Strategic Technological Capability and Organizational Performance of Machakos County Government Kenya

Mutiso Winfred Mwende^{1*}, Dr. Elizabeth Nambuswa Makokha^{1.2}

^{1.} School of Business, Department of Business, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya

^{2.} School of Human Resource Development, Department of Entrepreneurship, procurement, leadership and management. Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya

DOI: https://doi.org/10.5281/zenodo.10016263

Published Date: 18-October-2023

Abstract: The purpose of this study was to identify the influence of strategic technological capability on organizational performance of Machakos County Government Kenya. The study adopted following theory, resource-based view theory. The study used a descriptive research design with a target population of 72 heads of departments in the county government of Machakos. Since the target population was small, the study worked with entire population which is census. Data collection instrument was structured questionnaire. Both primary and secondary data was collected. The researcher self-dropped and picked the duly filled questionnaires. Piloting was be done to test the validity and reliability of data collection instrument. Data was organised, coded, edited to bring a meaning. Both descriptive and inferential statistics was be done. Multiple regression was done to test the significant levels of one variable over the other. Analysis of variance was also done. In conclusion basing on the findings, Strategic employee capability was found to be positively related to organizational performance of Machakos County Government Kenya. The study came up with a number of recommendations. The county government should have the capacity to expand and deploy the firm's core capabilities, and effectively combine the different streams of technologies to mobilize technological resources throughout the firms in order satisfy the customer needs in an efficient and effective ways. There should be consistence on provision of training due to skilldevelopment and cross-training development difficult to trade and imitate, scarce and appropriable specialized human capital assets. The finding is of significant to the researchers, academicians, stakeholders and to the entire economy as a whole.

Keywords: Strategic Technological Capability, Organisational Performance.

1. INTRODUCTION

In the world of competition and turbulent business environment, achieving operational performance in organizations is dependent on multiple factors which may be internal and external (Quinn & Hilmer, 2014). Burak (2013) observe that in the modern competitive business environment, organizations from one sector to another can utilize strategic resources in attaining long term and short term goals. Choosing a business strategy that exploits distinctive competencies and valuable resources not only promotes operational performance of firms but also influences sustainable competitive edge to a business over and above the competition that it faces. Possession of strategic capabilities enable a firm to directly improve its value offering to the market or customers in terms of products or services which are a result of possession of core competencies (Wanjiku, 2017). Core competence describes an organization specific capability which helps it stand out from the rest in

the industry. It is the asset that defines the essence of the firm's business in terms of core capabilities which make it possible for the firm to compete with other firms in the industry effectively. Globally, firms in various sectors strive to achieve high competitive advantage for instance Google, Facebook, Twitter, Amazon and Yahoo are examples of firms headquartered in United States that operate in information technology sector that have used their unique strategic capabilities to achieve high competitive advantage (Marston, Li, Bandyopadhyay, Zhang & Ghalsasi, 2011). At the centre of the growth and rapid expansion of these firms are unique resources both financial and human resources, intellectual capabilities among other strategic capabilities (Mwangi, et al., 2021).

Possession of strategic capabilities enable a firm to directly improve its value offering to the market or customers in terms of products or services which are a result of possession of core competencies (Wanjiku, 2017). Core competence describes an organization specific capability which helps it stand out from the rest in the industry. It is the asset that defines the essence of the firm's business in terms of core capabilities which make it possible for the firm to compete with other firms in the industry effectively. Ngugi and Karina (2013) in Kenya avers that maintaining a competitive edge in an unpredictable business environment, organizations should reconsider adopting strategic management capabilities in order to survive. Subsequently, Kilui (2015) in Kenya ascertains that strategic management capabilities from one organization to another, strategic interventions such as technology, employee development and strategic financial capability can facilitate organizational performance. Without a strategic management approaches, achieving organization excellence is unlikely in the dynamic business environment. As companies intend to expand their market share beyond local territories and maximize profits, rethinking on strategic management capabilities will not only facilitate organizational agility but also organizational efficiency and effectiveness (Kimani, 2013).

Strategic management capabilities are described as a set of abilities that exist or can be created in organizations to facilitate long-term competitiveness (Owuor, 2018). Strategic management capabilities help organization in managing the future by putting focus on the requirement and needs of clients and manage problems and crises cropping up in the environment they operate in and differentiates between operational capabilities: techniques and common processes which can be imitated and learned (O'Regan and Ghobadian, 2014). Strategic management capability in this study will be evaluated in terms of strategic technological capability, strategic leadership capability, strategic employee capability and strategic financial capability. Strategic leadership capability is regarded by Alam et al., (2011) as the ability of leaders to use their charisma or knowledge to influence workers towards organizational goals.

Organizational performance is an organization's ability in its resources utilization to attainorganizational goals in a way that is effective and efficient (Daft, 2010). Federico and Magdalena (2011) define performance as an organization's way of carrying its objectives into effect. Organizational performance measurement is viewed from two views: non-financial or financial. Non-financial performance has the flowing aspects: reputation, innovation, quality, satisfaction of employee and client satisfaction. And, financial performance dimensions range from organization's growth, market value to profitability. Despite the opportunities business globalization presents, the results of county governments have been unsatisfactory in terms of goals achievements (Adhiambo, 2018). According to a report by Pharmacy and Poisons Board (2018), an approximate of 53% of the county governments established in Kenya not only not performing effectively due to financial constraints but also due to inappropriate strategies adopted.

