

# Agile Flexibility for Firms Effectiveness in Alternative Energy Firms in Kenya

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**Abstract:-** This paper examined the role played by flexibility in a strategic agility for firm effectiveness in alternative energy firms in Kenya. A review of pertinent conceptual, theoretical, and empirical literature was done and a hypothesis was formulated. 45 alternative energy companies in Kenya were surveyed using the census method and structured questionnaire was administered. A total population of 84 top managers and operational managers were investigated. The validity of the instrument was determined using content and construct validity while Cronbach Alpha was used to ascertain the reliability of the instrument. Multiple linear regression Analysis was used to analyse the hypothesis with the aid of Statistical Package for Social Science (V26.0). It was established that flexibility had a positive and significant effect on organizational effectiveness ( $\beta=.461$ ,  $p<.05$ ). This study concludes that firms operating in dynamic environments must realize the need for change, mobility and adaptation and thereby stimulate they're in developing agility that can better respond to a dynamic environment. The study concluded that flexibility was significant predictors of effectiveness among alternative energy companies in Kenya. The study found that agile flexibility components have positive and significant effect on company effectiveness of selected alternative energy companies in Kenya. Findings further revealed that employee fluidity has the highest contribution to organization effectiveness in the alternative energy companies in Kenya. It concluded that agile flexibility affects organisational effectiveness in alternative energy companies in Kenya. Based on the findings, the study recommends that management alternative energy companies in Kenya should keep update on the emerging trends, policies and strategies to retain customers and become more flexible. To ensure improved market share, profitability and customer satisfaction.

**Keywords:-** Flexibility, Alternative, Effectiveness, Energy

## I. INTRODUCTION

Strategic agility is working out the way to make quick turns and having the capacity to alter and re-establish the association without losing force. Strategic agility can do associations that may deliver the right particulars and administrations at the seasonable place, at the proper time, at the proper cost and for the right guests. In moment's turbulent and largely competitive terrain, associations demand a differing set of capabilities for effective and effective organizational responses towards similar increased situations of query, complexity and unpredictability (Brozovic, 2018; Fayezi, Zutshi, & O'Loughlin, 2017; Purvis, Gosling, & Naim, 2014). Strategic agility is the

capacity to constantly and enough modify and acclimate in suitable time the vital course in centre business, in connection to evolving conditions (Weill, Broadbent and Subramani, 2012). Facing request turbulence, contender challenges, and indeed harder goods of the epidemic, an association requires the capability and dexterity to respond to changes, perform certain adaptations and strengthen effectiveness if not to ameliorate it to maintain performance and sustainable competitiveness. An nimble business can respond snappily and effectively to chances and pitfalls found in its internal and external surroundings be they marketable, legal, technological, social, moral or political. Businesses that embrace nimble are suitable to acclimatize briskly; delivering and frequently, testing the environment and remaining client concentrated. The COVID-19 epidemic is just the foremost recent and dramatic illustration of a worldwide extremity that stressed, in a veritably fairly short time, the far-reaching implications and challenges of change in addition to urgency of effective responses hence the significance of strategic agility to achieve effectiveness of any organisation.

Flexibility is viewed as the capability to retort to unpredicted change and also the capacity to determine the extent of enterprises may exercise in uncertain surroundings it's considered as an indicator of company agility, and a part of enhancing internal response strategy. Studies by Kinako (2016), Koekemoer, et al (2021) shows that Flexibility allows companies to, after considering their internal capabilities, redeploy and transfer their resources, particularly mortal resources, to new activities in an exceedingly converted activity system which incorporates a positive relationship to effectiveness which is in agreement with Zhu et al (2013), and Vaari, A. (2015). still, some studies set up that substantial reliability benefits dwindle with the rise in industry volatility in inflexibility (Pecujlija, M. et al, (2017)). As argued by Vokurka, Zank and Lund (2012) the foremost valuable goods of agility are being embraced and supported more on the connection between agility and competitiveness. it's a living conception that adapts to numerous surroundings, associations, and company needs, also, in strategic management, flexibility is the capability of a company to respond advantageously to changing terrain.

