strategic change and adaptation has also been described in the literature. Strategic change and adaptation is required when the context in which the firm operates undergoes changes including the market, competition, technology and the economy. Likewise, the internal factors such as organizational structure, culture, resources, capabilities and Leadership Support are also influential in the process of adaptation. Kraatz & Zajac (2015) noted that resource capacity is one of the more important factors that define strategic change. Employees' skills, motivation, and attitudes are also involved in this process (Richard, 2019; Chaudary et al. , 2015; Triana et al. , 2019; Harikkala-Laihinen, 2022; Rossi & Sengupta, 2022b).

Another research area is the link between CEO EO and strategic change; the results of which indicate that time spent by the CEO abroad has a positive effect on strategic change if the number of countries visited and cultural distance are taken into consideration (Le & Kroll, 2017; Wang et al. , 2021). Also, the five-factor model of personality has differential effects on the strategic change implementation by the CEO (Herrmann & Nadkarni, 2014). According to Capssa et al. (2022), it is established that external environment factors often affect the strategic fit and adaptation of a company, however, the company's capacity to identify opportunities for development and adapt measures of development is equally significant.

Yang (2019) pointed that environmental dynamism has a positive correlation with resource-related strategic change and overall change and financial flexibility has a significant positive moderation effect. Kujala (2022) also pointed out that among the factors that enhance strategic adaptation for the entrepreneurs, there is a focus on the development of product quality. As highlighted by Mulegwa & Imbambi (2019), Transformational Leadership Support plays a very crucial role in the process of strategic change implementation especially to the elite management groups. Richard (2019) revealed that relationship-based fault lines particularly education have a negative effect on strategic change while task-based fault lines have positive effects with environmental dynamism moderating the effects of gender and education differences.

Last but not the least, it can be said that strategic change and adaptation play a crucial role in determining the organizational performance. According to Makina and Kengara (2018), Kim and Choi (2022), Le and Kroll (2017) and Machimbi and Kilika (2022), there is a strong evidence that the efficiency of strategic change leads to improvement of organizational performance. Also, the study establishes that the use of strategies enhances performance while the use of resistance to change reduces performance (Makina & Kengara, 2018). Bundi et al. (2016) prove that strategic change, together with visionary Leadership Support, increases organizational performance. Strategic change and business adaptability with regard to market Leadership Support and expansion are essential for enhancing organisational performance (Leick, 2019).

3 AIM OF THE RESEARCH

The purpose of this study was to determine the relationship between Training & Development and Leadership Support on Talent Management and Competitive Advantage in Renewable Energy Organizations in Gujarat. More specifically, this research sought to establish the following questions: how do these organizational practices enhance talent management and development and how do they shape an organisation's capability to sustain competitive advantage in the dynamic and growing renewable energy sector. Thus, the relationships identified in the study aimed at providing practical recommendations for managerial and policy decision-makers in enhancing organizational performance and sustainability.

4 RESEARCH HYPOTHESES

H1: There is a significant positive relationship between Training & Development and Talent Management within Renewable Energy Organizations in Gujarat.
H2: There is a significant positive relationship between Leadership Support and Talent Management within Renewable Energy Organizations in Gujarat.
H3: There is a significant positive relationship between Training & Development and Competitive Advantage within Renewable Energy Organizations in Gujarat.
H4: There is a significant positive relationship between Leadership Support and Competitive Advantage within Renewable Energy Organizations in Gujarat.

5 RESEARCH METHODOLOGY

This research work used both the quantitative and qualitative research approach in order to have a broader view of the effects of Training & Development and Leadership Support on Talent Management and Competitive Advantage in REOs in Gujarat. The study was carried out with the purpose of offering practical recommendations to the managers, HR specialists, and policy makers, who are interested in the improvement of organizational effectiveness in this fast growing field.