Owuor (2018) point out those changes in regulations, competition, high chances of failure, poor guidance, low competencies, lack of knowledge and skills, misappropriation of resources, stagnation of county governments are some of the issues of concern that are attributed to underperformance of the counties. There has been complains of bureaucracy, low adoption of latest ways of work, lack and misappropriation of funds and low motivation among the county government employees. Like any other competitive enterprise, rethinking on strategic management capabilities will not only enable county government navigate in the turbulent business environment but also sustain their competitiveness (Njaaga, 2017). Despite extensive studies have been conducted by Owuor (2018), Adhiambo (2018), and Njaaga (2017), clearly there exist inadequate proof about the link between strategic management capabilities on organizational performance thus applicability of this research in the county governments in Kenya. A study by Khan and Huda (2016) investigated how health care organizations' performance is impacted by strategic management and found that organizational performance and competition level are strongly and positively impacted by strategic management. However, in data collection, interviews were employed resulting to qualitative data in involving few participants hence creating an issue of findings which cannot

represent the entire population. Kasera (2017) study examined how performance of Health Institutions in Nairobi County and strategic management capability related and established that a negative correlation between strategic leadership capability and organizational performance. Therefore, the study sought to identify the influence of strategic technological capability on organizational performance of Machakos County Government Kenya.

1.1 Resource Based View Theory

It was presented by Wernerfelt in 1984 and is considered among the widely referenced strategic management theories specifically since is practically relevant to contemporary management practices. It views a firm as an entity with resources and capabilities that are unique that can be utilized to achieve stakeholder expectations. The theory opines that resources are available factor stocks controlled or owned by a firm and can be turned into end products. To be supplied with all the needed resources for gaining way to access resources valuable in enhancing capability, a high number of suppliers are depended by firms to make the supply (Galbreath, 2005). Therefore, the theory contends that capability is ability of a company in deploying resources, mostly combined, utilizing organizational processes in producing an expected effect. The theory ascertains that sustainable competitive advantage can only be realized if resources imitable, non-substitutable and valuable.

Operational effectiveness and efficiency can be achieved by effective management of resources like knowledge and information, firm attributes, organizational processes, assets and capabilities. The theory acknowledges that a firm can use it unique demographic characteristics such as the history, age, ownership, human resources and physical facilities to gain competitive advantage. The theory underpins this research on the ground that county governments can utilize their tangible and intangible resources and capabilities such as technology, leadership and human resources to facilitate their competitiveness.

2. TECHNOLOGICAL CAPABILITIES

Due to rapid environmental changes, strategic technological capability should not be ignored. It is only through technological adaptability that firms can survive. Strategic technological capability enables firm to identify, acquire and apply new external knowledge to develop operational competencies, which leads to the attainment of superior performance. Strategic technological capability has been described as the firm's ability to design and develop new process, product and upgrade knowledge and skills about the physical environment in unique way, and transforming the knowledge into instructions and designs for efficient creation of desired performance (Wang et al., 2006). Strategic technological capability entails not only technical mastery capability, but also the capacity to expand and deploy the firm's core capabilities, and effectively combine the different streams of technologies and mobilize technological capability comprises the body of practical and theoretical knowledge, procedures, experience, methods and physical equipment and devices (Ahmad et al., 2014). Strategic technological capability represents a firm's superior and heterogeneous technical resources which meticulously related to the design technologies, product technologies, information and process technologies, sourcing and integration of external knowledge (Bergek, Tell, Berggren, & Watson, 2008). These components of technological capabilities are responsible for significant positive variation in firm's performance (Bergek et al., 2008).

Strategic technological capability enables firm to identify, acquire and apply new external knowledge to develop operational competencies, which leads to the attainment of superior performance. Through effective strategic technological capability, a firm creates and delivers new products and services in better and efficient way that best satisfies the customer needs, thus enhances the overall success of firm's new product development and performance (Wang et al., 2006). Hence, strategic technological capability enables firms to endure the effects of dynamically changing business environment throughout the life of business, right from the start-up to the age of corporate social responsibility. Effective development of strategic technological capability in firms entails becoming open-minded to the development in technological environment, perpetual accumulation of valuable knowledge and deployment of the current technologies effectively (Ahmad et al., 2014; Bergek et al., 2008; Wang et al., 2006). Therefore, effective combination of appropriate operational capabilities enhances the strength of firm's strategic technological capability. Strategic technological capability has been established in allowing firms to develop and deliver valuable product or services to customers and ensure effective customer relationship which positively enhance performance (Reichert & Zawislak, 2014; Ahmad et al., 2014; Zawislak et al., 2013; Wang et al., 2006).

Strategic technological capability and relational capability are essential dynamic capabilities that enable organisations to achieve and maintain sustainable competitive advantage and superior performance in competitive global business environment (Yang, et al.,2018; Wang, et.al., 2006). However, inefficient capabilities have constrained the business activities and performance of organisations (Sok, et al.,2017), especially, in African economies where human capital, technological, collaborative and innovative capabilities upset the competitiveness and performance of the sector (Asante, Kissi, & Badu, 2018; Akeyewale, 2018; Oyelaran-Oyeyinka et al., 2012). Nevertheless, extant literatures have established that technological, relational and learning capabilities are valuable, rare, inimitable and non-substitutable resources and dynamic capabilities that enhance the sustenance of competitive advantage and performance in rapidly changing environment (Yang et al., 2018; Pham, et., 2017; Ahmad, et al.,2014). However, these capabilities have been studies on organisations from plastic industry (Chantanaphant, et al., 2013), professional and financial services (Ulbrich & Borman, 2017; Ainin, et al., 2010), healthcare, (et al., 2017), constructions (Manley & Chen, 2015) and aviation industry (Rajasekar & Fouts, 2009), mostly from western developed world, the USA, Latin America and Emerging Asian economies.