The term agility also includes the sense of 'speed', or 'swiftness'. According to Fayezi et al. (2017) and Wadhawa and Rao (2005), there's a divergent view of how inflexibility and agility do. Several scholars see agility as composed of several core elements girding the conception of flexibility (Prater, Biehl, & Smith, 2001; Sharifi & Zhang, 1999), whereas other researchers view the concept of agility as an inalienable extension of flexibility (Backhouse & Burns, 1999; Richter, Sadek, & Steven, 2010; Vokurka & Flidner, 1998).

thus, this study seeks to examine the need for nimble flexibility to make an effective organization. Specifically, the objective of the study is to probe the effect of nimble flexibility on firm effectiveness of alternative energy companies in Kenya.

## II. LITERATURE REVIEW

### A. Strategic agility

Strategic agility implies that a company can take quick, decisive, and effective actions which it can trigger, anticipate, and make the most of change (Doz&Konshen, 2007; Jamrog et al., 2006). Firms demonstrating strong agility can maintain their strategic supremacy despite market fluctuations (D'Aveni, 1999; Thomas, 1996). A high level of strategy means a firm can demonstrate a standardized capacity for concentrating resources on key strategic issues, accumulating new resources efficiently and effectively, complementing and mixing resources in new ways, and redeploying resources for brand new uses (Hamel & Prahalad, 1993). In many ways, strategic agility captures a firm's prowess for developing and learning complex problem-defining and problem-solving heuristics (Lei, Hitt, & Bettis, 1996). The competitive dynamics literature argues that agility is correlated with several factors like response speed, fast directional changes, number of strategic moves taken during a period, variety in strategic moves undertaken, a firm's ability to initiate new action sequences, and similar indicators of a broad action including decisiveness (Ferrier, 2001; Ferrier et al., 1999; Grimm, Lee, & Smith, 2006).

According to Allen and Wright (2007), for a firm to realize strategic agility, it must evolve and gradually change from a mechanistic to a more flexible organizational structure. Roth further argues that such an organizational approach will enable the firm to leverage value chain resources for strategic advantages. Towards this end, the firm is then capable of gradually shifting from manufacturing to more flexible operations. Corroborating Allen and Wright, Prahalad and Hamel (1993) suggest a three faceted model of strategic agility incorporating several aspects of strategic agility. The main components of strategic agility include; clarity of vision, shared responsibilities, core competencies, selected strategic targets, and implementation of strategic agility (Hall, 1993). Long (2018) argues that for a firm to amass speed and responsiveness, it must ensure clarity of vision and mechanisms to grasp its core capabilities. He further portends that an absence of strategic agility makes a firm ill-prepared for turbulent dynamics within the market-leading to pursue elusively opportunities. Towards this end, strategic agility relies on the agility of the respective organization. But it's imperative to make sure that team agility is in situ to foster individual agility. Innovativeness, flexibility and leadership are a number of the critical success factors for the successful implementation of strategic agility

### B. Flexibility

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Towards this end, Ren asserts that aspects like timeliness, flexibility, and value addition constitute the key guiding principles within the satisfaction of customer demands for a firm to stay competitive and effective. Corroborating Ren; Toor and Ofori (2010) outline four main capabilities; responsiveness, competency, flexibility and speed. per Shepherd and Sutcliffe (2011), to remain ahead of its competitors, a firm must continually apply best practices within the performance of its key functions while incorporating dynamic customer requirements and opinions through top-notch public relation. Georgewill (2021) applied a theoretical study, by reviewing the literature on the role of structural flexibility on corporate responsiveness to a business environment, the study found that structural flexibility plays an inestimable role within the facilitating of corporate responsiveness in reacting to changes within the business environment. The study recommended further study to seek out the event of capabilities that fosters flexibility and seamless operations that organizations should provide, develop and sustain skills that facilitate responsive actions.