5.1 Research Design

The research was conducted in such a way that it would be able to establish the correlation between variables and also the industry specific factors within the renewable energy industry. Cross-sectional quantitative data was collected using a survey questionnaires while qualitative data was collected using interviews. This approach enabled a strong analysis, which incorporated the benefit of both methods to double check the results and give a clear insight of the factors that influence organizational success.

5.2 Data Collection

The data was collected from a purposive sample of Renewable Energy Organizations working in Gujarat which includes solar, wind and biomass energy organizations. In the study, the sampling technique used was the stratified random sampling so as to get a cross-section of the various types and sizes of the organizations. This approach was used to make sure that the study was generalizable across the sector because the problem and opportunities are unique across the renewable energy firms. The quantitative data was collected by the use of structured questionnaires administered from 400 senior management, human resource directors, trainers, and training and development managers in the sample organizations. The questionnaires were developed with the aim of assessing the Training & Development programs, the level of Leadership Support and the effects of the two on Talent Management and Competitive Advantage. The scales that were applied in the questionnaires

were pre-tested through a pilot survey with a sample of respondents to check on their reliability and validity. Besides the survey, the qualitative data was collected through face-to-face interviews with the key respondents such as CEOs, operation managers, and sustainability officers. These interviews offered more detailed information about the role of training and leadership as key factors that determine organizational performance especially in the renewable energy sector that is faced with factors such as regulatory adjustments, technological innovation, and market forces. The interviews were face-to-face or through video conferencing based on the participants' schedule and their preference.

5.3 Sampling Method

The study adopted a stratified random sampling technique in order to get a sample from the renewable energy sector in Gujarat. It was divided into sub-sectors according to the type of renewable energy involved such as solar, wind, biomass among others and according to the size of the organizations such as SMEs and large firms. In each stratum, organizations were then selected at random for the study. This approach was adopted in order to have a broad sample to ensure that there was a variety within the sector and ensure that the comparison was done based on the different types of organizations in the renewable energy sector.

5.4 Data Analysis

The quantitative data was analyzed using statistical software to perform regression analysis in order to establish the coefficients and co-efficiency values of Training & Development, Leadership Support, Talent Management and Competitive Advantage. In order to analyse the goodness of fit and statistical significance of the models, R-squared values, confidence intervals and p-values were computed. The data collected from the interviews was categorized in the form of themes and subthemes and were then compared and contrasted with the quantitative data. This approach made it possible to come up with conclusions that are informed by both quantitative data as well as the qualitative experiences of the practitioners.

6 RESULTS ANA ANALYSIS

Table 1 - Models Info	
Estimation Method	ML
Number of observations	400
Model	Talent Management ~ Training & Development + `Leadership Support `
	Competitive advantage ~ Training & Development + `Leadership Support `

The table 1 presented provides insights into two statistical models used in a study that examines the relationships between Talent Management, Competitive Advantage, and two key independent variables: Training and Development and Leadership Support. These models are to test the effects of the organizational practices on important consequences, which are useful for making strategic decisions in the business environment.

Table 2 - R-squared			
		95% Confidence Intervals	
Variable	R^2	Lower	Upper
Talent Management	0.946	0.935	0.955
Competitive advantage	0.619	0.556	0.674

The value of R-squared for Talent Management is 0. 946 which is exceptionally high. This means that 94. 6% of the variation in Talent Management can be accounted for by the predictor variables, Training & Development and Leadership Support. This is a very high degree of explained variance suggesting that these two variables are indeed very good predictors of Talent Management within the organization.

The significance value for Training & Development and Leadership Support for Competitive Advantage is 0. 619, meaning that 61. 9% of the variation in Competitive Advantage can be accounted by Training & Development and Leadership Support. However, it is still a significant chunk of the variance, although it is lower than the R-squared value calculated for Talent Management. This implies that the said predictors are relevant in predicting Competitive Advantage but there could be other variables that contribute to this result and are not captured by this model.