Technology is a systematic application of physical forces for production of goods and services. The knowledge used in practical ways in industry (Oxford 2005). It is the knowledge, process, tools, methods and systems employed in the creation of goods and improving in services. Technology is the result of man's learned and acquired knowledge or his technical skills regarding how to do things well (Khalil, 2000). Technological innovation provides the life-blood of economic activities.

Technological innovation is a tool for economic growth and the application of those inventions to meet emerging business opportunities, and to meet social needs, and environmental challenges. For any organization to be able to compete, it must be technologically innovative. Technological innovation and core competitiveness enjoy symbiotic relationship (Rungsithong et al. (2017). Technological Innovation Capability (T.I.C) is an important component of the core competitiveness of the manufacturing industry, and core competitiveness play a role in promoting or influencing technological innovation. Technology should be so designed to be able to match the marketing capability of the organization and be seen as reflecting in the strategic plan of the firm and its overall success. Innovation should match resources inputs, technology and market. This according to Liao (2018) is part of innovation and the new combination of various elements of productivity. There is need for these technological innovation capabilities (which serve as the driving force) and strategic plan capabilities. Marketing capabilities are prerequisites to sound strategy marketing. This synergy is a dynamic situation as it combines necessary innovative capabilities to respond to the environment. According to Kazmi (2008), an organization need to possess dynamic capabilities to adjust in order to respond to the external environment.

The essence of innovation is to create value (Kim and Mauborgne, 1999). And to value innovate, companies must be able to offer radically superior value and ensure that the target market is accessible to the price and this is what management of Nestle product assumes to be doing by packaging its product for the affordability of the market. Eris et al. (2018), conclude that value innovation involves new product concept or new way of developing a business opportunity using the existing technologies and knowledge. This is the essence of strategic marketing derived from the corporate strategic planning capabilities. The impact of technological innovation capability on company's performance is enormous (Eris et al. 2018). Innovation is an interactive process characterized by technological interrelated uses between sub-system (Goh et al. (2012). It enhances customer competence and technological competence (Daniels, 2002). Galende and Fuente (2003) states that technological innovation has impact on commercial resources, organizational resources and intentions. It impacts on the firm or industry, suppliers and customers (Liao 2018). Lei and Yursberg (2016) observe flexibility innovation, efficiency and relatively higher speed.

Teece et al (2019) describe a "strategic technological capability" as "the ability to perform any relevant technical function or volume activity within the organization including the ability to develop new products and processes and to operate facilities effectively". Strategic technological capability have been an integral strategic resources used by organizations to achieve competitive advantage in the industry over the past era (Duysters and Hagedoorn, 2013). This is known from McEvily et al. (2004) study which argues that organizations that have higher technological skills appear to perform at the highest level, and also tend to be more innovative and creative. They achieve a great efficiency gain by inventing process innovations (Teece et al., 1997), and also engage in high differentiation strategy by creating products to respond to the evolving market (Teece and Pisano, 2016; Verona, 2019). It was suggested by Porter (1985) that the ability of an organization to employ and develop a high technology for its product goes a long way in determining the strategic position

to adopt whether it is that of the differentiation position or the cost leadership position. Further speaking, he argues that the ability of an organization to be able to lead and maintain technological change in the industry eventually give such organization a justifiable competitive advantage over others.

The ability of strategic technological capability to control the ability of the organization to perform should be a positive step for the organization to gain the competitive edge over others. For instance, for an organization that adopt the cost leadership strategy, there can be the enjoyable positive advantage of the relationship between the strategy adopted and performance if it has a significant technological capability. This implies that technological capabilities will help the organization to efficiently produce more products at the lowest cost possible thereby enhancing its economies of scale (Pham et al., 2017). Correspondingly, a higher strategic technological capability also helps in achieving competitive advantage adopting the differentiation strategy by improving the quality of the product, adding new features and values to the product, and also improving the economies of scale of the organization (Pham et al., 2017).

Much theoretical research have been focused on technological capabilities, however, there have been less research on its relationship with organizational performance (Tsai, 2004). Among researchers that have studied its relationship with organizational performance include Aw and Batra (2012). They looked at the relationship between strategic technological capability and firm efficiency in Taiwan's manufacturing industry using total expenditure on R&D and on-the-job training as the proxy variables for strategic technological capability. Their result found out there exist a positive correlation between strategic technological capability and firm efficiency. Consequently, Acha (2000) in his work replaced strategic technological capability with R&D expenditure, publications and patents and discovered that there is also a positive correlation between those elements and firm's operational performance. Tsai (2004) simultaneously studied the relationship between these two variables using a seven year panel dataset of 45 large manufacturing firms quote on the Taiwan stock market as empirical evidence. The result indicated that strategic technological capability is an important determinant of a firm's performance in the electronic field. It is then suggested from these points of views that technological capabilities have a positive effect on organizational performance. (Etemad and Lee, 2001; Lee et al., 2001; Afuah, 2002; Schoenecker and Swanson, 2002).