The results suggest that the more reactive and versatile an organization is, the more efficient and effective its crisis management is. Pradhan, (2017), also examined the influence of human resource flexibility on organisational effectiveness. Using structural equation modelling on survey data collected from 350 executive respondents randomly selected from various manufacturing industries of public sector organisations in India, the study revealed that there is significant influence of flexibility on organisational effectiveness. The study also suggests that flexibility is the essence for any organisation to deal with the global business demands in a timely manner. Although these studies show a positive relationship between flexibility and effectiveness as other studies the mode of measure of effectiveness was mainly administrative and therefore a need to establish the

effect of flexibility on organisation effectiveness using the measures of, growth, profitability and customer satisfaction.

### C. Strategic mobility

Several studies have been done with regards to employee mobility and knowledge spin alongside with other variables, for instance, Abbas, et al; (2017) studied the relationship between knowledge sharing and dissemination among Academics in Nigerian Universities; Adagbabiri, & Okolie (2020) in their study concentrated on human resource management practices and organisational performance: an empirical study of oil and gas industry in Nigeria; Adim and Mezeh (2020) investigated health and safety training and employee performance in oil and gas companies in Rivers State, Nigeria. While diverse studies examined the organisational performance-effect of individual dimension of employee mobility and knowledge spin such as knowledge sharing and dissemination, skill retention, and training. It therefore seems scholars have not extensively investigated the effect of the combined employee mobility and knowledge spin on skill retention in upstream oil and gas companies in Nigeria. Hence, this study intended to fill the existing gap by investigating the effect of employee mobility components on skill retention of selected upstream oil and gas companies in Nigeria. This was with the view of examining the effects of employee mobility on skill retention of selected oil and gas upstream companies in Nigeria. It is therefore hoped that the evidence from this study would serve as important quantitative into the cauldron of skill retention an

### D. Resource fluidity

Coined by Doz and Kosoen, resource fluidity refers to an organization's ability to reconfigure internal operations so as to channel resources across business units for productive use (Doz and Kosonen 2008; Doz and Kosonen 2010). Resource fluidity is the ability to adjust and renew business system and relocate resources quickly according to needs and circumstances. They argue that innovation and constant development of new capabilities are the only sources of excellence for sustainable competitiveness. Resource fluidity is the organization's internal ability to relocate resources quickly to capture opportunities and distance themselves from failures further (Doz & Kosonen, 2008 cited in Arokodare and Asikhia (2020). Examples of resources that move toward opportunities arise in several studies. Busch and Hoffmann (2007) proposed that resource fluidity is needed to create and manage adaptive and pre-emptive flexibility

Schilke, and Helfat (2018) who also consider this view that strong dynamic capabilities include processes explained by strategic agility constructs like resource fluidity that enable the flow of resources across the department to reinforce performance. Organizations with high-level absorbed slack are dubbed fat. These organizations have been found to be slow and less competitive in the market (Love and Nohria 2005). As the competition grows intense, it becomes imperative for organizations to redeploy absorbed slack for productive use (Love and Nohria 2005; Mellahi and Wilkinson 2010). This is necessarily prevalent in both large organizations that are adequately

capitalized (Cheng and Kesner 1997) and small organizations that are undercapitalized (George 2005), and prevalent among organizations in both developed economies that enjoy a munificent economic foundation (Greenley and Oktemgil 1998) and developing economies that suffer from a sparse economic foundation (Tan and Peng 2003). However, notwithstanding its importance and prevalence, the question of how to redeploy slack resources for productive use remains unknown in the literature (Love and Nohria 2005, p.1088). Although Doz and Kosone (2010) have provided a list of ways such as decoupling, switching, and grafting, for developing resource fluidity, little is known about the development process.