Table 3 - Parameter Estimates								
				95% Confidence Intervals				
Dep	Pred	Estimate	SE	Lower	Upper	β	z	p
Talent Management	Training & Development	0.526	0.033	0.462	0.591	0.491	15.97	< .001
Talent Management	Leadership Support	0.619	0.0381	0.545	0.694	0.5	16.24	< .001
Competitive advantage	Training & Development	0.27	0.0591	0.155	0.386	0.374	4.57	< .001
Competitive advantage	Leadership Support	0.358	0.0685	0.224	0.493	0.428	5.24	< .001

The table 3 provides a comprehensive view of the parameter estimates derived from a study examining the influence of Training & Development and Leadership Support on two critical organizational outcomes: Talent management and competitive advantage. The estimates are scrutinized using different statistical measures which include the estimate, standard error (SE), 95% confidence intervals, beta coefficient (β), z-value and the p-value. These metrics assist in determining the nature, direction and the extent of the relationship between training and development and leadership support with talent management and competitive advantage.

6.1 Training & Development as a Predictor of Talent Management

The estimate of Training & Development is 0. 526, which shows a positive and strong correlation between Training & Development and Talent Management. In other words, it is suggested that for every one point change in Training & Development activities in an organization, Talent Management is predicted to change by 0. 526 points, holding everything else constant. The reliability of this estimate is further confirmed by the fact that the standard error is 0. 033, which is rather low.

The 95% confidence interval for this estimate is between 0. 462 and 0. 591 which indicates that the probability of the true effect of Training & Development on Talent Management being within this range is 95%. The standardized beta coefficient (β) of 0. 491 also shows the strong positive relationship between Training & Development and Talent Management on a scale of 0 to 1, which is the standardized beta coefficient that allows the comparison of the impact of different predictors.

The calculated z-value of 15. 97 along with the p-value of less than 0. 001 supports the hypothesis and thus, it can be concluded that Training & Development and Talent Management are positively correlated and the correlation is statistically significant. This is a low p-value which means that it is highly unlikely that the observed effect is due to chance hence supporting the need for training initiatives in improving on talent management practices in organizations.

6.2 leadership support as a predictor of talent management.

In the same vein, Leadership Support has a positive and statistically significant effect on Talent Management with estimate of 0. 619. This implies that, an increase of one unit in Leadership Support is associated with 0. 619 unit increase in Talent Management. The standard error of 0. 0381 is a bit higher than the Training & Development's but is still within the range of a precise estimate.

The confidence interval for this relationship is between 0. 545 and 0. 694, which means that we can be very confident about the effect size. The beta coefficient (β) of 0. 5 reveals that Leadership Support is a strong determinant of Talent Management and is equally significant to Training & Development.

The result of z-test is 16. 24 and p-value of less than 0. 001 indicates that Leadership Support has a significant impact on Talent Management. This result underscores the importance of leadership in directing and coaching employees, which in turn helps the organisation to address and build its human capital.

6.3 Training & Development as a Predictor of Competitive Advantage

Coefficient estimate of Training & Development is 0. 27 which show that it has a positive influence on Competitive Advantage but it is relatively smaller than the influence on Talent Management. This implies that although Training & Development is one of the factors that define competitive advantage of an organization, its impact is relatively lower. The standard error of 0. 0591 is a little higher to indicate more fluctuation in the estimate. The 95% confidence interval is between 0. 155 and 0. 386 which indicates that the effect is still positive but this effect can be within a range of 0. 155 to 0. 386 only. The obtained beta coefficient of 0. 374 shows a moderate connection between Training & Development and Competitive Advantage, meaning that though

Training & Development is vital, there may be other factors that can influence Competitive Advantage of an organization in the market. The t-statistic of 4. 57 and the p-value of less than 0. 001 are indicative of the fact that this relationship is statistically significant and it can therefore be concluded that Training & Development has a positive and significant impact on Competitive Advantage and this relationship is not due to chance variation.