Intense competition has undermined the performance of firms in developing economies as they try to expand the scope of their operation and market. The desire of firms to keep in pace with the development in the global technological business environment has been constrained by several factors which include inadequate commitment to acquire the new technologies, lack of technical and networking skills, inadequate human capital and improper choice of technology (MAN, 2017; Mefuna & Abe, 2015). Consequently, the industrial and commercial landscapes were dominated by foreign factors and products (MAN, 2017). Hence, African countries under the banner of the African Continental Free Trade Agenda have demonstrated commitment to improve the economic and commercial activities of the region through the enhancement of the firms' competitive advantage locally and at global front. In this regard, Nigerian Government has introduced several programs and policies such as the National Information Technology Development Agency, the National Industrial Revolution Plan, National Office for Technology Acquisition and Promotion, among others, to help firms improve the capacity to develop or imitate the universally acknowledged industrials technologies and enhance their ability in assimilating new technologies to satisfy the peculiar needs of the country (NIRP, 2014).

However, due to the dearth of open standards, firms need to create distinctive capabilities and product to effectively expand and internationalize their operations and survive the globalization effects (Rugraff, 2012). The resource-based view (RBV) and the dynamic capability view have for decades demonstrated the crucial role of capabilities in enhancing firm's competitive advantage and performance (Teece, Pisano, & Shuen, 2019; Barney, 2013; Wernerfelt, 1984). Therefore, strategic technological capability and relational capability are essential dynamic capabilities that enable firms to achieve and maintain sustainable competitive advantage and superior performance in competitive global business environment (Yang, Xie, Liu, and Duan, 2018).

Conceptualizing learning capability as mediator is consistent with the work of Hailekiros and Renyong (2016) and Wang et al. (2006). The concept of learning capability in the field of research and among practitioners has greatly grown over the years due to its importance to the dynamic business environment (Alegre and Chiva, 2008). Nevertheless, the concept of learning capability (Goh, Elliott, and Quon, 2012; Sok et al., 2011; Alegre and Chiva, 2008) emphasizes the importance of some facilitating factors for efficient organizational learning and innovative performance. Hence, technological and relational capabilities are essential dynamic capabilities in changing what the firm knows by internalizing new knowledge

(Pham et al., 2017; Zawislak, Alves, Tello-Gamarra, et al., 2013). These capabilities are therefore considered essential to the adaptation and assimilation of new knowledge and techniques to improve performance. Furthermore, Sukoco, Hardi, and Qomariyah (2018) sought for an investigation of the potential mediating role of learning on the relationship of firm's capabilities and performance. Nonetheless, limited attention has been given to the empirical examination of the mediating role of learning capability on the association of the technological and relational capabilities and the performance of firms in developing economies.

Strategic technological capability plays a crucial role in the attainment of firm's efficiency in innovativeness and production process. It is generally associated with the knowledge and skills necessary for a business firm to develop, use, adapt, absorb and transfer technologies (Mori, Batalha, & Alfranca, 2016). Firm's technology can be regarded as part of the extensive body of knowledge, techniques, system and tools available for the generation, distribution and the usage of goods and services by the final destination. A firm's technological change can be appreciated as a continuing process to generate and absorb technologies that enable the firm to competitively produce and offer valuable product to the market. Wang et al. (2006) opined that the positive impacts of strategic technological capability on firm's performance demonstrated the potential of this capability to stimulate mediating variables such as firm's learning.

It has been demonstrated that strategic technological capability improves firm's learning capability, organizing and manufacturing capabilities, as well as resource allocation capability (Baark, Lau, Lo, & Sharif, 2011). Consequently, technologically oriented firms have the will and ability to acquire important technological knowledge and apply them in the business operation process. Hence, the development process of firm's strategic technological capability has been established to be a path dependent development process, which started with learning by doing and followed by learning by adaptation to enhance productivity through proficient utilization and adaptation of technological knowledge (Ray, 2008). It is therefore essential to state that strategic technological capability increases firm's efficiencies in developing innovative idea and knowledge that enable SMEs firms to achieve distinctive performance in reaction to the changing marketing environment. Strategic technological expertise is critical in acquisition and integration of external knowledge, thus detailed technological understanding is required to effectively acquire and exploit new knowledge (Lichtenthaler, 2016). Technological skills are considered crucial in bringing innovative idea and better product design (Masa'deh et al., 2018). Therefore, strategic technological capability has been considered to be an essential factor in changing what a firm knows by internalizing new knowledge (Ahmad et al., 2014; Zawislak et al., 2013; Baark et al., 2011; Wang et al., 2006).

3. METHOD

This study adopted a descriptive research design. The target population for the study was 72, comprised of all middle level management in Machakos County, Kenya. Since the study population was small, the study worked with the entire population which is census. Data collection instrument was questionnaire and other information relevant to the study. Both primary and secondary data was collected. Piloting was done to test the validity and reliability of the data collection instrument. The data was reduced, organized, coded, edited, classified using a table and analysed to bring out the meaning under each of the factors. It was crosschecked and verified for errors, completeness and consistency. It was then coded, entered and analysed descriptively using IBM Statistical Package for Social Sciences (SSPS 23). Pearson correlation analysis was used to test the relationship between variables in the study hypotheses. ANOVA, multiple linear regression analysis was adopted computed to determine the statistical relationship between the independent variables and the dependent variables.

4. DISCUSSION

The study sought to examine the influence of strategic technological capability on organizational performance of Machakos County Government Kenya. The respondents were requested to rate their agreement or otherwise against each statement posed to them, using a 5-level Likert scale (strongly disagree meant a one, disagree was a two, neutral was a three, agree was a four and strongly agree was a five). The statements posed to respondents sought to ascertain their opinion regarding strategic technological capability.