### E. Adaptability

Strategic adaptability is a planned ability to respond effectively when business and environmental factors change unexpectedly. In today's world of globalization, it's more and tougher for enterprises to keep up their competitive advantage. The enterprise is subjected to increasing quality demand, adaptability and suppleness (Nilson, Rapp, 2005). Tannenbaum, (1957), in his paper, presents a test of the link between organizational culture as an important indicator of organizational effectiveness and customer satisfaction using service-unit data from two health resorts. The finding suggests that when trying to predict the comparative degree to which organisational effectiveness factors have in satisfying customers' needs, performance, adaptability and mission is of the best importance. during this context, there's no room for innovation, although employees and customers don't share similar views about the impact of organisational effectiveness

Research has shown that the assessment of multiple constituents is an accurate reflection of organizational effectiveness, especially concerning organizational adaptability. Organizations can survive given that they operate effectively within the present and have the foresight and capability to anticipate and brace oneself for the longer term (Connors, 1979). Ross & Goodlow (1980) suggest that a company can only stay resilient by having demands placed thereon. Organizations must be tested to sharpen their skills in self-correcting responses

Adaptability represents the capability of an firm or company to react quickly to opportunities and pitfalls and convert them into business advantage (Macmillan & Tampoe, 2000). Adaptability refers to: The capacity to respond to the needs of customers and clients The ability to make optimum choices: an intentional response to change based on the information regarding the environment - past, present and future. Recognising that primarily people are the ones who must adapt not organisations. People must be empowered to: take sensible risks, build new capabilities, experiment, adjust their behaviours, be fearless, learn from their failures and share their experiences with others. Simplifying the organizational structure of the firm, if insufficiency is proven. Adapting to the permanent changes in the business environment represents a continuous process that consumes many resources in an organization, like time, effort and energy. Literature Review Adaptability has been empirically linked with firm performance (Marcoulides &



Heck, 1993). Some specialists demonstrated the existence of an important relationship between firm performance and adaptability, viewed as a set of cultural values. (Kotter & Heskett, 1992; Gordon & DiTomaso, 1992). These researchers state that organizations capable of better internalizing values leading to a superior ability that allows them to recognize and adapt to changing conditions are more likely to reap superior rewards. According to them, adaptability is a combination of two or more cultural values, including innovation and action orientation, that allow a firm to adjust to environmental conditions better than others, thereby, leading to superior performance. Adaptability is also linked to the concept of strategy and appears to be more complex than a simple set of cultural values. The ability to adapt to changing

#### *F. Effectiveness*

Herman & Renz (2004) realize that organizational effectiveness is the relationship between the organization's outcomes achieved and its planned objectives. The higher productive outcomes confer with more effectively achievable objectives. It's an appropriate term to the organization, but difficult to assess. However, it can be clarified by giving indicators to managers to manipulate their organizations within the variety of multiple scales.

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Vaari, A. (2015). set out to determine leadership effectiveness. using literature, print articles, journals, researches and media sources. Anchored on the dynamic capabilities view the research showed that flexibility is that the core of effective leadership. Leaders strive to influence others for the great of the organization. To be effective during this they need to be flexible, making flexibility the key factor enabling leaders to function effectively in various situations although the studies sought the effect of flexibility on performance there was just one aspect of agility which is leadership that was utilized.

#### *G. Agile Flexibility and Organisation Effectiveness*

In China a study was done Zhu et al (2013) to investigate the role of organisational effectiveness as a mediator in the relationship between the strategic integration of HRM and firm financial performance. The study was based on the survey responses of 618 managers in state-owned and private enterprises in China. They found positive relationships between perceived changing business environment and strategic integration of HRM, and between strategic integration of HRM and organisational effectiveness. The research adds an important conceptual link by showing that organisational effectiveness can play an important role as a mediator in the HRM and firm financial

performance relationship a point that was tackled in this study. Vaari, A. (2015). Set out to determine leadership effectiveness. using literature, articles, journals, researches and media sources such as internet news pages and internet pages of organizations. Anchored on dynamic capabilities view the research showed that flexibility is the core of effective leadership. Leaders strive to influence other people for the good of the organization. To be effective in this they must be flexible, making flexibility the key common factor enabling leaders to function effectively in various situations although the studies sought the effect of flexibility on performance there was only one aspect of agility which is leadership that was utilized.