6.4 Leadership support as a predictor of competitive advantage

Leadership Support has a direct and significant effect on Competitive Advantage with an estimate of 0. 358. This means that when Leadership Support is increased by one unit, then Competitive Advantage is likely to increase by 0. 358 units. The standard error of 0. 0685 is the highest among the estimates which indicates slightly lower precision in this estimate as compared to others.

The confidence interval for this effect is between 0. 224 and 0. 493 for the positive relationship. The beta coefficient (β) of 0. 428 indicates that Leadership Support has a moderate influence on Competitive Advantage and is therefore an important determinant of an organisation's capacity to perform better than rivals.This is also statistically significant with a z-value of 5. 24 and a p-value less than 0. 001 which supports the notion that leadership is important not only in internal practices but also in sustaining competitive advantage in the market place. Analysis of the parameter estimates also shows that Training & Development and Leadership Support are significant predictors of Talent Management and Competitive Advantage. The positive and significant beta coefficients imply that these organizational practices are imperative in improving both the internal managerial and external market performances. For Talent Management, both Training & Development and Leadership Support reveal significant impact suggesting that organizations that spend in these areas are likely to record a significant improvement in Talent Management. The high z-values and low p-values also add to the significance of these predictors, and thus provides a good reason for organizations to consider these practices important in their strategic planning.In the case of Competitive Advantage, the positive though relatively smaller impact indicates that these factors though significant, are not as influential as they are for Talent Management. However, the fact that these relationships are statistically significant underlines the fact that organisations seeking to improve their position in the market should not underestimate the need to create a positive leadership climate and to support employee learning.

Figure 1 – Path Digram

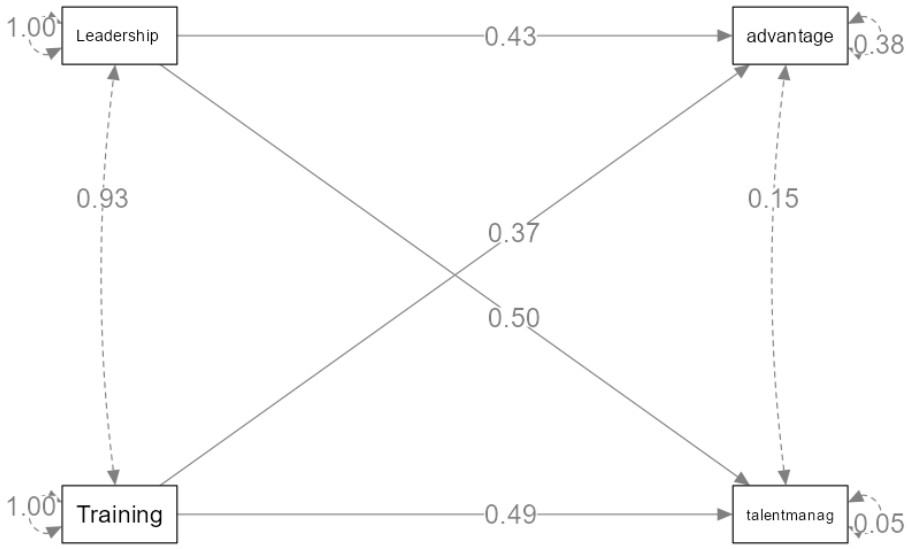

Table 4- Variances and Covariances								
				95% Confidence Intervals				
Variable 1	Variable 2	Estimate	SE	Lower	Upper	β	z	p
Talent Management	Talent Management	0.0622	0.00439	0.05354	0.0708	0.0541	14.14	< .001
Competitive advantage	Competitive advantage	0.2002	0.01415	0.17243	0.2279	0.3815	14.14	< .001
Talent Management	Competitive advantage	0.0168	0.00564	0.00571	0.0278	0.1503	2.97	0.003

Training & Development	Training & Development	1.0009	0	1.0009	1.0009	1		
Training & Development	Leadership Support	0.8007	0	0.80072	0.8007	0.9258		
Leadership Support	Leadership Support	0.7474	0	0.74738	0.7474	1		