The findings in Table 4.1 reveal that majority of the respondents with an aggregate mean score of 4.3 and a standard deviation of 0.8 agreed with statements on strategic technological capability. The respondents agreed with the statements

that the county government should have the capacity to expand and deploy the firm's core capabilities, and effectively combine the different streams of technologies and mobilize technological resources throughout the firms (mean=4.2), firm's superior and heterogeneous technical resources which meticulously related to the design technologies, product technologies, information and process technologies, sourcing and integration of external knowledge (mean=4.2). With effective strategic technological capability, a firm creates and delivers new products and services in better and efficient way that best satisfies the customer needs, thus enhances the overall success of firm's new product development and performance (mean=4.2), results on the statement that strategic technological capability enables firms to endure the effects of dynamically changing business environment throughout the life of business, right from the startup to the age of corporate social responsibility (mean -4.4) and on (mean – 4.3) the ability of an organization to employ and develop a high technology for its product goes a long way in determining the strategic position to adopt whether it is that of the differentiation position or the cost leadership position. Lastly on the statement that a higher strategic technological capability helps in achieving competitive advantage adopting the differentiation strategy by improving the quality of the product, adding new features and values to the product, and also improving the economies of scale of the organization (mean=4.1)

Table 4 1. Descrip	ntive Statistics	on strategic	technological	canability
Table 4.1. Desch	puve stausues	on su alegic	technological	capability

Statement(N=70)	SD	D	Ν	Α	SA	Μ	S.DEV
The county government should have the capacity to expand and deploy the firm's core capabilities, and effectively combine the different streams of technologies and mobilize technological resources throughout the firms	1.4%	4.2%	6.3%	47.7%	40.4%	4.2	0.8
firm's superior and heterogeneous technical resources which meticulously related to the design technologies, product technologies, information and process technologies, sourcing and integration of external knowledge	2.5%	6.0%	1 9%	40.4%	46 3%	12	1.0
With effective strategic technological capability, a firm creates and delivers new products and services in better and efficient way that best satisfies the customer needs, thus enhances the overall success of firm's new product	2.370	0.070	4.970	+0.+70	+0.370	4.2	1.0
development and performance. strategic technological capability enables firms to endure the effects of dynamically changing business environment throughout the life of business, right from the startup to the	0.0%	5.6%	7.7%	43.5%	43.2%	4.2	0.8
age of corporate social responsibility the ability of an organization to employ and develop a high technology for its product goes a long way in determining the strategic position to adopt whether it is that of the	0.0%	1.8%	7.4%	40.4%	50.5%	4.4	0.7
differentiation position or the cost leadership position a higher strategic technological capability helps in achieving competitive advantage adopting the differentiation strategy by improving the quality of the product, adding new features and values to the product, and also improving the economies of scale of the	0.0%	8.9%	20.0%	50.1%	21.0%	4.3	0.7
organization	0.0%	6.0%	15.0%	50.0%	29.%	4.1	0.6
Aggregate mean						4.3	0.8

4.1 Inferential Statistics

4.1.1 Pearson Correlation

The study sought to establish the strength of the relationship between independent and dependent variables of the study. Pearson correlation coefficient was computed at 95 percent confidence interval (error margin of 0.05). Table 4.2 illustrates the findings of the study.

	Organizational performance
Pearson Corre	relation .875 ^{**}
Strategic technological capability Sig. (2-tailed)	.000
N	70

Table 4.2: Correlation Matrix

As shown on Table 4.2 above, the p-value for strategic technological capabilities was found to be 0.000 which is less than the significant level of 0.05, (p<0.05). The result indicated that Pearson Correlation coefficient (r-value) of 0.875, which represented a strong, positive relationship between technological capabilities on organizational performance of Machakos County Government Kenya.

4.1.2 Multiple Linear Regression

Multiple linear regressions were computed at 95 percent confidence interval (0.05 margin error) to show the multiple linear relationship between the independent and dependent variables of the study.

4.1.2.1 Coefficient of Determination (R2)

Table 4.3 shows that the coefficient of correlation (R) is positive 0.808. This means that there is a positive correlation between influences of strategic technological capabilities and organizational performance of Machakos County Government Kenya. The coefficient of determination (R Square) indicates that 79.5% of organizational performance of Machakos County Government Kenya is influenced by technological capabilities. The adjusted R² however, indicates that 69.3% of organizational performance of Machakos County Government Kenya is influenced by technological capabilities. The adjusted R² however, indicates that 69.3% of organizational performance of Machakos County Government Kenya is influenced by the effect of technological capabilities leaving 30.7% to be influenced by other factors that were not captured in this study.

Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808 ^a	.795	.693	.90787

a. Predictors: (Constant), technological capabilities

4.1.2.2 Analysis of Variance

Table 4.4 shows the Analysis of Variance (ANOVA). The p-value is 0.000 which is < 0.05 indicates that the model is statistically significant in predicting how tecnological capabilities influence organizational performance of Machakos County Government Kenya. The results also indicate that the independent variables are predictors of the dependent variable.

Table 4.4 ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	5.002	1	1.081	56.001	.000 ^b
1	Residual	59.430	69	.969		
	Total	64.432	70			

a. Dependent Variable: organizational performance of Machakos County Government Kenya

b. Predictors: (Constant), technological capabilities

4.1.2.3 Regression Coefficients

From the Coefficients table (Table 4.5) the regression model can be derived as follows:

Y = 33.129+ 0.729X4

The results in table 4.5 indicate that all the independent variables have a significant positive influence on organizational performance of Machakos County Government Kenya. The technological capabilities with a coefficient of 0.729 (p-value = 0.000). According to this model when the independent variable values are zero, organizational performance of Machakos County Government Kenya will have a score of 33.129.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	33.129	3.118		38.422	.000	
	Technological capabilitie	s .729	.174	.723	3.114	.000	

Table 4.5: Regression Coefficients

4.1.3 Hypotheses Testing

Ho4: Technology capability does not have a significant influence on performance of County government of Machakos.