Kinako (2016) did a study on agility strategies and competitive advantage of insurance companies in Kenya. The study concludes that agility strategies affect competitive advantage of insurance companies in Kenya. It further concludes that the insurance companies should put in place four major agility strategies namely; innovativeness, operation dexterity, total quality management and resource fluidity in order to improve its competitive advantage. Pradhan, R. K et al (2017), also examined the influence of human resource flexibility on organisational effectiveness. Using structural equation modelling on survey data collected from 350 executive respondents randomly selected from various manufacturing industries of public sector organisations in India, the study revealed that there is significant influence of flexibility on organisational effectiveness. The study also suggests that flexibility is the essence for any organisation to deal with the global business demands in a timely manner. Although these studies show a positive relationship between flexibility and effectiveness as other studies the mode of measure of effectiveness was mainly administrative and therefore a need to establish the effect of flexibility on organisation effectiveness using the measures of, growth, profitability and customer satisfaction.

Koekemoer, L et al (2021) investigated a model of leadership behaviour, team effectiveness, technological flexibility, work engagement and performance in the context of a 'hard lockdown' in South Africa, using questionnaires. Specifically, remote 229 workers were sampled online via social media as a result of the COVID-19 pandemic. The results showed that the resources of leadership behaviour and team effectiveness had direct positive influence to work engagement and that work engagement had a positive path to two performance factors: adaptivity and proactivity.

Up to date flexibility is viewed as the ability to respond to unpredicted change and the capacity to determine the level of firms may exercise in uncertain environments it is considered as an indicator of firm agility, and an element of enhancing internal response strategy (Kinako (2016), Koekemoer, L et al (2021) Flexibility allows organizations to, after considering their internal capabilities, redeploy and transfer their resources, particularly human resources, to novel activities in a transformed activity system which has a positive relationship to effectiveness (Zhu et al (2013), Vaari, A. (2015)). However, some studies found out that substantial reliability benefits diminish with the increase in industry volatility in flexibility (Pecujlija, M. et al, (2017)).

### III. MATERIALS AND METHODS

The study adopted a correlational research survey design, as it enables researchers to establish statistical pattern between seemingly interconnected variable and to link variables by observing their behaviours in the most natural. The study applied a structured questionnaire as the main research instrument. In this study, the population included 42 alternative energy firms in Kenya was used as a sample. The population of the study comprised of 84 employees, consisting of Managers or CEOs, Strategic / operations managers. The population consisted of 42 selected firms in Kenya. The study utilized both primary and secondary data. A structured questionnaire was used to collect data. Approximately Ten, is that 12% pilot of the employees from 4 firms participate in the pilot study and therefore did not participate in the main study. Among the critical criterion for the validity tests, the researcher sought an opinion from experts in the industry.

Cronbach reliability entails administering the question to the respondents and two weeks before the actual field study through piloting. Cronbach's alpha coefficient was 0.85 was obtained thus implying that the instrument was reliable. Descriptive and inferential statistics were applied in

analysing the quantitative data on flexibility. Multiple linear regression was conducted to examine the relationship between agile flexibility indicators with effectiveness.

The regression model that was adopted in the study is indicated below.

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:

Y = Effectiveness (measurements of firm effectiveness)

X<sub>1</sub> = Flexibility

ε = error term due to the regression,

B<sub>0</sub> = regression constant,

β<sub>1</sub> = Regression Coefficients

Source: Adopted from Fairchild and MacKinnon (2009)

### IV. RESULTS/ FINDINGS

Examining the effect was carried out by means of regression model which was done by regressing effectiveness against the flexibility scale. However, it was important to establish the level of agreement on flexibility scale by the respondents. The findings are presented as shown in Table 1. using means and standard deviations.