The Table 4 displays the variances and covariances of the variables used in the study, which provide information on the correlation and dispersion of Talent Management, Competitive Advantage, Training & Development and Leadership Support. Variances are used to quantify the extent of dispersion or spread of each variable while covariances are used to quantify the extent to which two variables are related in terms of change. The statistical measures used in this study include estimate, SE, 95% CI, β, z-value and p-value, which assist in the determination of the strength and the significance of these relationships. The variance estimate for Talent Management is 0. 0622 while the standard error is 0. 00439. This low variance also mean that the values of Talent Management are not far from the mean, meaning that there is a high level of similarity in how Talent Management is perceived in the observations made. The 95% confidence interval is 0. 05354 to 0. 0708; this is a small interval that indicates the accuracy of this estimate. The above calculated beta coefficient is 0. 0541, which is significant at 0. 001 level, having a z value of 14. 14, further supports the fact that this variance is not due to random chance and thus is statistically significant. We have calculated the variance estimate for Competitive Advantage as 0. 2002 and standard error of 0. 01415. It is therefore evident that the variance of Competitive Advantage is higher than that of Talent Management implying that there is more dispersion of the observations. The 95% confidence interval for this variance is estimated to range between 0. 17243 and 0. 2279, meaning that there is more variability possible. The beta coefficient (β) of 0. 3815 indicates that Competitive Advantage has a greater degree of dispersion of values which is in line with the fact that various factors may affect an organization's competitiveness in different ways. The z-value is the same as that of Talent Management at 14. 14 and the p-value < 0. 001; this provides additional support to this variance. The calculated correlation between Talent Management and Competitive Advantage is 0. 0168 with the standard error of 0. 00564.

This means that as Talent Management goes up, there is a corresponding increase in Competitive Advantage, although to a limited extent. The confidence interval of covariance is 0. 00571 to 0. 0278, which indicates the level of certainty of this positive relationship. The beta coefficient (β) was 0. 1503 and the z-value was 2. 97, this shows that covariance was statistically significant with the p-value of 0. 003. This means that the increase in Talent Management leads to the increase in Competitive Advantage with a moderate degree of relationship. The variance for Training & Development is 1. 0009 and the standard error is not reported for this value, this means that this value is probably fixed or standardized in the model. The confidence interval is also set at 1. 0009, which means that the variation in Training & Development is explained by the model. The beta coefficient is 1, which indicates that the variance of Training & Development is used as the standard by which other variables are measured. The covariance between Training & Development and Leadership Support is 0. 8007 with no standard error hence the relationship is strong and fixed in the analysis. The confidence interval is also kept constant at 0. 8007 meaning that the relationship between these two variables is constant. The obtained beta coefficient of 0. 9258 is highly significant and positive which means that Training & Development is positively and strongly related to Leadership Support. This strong positive relationship demonstrates that these two factors are closely related in influencing the organisation's performance.

The variance for Leadership Support is 0. 7474 with no standard error, which suggest that the value is likely to be fixed or standardized. The confidence interval has been set at 0. 7474 which indicates that Leadership Support has been varying with the same degree throughout the study period. The value of beta coefficient 1 means that this variance is a reference or key variance in the analysis and highlights its significance in the model. The variances and covariances shown in the table give a clear picture of the inter and intra-correlation of the variables of the study. The low value of variance in Talent Management means that organizations have similar approaches to managing and developing talents The high value of variance in Competitive Advantage means that organizations have different approaches to achieving competitive advantage. The positive correlation of Talent Management and Competitive Advantage indicates that the increase in talent management practices has a positive effect on competitive advantage, though not very strong. This clearly depicts the fact that Training & Development and Leadership Support are two factors that are closely related. It is therefore likely that organizations that spend resources in Training & Development will also have excellent Leadership Support, and the other way round. This relationship is important to define how internal practices affect both, Talent Management and Competitive Advantage.