From Table 4.5 above, strategic technological capability ($\beta = 0.727$) was found to be positively related to organizational performance of Machakos County Government Kenya. From t-test analysis, the t-value was found to be 3.114 and the ρ -value 0.000. Statistically, this null hypothesis was rejected because ρ <0.05. Thus, the study accepted the alternative hypothesis and it concluded that strategic technological capability affects organizational performance of Machakos County Government Kenya.

5. CONCLUSION AND RECOMMENDATION

In conclusion basing on the findings, Strategic technological capability ($\beta = 0.727$) was found to be positively related to organizational performance of Machakos County Government Kenya. From t-test analysis, the t-value was found to be 3.114 and the ρ -value 0.000. Statistically, this null hypothesis was rejected because $\rho < 0.05$. Thus, the study accepted the alternative hypothesis and it concluded that strategic technological capability affects organizational performance of Machakos County Government Kenya. The study came up with a number of recommendations. The county government should have the capacity to expand and deploy the firm's core capabilities, and effectively combine the different streams of technologies to mobilize technological resources throughout the firms in order satisfy the customer needs in an efficient and effective ways.

REFERENCES

- [1] Abbas, U.I. & Abu, M.M. (2019). Impact of Financial Control Mechanisms on Profitability Performance: A Case of Manufacturing Firms in Nigeria. International Journal of Managerial Studies and Research. 7(3), 1-10.
- [2] Abdul-Rauf, A.L. (2016). Financial Management capability in Small and Medium Sized Enterprises: Empirical Evidence from the District of Ampara in Sri Lanka. International Journal of Economics, Business and Management Studies. 3(3), 117-126
- [3] Acha V. (2000). The role of technological capabilities in determining performance: the case of the upstream petroleum industry. The DRUID conference of industrial dynamics, Hillerdd
- [4] Afuah A. (2002). Mapping technological capabilities into product markets and competitive advantage: the case of cholesterol drugs. Strategic Management Journal: 23:171–9.
- [5] Adeyemi, B. (2011). Bank failure in Nigeria: a consequence of capital inadequacy, lack of transparency and nonperforming loans? Banks and Bank Systems, 6(1)
- [6] Alvesson, M., & Einola, K. (2019). Warning for excessive positivity authentic leadership and other traps in leadership studies. The Leadership Quarterly, 30(4), 383-395.
- [7] Adhiambo, O. W. (2018). Influence of Differentiation Strategies on Performance of Manufacturing Companies Operating in Kenya (MBA Project, University of Nairobi)Page: 477
- [8] Adeodun, A., Daniyan, I., Omohimoria, C., & Afolobi, S. (2015). Development of indigeneous engineering and technology in Nigeria for sustainable development through promotion of SMEs (case of design of manually operated paper recycling plant). International Journal of Science, Technology and Society, 3(4), 124–131
- [9] Ahmad, N., Othman, S. N., & Mad Lazim, H. (2014). A review of strategic technological capability and performance relationship in manufacturing companies. International Symposium on Technology Management and Emerging Technologies (pp. 193–198).

- [10] Ahmad, N., Othman, S. N., & Mad Lazim, H. (2014). A review of strategic technological capability and performance relationship in manufacturing companies. In International Symposium on Technology Management and Emerging Technologies (pp. 193–198).
- [11] Ahmed, W., Najmi, A., Mustafa, Y., & Khan, A. (2019). Developing model to analyze factors affecting firms' agility and competitive capability: A case of a volatile market. Journal of Modelling in Management, 14(2), 476–491.
- [12] Aminasaun and Babayanju, (2016). Sources of Finance and Financial Performance of Downstream Petroleum Firms in Nigeria. European Journal of Business and Management. 8(33), 210-224.
- [13] Ariyo, Clement Olugbenga, Onileowo, Temitope Teniola and Oke, Michael Ojo. 2020. "The impact of financial planning on the financial performance of small scale business firms in ekiti state", International Journal of Development Research, 10, (02), 33818-33826
- [14] Asante, J., Kissi, E., & Badu, E. (2018). Factorial analysis of capacity-building needs of small- and medium-scale building contractors in developing countries: Ghana as a case study.Benchmarking: An International Journal, 25(1), 357–372
- [15] Al-Ansari, Y., Altalib, M., & Sardoh, M. (2013). Technology orientation, innovation and business performance: A study of Dubai SMEs. International Technology Management Review, 3(1), 1–11.
- [16] Alcantar, J., & Ngwenyama, O. (2015). Top management capability for SME's market entery decisions. International Association for Management of Technology (pp. 1348–1362).
- [17] Amit, R., Shoemaker, P.J.H., (1993), Strategic assets and organizational rent, Strategic Management Journal, 14,1: pp.33-46.
- [18] Apospori, E., Nikandrou, I., Brewster, C., & Papalexandris, N. (2017). HRM and organizational performance in northern and southern Europe. The International Journal of Human Resource Management, 19(7), 1187-1207
- [19] Avolio, B. J. (1999). Full leadership development: Building the vital forces in organizations. Thousand Oaks, CA: Sage.
- [20] Baark, E., Antonio, K., Lo, W., & Sharif, N. (2011). Innovation sources, capabilities and competitiveness: Evidence from Hong Kong firms. Paper Presented at the DIME Final Conference.
- [21] Bäcklander, G., Rosengren, C. & Kaulio, M. (2021). Managing intensity in knowledge work: Self-leadership practice among Danish management consultants. Journal of Management & Organization, 27, 342–360. Google Scholar
- [22] Barney, J. B. (1991). Resource-based theories of competitive advantage: A ten-year retrospective on the resourcebased view. Journal of management, 27(6), 643 - 650.
- [23] Barney, J. B. (2016). Firm resources and sustained competitive advantage. Journal of management, 1(7), 99 120
- [24] Benard, R. K. (2018). Information Communication Technology Considerations and Revenue Collection in Nairobi City County, Kenya. International Journal of Social Sciences and Information Technology, 4(10), 189 – 203
- [25] Benner, M. J. & Tushman, M. L. (2013). Exploitation, exploration, and process management: the productivity dilemma revisited. Academy of Management Review, 28(2), 238-256.
- [26] Bergek, A., Tell, F., Berggren, C., & Watson, J. (2008). Technological capabilities and late shakeouts: Industrial dynamics in the advanced gas turbine industry, 1987-2002. Industrial and Corporate Change, 17(2), 335–392.
- [27] Branzei, O., Vertinsky, I., (2006), Strategic pathways to product innovation capabilities in SMEs, J of Business Venturing, 21, 1: pp.75-105.
- [28] Carmeli, A. ,(2004), Assessing core intangible resources, European Management Journal, 22,1; pp.110-122
- [29] Carucci 2016. Great Leaders know they're not perfect. Retrieved, from Harvard Business Review:https://hbr.org/ 2015/12/great-leaders-know-theyre-not-perfect