Statements on Flexibility	Mean	Std. Deviation
Our structure allows mobilizing and redeploying of resources rapidly and correctly	3.75	1.311
Our physical and human resources available are adequate to promote organizational success in this institution	3.84	1.232
Our structure allows mobility of team and Knowledge across departments as tools to win?	3.77	1.646
Our structure provides adequate infrastructure to cater for all activities	3.70	1.321
Our structure allows mobilizing and redeploying of human resources rapidly and effectively	3.77	1.416
Our organization has Availability of internal employees to fill roles	3.35	1.493
Our organization Lack information for employees on available roles	4.42	.497
Our Current managers resist internal moves	4.09	0.59
Our transformation initiatives meet our strategic and financial objectives?	4.25	0.55
We have the data and analytics capability to develop timely customer, competitor, and operational insights	3.97	0.87
We able to capture and measure the value we create from our transformation initiatives?	3.81	0.71
We able to identify Which transformation triggers are creating opportunities for us? How are we capitalizing on these	4.01	0.81
We Create adaptive space by providing necessary recourses in terms of free time and budgets.	4.00	0.54
Leveraging employee sensing capabilities, enabling leaders we identify relevant external developments and translate them into internal pressure to activate employees' seizing capabilities, which can subsequently trigger an adaptive process in the organisation.	3.58	0.72
Enabling leaders nurture and harness the organisation's creative potential by fostering team heterogeneity and diversity, thus creating adaptive space.	4.07	0.58
We idea champion and implement change to encourage individuals to create network structures within an organisation which could support leveraging and scaling new ideas.	4.00	0.54
Our structure allows mobilizing and redeploying of resources rapidly and correctly	3.91	0.72
Valid N (listwise)		

Table 1: Flexibility of Alternative Energy Companies in Kenya

According to the findings on organization flexibility among the alternative energy companies in Kisumu, their structure allows mobilizing and redeploying of resources rapidly and correctly as rated highly (M=3.75, SD=1.31) as well as mobility of team and knowledge across departments as tools to win (M=3.77, SD=1.646). There was also high rating (M=3.84, SD=1.23) on the adequacy of availability of the physical and human resources to promote organizational success in the organizations. The structure provides adequate infrastructure to cater for all activities as indicated

by a high rating (M=3.70, SD=1.32) and also allows mobilizing and redeploying human resources rapidly and effectively (M=3.77, SD=1.416).

From the findings, it emerges that the companies have availability of internal employees to fill roles (M=3.35, SD=1.493) but lack information on for employees on available roles (M=4.42, SD=.497). The findings also shows that the organizational current managers resist internal moves (M=4.09, SD=0.59) and lack information for

employees on available roles ( $M=4.42$ ,  $SD=.497$ ). There is data and analytics capability to develop timely customer, competitor, and operational insights according to a high rating ( $M=3.97$ ,  $SD=.87$ ) and are able to capture and measure the value they create from their own transformation initiatives ( $M=3.81$ ,  $SD=.71$ ). The findings indicate that alternative energy companies in Kisumu are able to identify which transformation triggers are creating opportunities for us? How are we capitalizing on these as indicated by a high rating ( $M=4.01$ ,  $SD=.81$ ) and create adaptive space by providing necessary resources in terms of free time and budgets ( $M=4.00$ ,  $SD=.54$ ).

It is further clear from the findings that leveraging employee sensing capabilities, enabling leaders we identify relevant external developments and translate them into internal pressure to activate employees' seizing capabilities, which can subsequently trigger an adaptive process in the organisation is done in these organizations to some extent ( $M=3.58$ ,  $SD=.72$ ). The ratings ( $M=4.07$ ,  $SD=.58$ ) also indicated that the organizations enable leaders nurture and harness the organisation's creative potential by fostering team heterogeneity and diversity, thus creating adaptive space. Finally, it is clear from the findings that the organizations create ideas to champion and implement change to encourage individuals to create network structures within an organisation which could support leveraging and scaling new ideas ( $M=4.00$ ,  $SD=.54$ ).

The main objective of the study was however to investigate the effect of flexibility on effectiveness of alternative energy companies in Kisumu, Kenya. This was achieved through the test of hypothesis stated that "Company flexibility has no significant effect on the effectiveness of alternative energy industry in Kenya". Using regression model and the F test, it was found that flexibility had a strong positive and significant effect on organizational effectiveness ( $\beta=.461$ ,  $p<.05$ ) hence a one unit improvement in organizational flexibility led to 0.461 unit improvement in organizational effectiveness based on the scale used.