Table 5 - Intercepts						
			95% Confidence Intervals			
Variable	Intercept	SE	Lower	Upper	z	p
Talent Management	-0.317	0.033	-0.381	-0.252	-9.654	0
Competitive advantage	0.805	0.059	0.69	0.921	13.676	0
Training & Development	2.002	0	2.002	2.002		
Leadership Support	2.055	0	2.055	2.055		

The table on intercepts gives information on the initial levels or reference points of the variables in consideration when all the predictors are assumed to be zero. In statistical modeling, the intercept means the average of the dependent variable if all the independent variables are equal to zero. This table shows the intercepts of the models for Talent Management, Competitive Advantage, Training & Development and Leadership Support, the standard errors (SE) of the coefficients, the 95% confidence intervals, the z-values and the p-values. The intercept estimate for Talent Management is -0. 317 with standard error of 0. 033. This negative intercept implies that when Training & Development and Leadership Support are equals to zero, the minimum level of Talent Management would be slightly below zero, which is theoretically plausible depending with the scale and context of the variable. The confidence interval for this intercept is 95% and it is between -0. 381 and -0. 252 which shows that the estimate is precise. The z-value of -9. 654 is highly significant and the p-value is 0 which indicates that the intercept is significantly different from zero. Hypothesis 2 posited that Training & Development and Leadership Support would have positive and significant relationships with Talent Management and this is evident from the findings above This negative intercept implies that in the absence of Training & Development and Leadership Support, Talent Management would be much lower, stressing the importance of the predictors. The intercept for Competitive Advantage is 0. 805 with the standard error of 0. 059. This positive intercept indicates that if Training & Development and Leadership Support are not included, the Competitive Advantage will be at a moderately positive level. The confidence interval for this intercept is 0. 69 to 0. 921 which indicates a small margin of error and, therefore, good precision. The z-value of 13. 676 is very high and the p-value of 0 suggest that this intercept is also statistically significant. The constant term greater than zero implies that even in the absence of the predictors' effects Competitive Advantage can be greater than zero, meaning other factors might be instrumental in sustaining Competitive Advantage. The intercept for Training & Development is set at 2. 002, and the standard error and the confidence interval are not available. This fixed value means that Training & Development is fixed at a basic value of 2. 002, which may be a reference or base value in the context of the model. Since there is no variability mentioned it means that this particular intercept is fixed and any additional effects are calculated from this value. Likewise, the intercept for Leadership Support is fixed at 2. 055 and standard error and confidence interval are not available. This fixed intercept implies that Leadership Support has a fixed baseline value of 2. 055, which is probably due to the fact that this is the value set at the beginning of the model. As with Training & Development, this fixed intercept is used as a benchmark value to determine the effect of other predictors on Leadership Support.
The intercepts in this table gives us an idea of the average values of the variables when there is no effect from the predictors (Training & Development and Leadership Support). The coefficient for Talent Management is negative, indicating that without training and leadership support the organisation would not be able to manage talent. On the other hand, the positive intercept of Competitive Advantage means that the organisation remains competitive to some extent even without these factors implying that there are other factors that cause it. The non-sloping lines for Training & Development and Leadership Support mean that these variables have a fixed starting point in the model and are used to measure the effects of other variables. These fixed values are important in understanding the changes or impact that Training & Development and Leadership Support has on Talent Management and Competitive Advantage.