- [30] Celuch, K.G., Kasouf, C.J., Peruvemba, V., (2002), The effects of perceived market and learning orientation on assessed organizational capabilities, Industrial Marketing Management, 31, pp.545-554.
- [31] Chantanaphant, J., Nabi, M. N. U., & Dornberger, U. (2013). The effect of technological capability on the performance of SMEs in Thailand. The Macrotheme Review, 2(4), 16–26.
- [32] Chen, I. S. N., Fung, P. K. O., & Yuen, S. S. M. (2019). Dynamic capabilities of logistics service providers: Antecedents and performance implications. Asia Pacific Journal of Marketing and Logistics, 31(4), 1068-1075.
- [33] Cheng, J. H., Chen, M. C., & Huang, C. M. (2014). Assessing inter-organizational innovation performance through relational governance and dynamic capabilities in supply chains. Supply Chain Management, 19(2), 173–186, Available from: https://doi.org/10.1108/SCM-05-2013-0162
- [34] Chepkole, G. K. & Deya, J. (2019). Effect of strategic capability on competitive advantage of information technology firms in Nairobi City County, Kenya. International Academic Journal of Human Resource and Business Administration, 3(5), 104-127
- [35] Chowdhury, M. M. H., & Quaddus, M. (2017). Supply chain resilience: Conceptualization and scale development using dynamic capability theory. International Journal of Production Economics, 188, 185-204.
- [36] Collier, D.A. & Evans, J.R. (2021). Operations and Supply Chain Management, Cengage Learning, Boston, MA.Google Scholar
- [37] Cooper, D. R. & Schinder, P. S. (2011). Business research methods (10th Ed). New York: McGraw Hill
- [38] Daft, R. L. (2010). New era of management (9th Ed.) South-Western College, Cengage Learning.
- [39] Daft, R. L., & Marcic, D. (2009). Understanding management. Mason, OH: Thomson Higher Education.
- [40] Daniel. M. Kammen (2002), Technological Innovation and Diffusion in Developing Countries. Annual meetings of the International Energy Workshop, 18-20, June 2002, Stanford University, U.S.A.
- [41] De Meyer2009. Collaborative Leadership: new perspectives in leadership development. Cambridge Judge Business School,.
- [42] Dous, M., Salomann, H., Kolbe, L., & Brenner, W. (2014), Knowledge Management Capabilities in CRM: Making Knowledge For, From and About Customers Work. 11thAmericas Conference on Information Systems, Omaha, NE, USA 11th-14th 2014.
- [43] Franco, A. M., Sarkar, M., Agarwal, R., & Echambadi, R. (2009). Swift and smart: The moderating effects of technological capabilities on the market pioneering–firm survival relationship. Management Science, 55(11), 1842– 1860.
- [44] Federico, G. T. B., & Magdalena, M. G. T. (2011). Is Porter's diamond applicable to developing countries? A case study of the broiler industry in Uruguay. International Journal of Business and Social Science, 2(6), 17 28
- [45] Fitzroy, P., Hulbert, J. and O'Shannassy, T. (2016). Strategic Management: The Challenge of Creating Value, 3rd Edition, London, UK: Routledge Publishing.CrossRefGoogle Scholar
- [46] Gatignon, H., & Xuereb, J.-M. (1997). Strategic orientation of the firm and new product performance. A working paper in the INSEAD Working Paper Series is intended as a means whereby a faculty researcher's thoughts and findings may be communicated to interested readers.
- [47] Halac, D. S. (2015). Multidimensional construct of technology orientation. Social and Behavioral Sciences, 195(1), 1057–1065.
- [48] Hailekiros, G. S., & Renyong, H. (2016). The effect of organizational learning capability on firm performance : Mediated by technological innovation capability. European Journal of Business Management, 8(30), 87–95.
- [49] Hatch, N. W., & Howland, C. (2015). When Does Competitive Advantage Improve Customer Welfare. In Academy of Management Proceedings (Vol. 2015, No. 1, p. 18091). Academy of Management.