This implies that organizational flexibility is very important to their effectiveness such that the more the organizations become flexible with other changes, the more they become more effectiveness. Previous studies such as Zhu et al., (2013), Kinako (2016), Koekemoer et al (2021) among others also supports the current studies after establishing a link between organizational flexibility and effectiveness. The study thus rejected the null hypothesis and adopted an alternative hypothesis that "Company flexibility has a significant effect on the effectiveness of alternative energy industry in Kenya"

## V. CONCLUSIONS

From the findings, it was established that there was a positive relationship between organizational flexibility and effectiveness such that the more the energy companies became flexible, the more they became more effective. It was thus concluded that agile flexibility has a positive and

significant effect on organizational effectiveness. Following the study findings, the following recommendations were made. Alternative energy companies should enhance their responsiveness to emerging situations, challenges and any need so as to offer good services that will make it more effective by investing in their response structures and mechanisms.

## REFERENCES

- [1.] Christofi, M., Pereira, V., Vrontis, D., Tarba, S., & Thrassou, A. (2021). Agility and flexibility in international business research: A comprehensive review and future research directions. *Journal of World Business*, 56(3), 101194.
- [2.] Weill, P., Subramani, M.R., & Broadbent, M. (2002). IT Infrastructure for Strategic Agility.
- [3.] Kinako, S. M. (2016). *Agility strategies and competitive advantage of insurance companies in Kenya* (Doctoral dissertation, University of Nairobi).
- [4.] Koekemoer, L., Beer, L. T. D., Govender, K., & Brouwers, M. (2021). Leadership behaviour, team effectiveness, technological flexibility, work engagement and performance during COVID-19 lockdown: An exploratory study. *SA Journal of Industrial Psychology*, 47(1), 1-8.
- [5.] Zhu, C. J., Cooper, B. K., Thomson, S. B., De Cieri, H., & Zhao, S. (2013). Strategic integration of HRM and firm performance in a changing environment in China: the impact of organisational effectiveness as a mediator. *The International Journal of Human Resource Management*, 24(15), 2985-3001.
- [6.] Vaari, A. (2015). Flexibility in the core of effective leadership.
- [7.] Doz, Y. L., & Kosonen, M. (2007). The new deal at the top. *Harvard Business Review*, 85(6), 98-104.
- [8.] Fayezi, S., Zutshi, A., & O'Loughlin, A. (2017). Understanding and development of supply chain agility and flexibility: a structured literature review. *International journal of management reviews*, 19(4), 379-407.
- [9.] S. Wadhwa, K. S. Rao & F. T. S. Chan (2005) Flexibility-enabled lead-time reduction in flexible systems, *International Journal of Production Research*, 43:15, 3131-3162, DOI: [10.1080/00207540500076530](https://doi.org/10.1080/00207540500076530)
- [10.] Prater, E., Biehl, M. & Smith, M.A., (2001). International supply chain agility: Tradeoffs between flexibility and uncertainty. *International Journal of Operations & Production Management*, 21/5/6, 823-39
- [11.] Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organisations: An introduction. *International journal of production economics*, 62(1-2), 7-22.
- [12.] Backhouse, C. J., & Burns, N. D. (1999). Agile value chains for manufacturing—implications for performance measures. *International Journal of Agile Management Systems*, 1(2), 76-82.
- [13.] Richter, A., Sadek, T., & Steven, M. (2010). Flexibility in industrial product-service systems and