7 DISCUSSION & CONCLUSION

The purpose of this research was to explore the relationship between Training & Development and Leadership Support and Talent Management and Competitive Advantage in organisations. In order to establish the level at which these organizational practices enhance talent management and the attainment of competitive advantage in the market, the study aimed at an analysis of the correlation between these variables. The study also showed that Training & Development and Leadership Support were the most effective practices that contributed to Talent Management. The strong positive correlations indicated imply that the organisations which provide extensive training and effective leadership support are in a better position to address and develop their human capital. These findings support prior studies, which underscore the importance of the development of the employees and leaders to the performance of organizations (Le & Kroll, 2017; Makina & Kengara, 2018). The model has a very high explanatory power for Talent Management which shows that these two factors are critical in understanding the ability of an organisation to effectively manage its human capital. Likewise, Training & Development and Leadership Support were also identified to have a positive and significant relationship with Competitive Advantage albeit to a slightly lesser extent compared with their effect on Talent Management. This indicates that although these practices are important in sustaining competitive

advantage, other factors could also be important. This is in line with Capssa et al (2022) who opined that external factors such as markets and competition have a large impact on an organization's competitive strategy even though internal processes are critical. The study also noted that while these predictors were not present, the intercept of the Talent Management was negative while that of the Competitive Advantage was positive. This difference suggests that while organizations are likely to fail to manage talent in the absence of training and leadership, they are likely to remain competitive due to other factors that are inherent in the organization or industry. These results are in line with the previous research, for example, Rossi & Sengupta (2022) that pointed out the interaction between internal and external factors as the key drivers of organizational performance.The paper's results help to extend the knowledge about the role of internal organizational practices for critical performance indicators such as Talent Management and Competitive Advantage. Thus, proving the importance of Training & Development and Leadership Support as key components of any strategic initiative to improve performance, this study supports the idea of their strategic importance. However, the study also implies that to gain a sustainable competitive advantage, it is necessary to take into account not only internal practices, which is consistent with the complexity of the competitive interactions described in the literature (Bubenik et al. , 2022; Morgan et al. , 2021). Therefore, the study emphasized the significance of Training & Development and Leadership Support in Talent Management and Competitive Advantage. The findings of the study indicate that the organisations that focus on these areas are likely to be effective in managing their talent and sustaining competitive advantage in the market. However, for sustainable competitive advantage, the firm has to look at the internal resources and the external environment as the two are interrelated. Future research could also include more of these variables and look at how they moderate or mediate the effects of the variables examined in this paper, thus giving a richer picture of what makes organisations successful in various settings.

8 STUDY IMPLICATION

The implications of this study are especially important for leaders and human resource professionals of Renewable Energy Organizations. The study recommends that Training & Development and Leadership Support are areas that must be given prominence for the organisations to improve Talent Management and maintain Competitive Edge in an environment characterised by dynamic technological advancements and evolving policies. It is argued that investing in these areas can result in better employee performance, innovation and organizational readiness. This paper reveals that there is a need for leadership to champion the talent issues as well as to manage the legal and environmental factors that are associated with the renewable energy industry. Further, the results suggest that, in addition to internal practices, Renewable Energy Organizations should not disregard external factors including government policies, market trends, and environmental impacts. It is suggested that a long-term view that combines a strong internal development process with an understanding of the external environment is the most effective approach in this sector. It provides a strategic understanding of the factors that Renewable Energy Organizations can use to enhance human capital and sustain competitive advantage in light of the emerging market changes.

9FUTURE SCOPE OF THE STUDY

The future direction of this research is therefore promising for future investigation especially within Renewable Energy Organizations. Another direction for further research is to look at the effect of other factors like organizational sustainability initiatives, innovation capacities, and employees' involvement on Talent Management and Competitive Advantage in this industry. Other research could also explore how external factors such as alterations in environmental legislations, technology and energy policies impact on organizational practices. Research in the renewable energy sector could be done on a longitudinal basis to understand how Training & Development and Leadership Support play out in the long run especially as the sector progresses with the growing energy demands of the world. Cross-sectional analysis of different types of renewable energy organizations, for example, solar, wind, and hydro organizations could reveal some sectorial factors that may explain the extent of impact of these practices. Extending the study to other RE firms, particularly the small-scale ones, would also be useful because the challenges they face may produce different results. In sum, the current study should be extended in the future by using a larger number of variables and contexts, which would advance knowledge of the factors behind long-term performance in the renewable energy industry.

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