- use-oriented business models. *CIRP journal of manufacturing science and technology*, 3(2), 128-134.
- [14.] Vokurka, R. J., & Fliedner, G. (1998). The journey toward agility. *Industrial Management & Data Systems*.
- [15.] D'Aveni, R. A. (1999). Strategic supremacy through disruption and dominance. *MIT Sloan Management Review*, 40(3), 127.
- [16.] Gioia, D. A., & Thomas, J. B. (1996). Identity, image, and issue interpretation: Sensemaking during strategic change in academia. *Administrative science quarterly*, 370-403.
- [17.] Hamel, G., & Prahalad, C. K. (1993). Strategy as stretch and leverage. *Harvard business review*, 71(2), 75-84.
- [18.] Lei, D., Hitt, M. A., & Bettis, R. (1996). Dynamic core competences through meta-learning and strategic context. *Journal of management*, 22(4), 549-569.
- [19.] Ferrier, W. J. (2001). Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness. *Academy of management journal*, 44(4), 858-877.
- [20.] Ferrier, W. J., Smith, K. G., & Grimm, C. M. (1999). The role of competitive action in market share erosion and industry dethronement: A study of industry leaders and challengers. *Academy of management journal*, 42(4), 372-388.
- [21.] Hall, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic management journal*, 14(8), 607-618.
- [22.] Kinako, S. M. (2016). Agility strategies and competitive advantage of insurance companies in Kenya (Doctoral dissertation, University of Nairobi).
- [23.] Ng'ang'a, K. (2018). *Strategic Agility and Competitiveness of Pharmaceutical Companies in Kenya* (Doctoral dissertation, University of Nairobi).
- [24.] Shepherd, D. A., & Sutcliffe, K. M. (2011). Inductive top-down theorizing: A source of new theories of organization. *Academy of Management Review*, 36(2), 361-380.
- [25.] Georgewill, I. A. (2021). Structural flexibility and corporate responsiveness in the business environment: A theoretical review. *European Journal of Economic and Financial Research*, 4(4).
- [26.] Pradhan, R. K., Kumari, I. G., & Kumar, U. (2017). Human resource flexibility and organisational effectiveness: mediating role of organisational citizenship behaviour. *International Journal of Human Resources Development and Management*, 17(3-4), 282-300.
- [27.] Hussain, S. T., Abbas, J., Lei, S., Jamal Haider, M., & Akram, T. (2017). Transactional leadership and organizational creativity: Examining the mediating role of knowledge sharing behavior. *Cogent Business & Management*, 4(1), 1361663.
- [28.] Adagbabiri, M. M., & Okolie, U. C. (2020). Human Resource Management Practices and Organizational Performance: An Empirical Study of Oil and Gas Industry in Nigeria. *RUDN Journal of Public Administration*, 7(1), 53-69.
- [29.] Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of management annals*, 12(1), 390-439.
- [30.] Geoffrey Love, E., & Nohria, N. (2005). Reducing slack: The performance consequences of downsizing by large industrial firms, 1977-93. *Strategic Management Journal*, 26(12), 1087-1108.
- [31.] Mellahi, K., & Wilkinson, A. (2010). A study of the association between level of slack reduction following downsizing and innovation output. *Journal of Management Studies*, 47(3), 483-508.
- [32.] Cheng, J. L., & Kesner, I. F. (1997). Organizational slack and response to environmental shifts: The impact of resource allocation patterns. *Journal of management*, 23(1), 1-18.
- [33.] George, G. (2005). Slack resources and the performance of privately held firms. *Academy of management Journal*, 48(4), 661-676.
- [34.] Greenley, G. E., & Oktemgil, M. (1998). A comparison of slack resources in high and low performing British companies. *Journal of management Studies*, 35(3), 377-398.
- [35.] Tan, J., & Peng, M. W. (2003). Organizational slack and firm performance during economic transitions: Two studies from an emerging economy. *Strategic management journal*, 24(13), 1249-1263.
- [36.] Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long range planning*, 43(2-3), 370-382.
- [37.] Nilsson, F., Rapp, B., (2005). Understanding competitive advantage the importance of strategic congruence and integrated control. Berlin: Springer.
- [38.] Georgopoulos, B. S., & Tannenbaum, A. S. (1957). A study of organizational effectiveness. *American sociological review*, 22(5), 534-540.
- [39.] Macmillan, H., & Tampoe, M. (2000). Strategic Management. Oxford University Press.
- [40.] Marcoulides, G. A., & Heck, R. H. (1993). Organizational culture and performance: Proposing and testing a model. *Organization science*, 4(2), 209-225.
- [41.] Gordon, G. G., & DiTomaso, N. (1992). Predicting corporate performance from organizational culture. *Journal of management studies*, 29(6), 783-798.
- [42.] Herman, R. D., & Renz, D. O. (2004). Doing things right: Effectiveness in local nonprofit organizations, a panel study. *Public Administration Review*, 64(6), 694-704.