- [50] Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capability: Strategy for the (N) everchanging world. Strategic management Journal, 32(11), 1243-125
- [51] Hobday, M. (2014). Product complexity, innovation and industrial organization. Research policy, 26(6),689-710
- [52] Ibrahim, A.U. and Mustapha, A.M. (2019). Impact of Financial Control Mechanisms on Profitability Performance: A Case of Manufacturing Firms in Nigeria. International Journal of Managerial Studies and Research (IJMSR). 7(3), 1-10
- [53] Ibrahim, R., & Primiana, I. (2015). Influence Business Environment On The Organization Performance. International Journal of Scientific & Technology Research, 4(4), 283-293.
- [54] Imbambi, R. M. (2018). Influence of Strategic Capabilities on Competitive Advantage of Sugar Companies in Western Kenya (Doctoral dissertation, JKUAT COHRED).
- [55] Irani, Z., Ahmad, N., Amer, N. T., Qutaifan, F., & Alhilali, A. (2013). Technology adoption model and a road map to successful implementation of ITIL. Journal of Enterprise Information Management, 4(5), 45 – 52
- [56] Iravo, M., Ongori, J. & Munene, C. (2013). Factors affecting the performance of hotels and restaurants in Kenya. A case of Kisii County. Interdisciplinary Journal of Contemporary Research in Business. 4(12), 897-928
- [57] Jain, V., & Kiran, R. (2012). Technology management strategies and small and medium enterprises of Punjab manufacturing: A use-based sector analysis. Journal of Intellectual Property Rights, 17(1), 64–72
- [58] Kamakia, P. (2014). Effect of product innovation on performance of commercial banks in Kenya (Doctoral dissertation, University of Nairobi).
- [59] Kasera, G. K. (2017). Strategic Management and Organizational Performance: Findings from Health Institutions in Nairobi County (Doctoral dissertation, United States International University-Africa).
- [60] Karamat, A. U. (2013). Impact of leadership on organizational performance. Unpublished doctoral dissertation, University of Applied Sciences, Finland
- [61] Kim, D., Kumar, V. & Kumar, U. (2012). Relationship between quality management practices and innovation. Journal of Operations Management, 30(4), 295-315
- [62] Kim, W.C. and Mauborgue, R (1999) Strategy, Value Innovation and the Knowledge economy. Sloan Management Review, 40, 3, Spring, 41-54
- [63] Kwame, B. (2010). Financial management practices of small firms in Ghana: An Empirical Study. The Strategic Journal of Business & Change Management,
- [64] Khalil, T. (2000). Management of Technology. The Key to competitiveness and Wealth Creation, McGrawHill.
- [65] Lee C, Lee K, Pennings J.M. (2001). Internal capabilities, external networks, and performance: a study on technology-based ventures. Strategic Management Journal: 22(6):615–40.
- [66] Lia O. Zhan (2001), Technology Innovation Concepts, Strategies and Research Methods. Yunnan Materials. Oxford Advance Learner Dictionary, (2005).
- [67] Lichtenthaler, U. (2016). Determinants of absorptive capacity: The value of technology and market orientation for external knowledge acquisition. Journal of Business, & Industrial Marketing, 31(5), 600–610, Available from: https://doi.org/10.1108/JBIM-04-2015-0076
- [68] Lin, C. A. (2013). An interactive communication technology adoption model. Communication theory, 13(4), 345-365
- [69] Lira (2016). The Effect of Collaboration on Performance in Public Management: Evidence from Community Policing. University of Kansas,
- [70] Liu, C. M., Lin, K. W., & Huang, C. J. (2014). Effects of product development on operating performance in textile industry. The Anthropologist, 17(1), 157-163

- [71] Matthysen, M. and Harris, C. (2018), "The relationship between readiness to change and work engagement: a case study in an accounting firm undergoing change", SA Journal of Human Resource Management, Vol. 16 No. 1, pp. 1-11.
- [72] Mbah, P. C. Chiioke, E., & Ebele, C. O. (2018). Effect of organizational structure on performance of manufacturing firms in South East Nigeria. GE-International Journal of Management Research, 3(12). 164 184
- [73] Mbithi, B., Muturi, W., & Rambo, C. (2015). Effect of Product Development Strategy on Performance in Sugar Industry in Kenya. International Journal of Academic Research in Business and Social Sciences, 5(12), 326-339
- [74] Mertler, C. A., & Vannatta, R. A. (2010). Advanced and Multivariate Statistical Methods, (4th Ed.)".Los Angeles
- [75] McGrath, G. R., & MacMillan, I. C. (2000). Entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty. Boston, MA: Harvard Business School Press.
- [76] McKelvie, A., Davidsson, P., (2009), resource base to dynamic capabilities: an investigation of new new firms, British Journal of Management, V.20, pp.63-80.
- [77] Mohd, A. A., Harif, M., Osman, H. B. & Hoe, C. H. (2010). Financial management practices: An in-depth study among the ceos of small and medium enterprises (SMEs). International Review of Business Research Papers, 6(6): 13-35.
- [78] Mori, C. D., Batalha, M. O., & Alfranca, O. (2016). A model for measuring technology capability in the agrifood industry companies. British Food Journal, 118(6), 1422–1461, Available from: https://doi.org/http://dx.doi.org/ 10.1108/MRR-09-2015-0216
- [79] Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2012). Verification strategies for establishing reliability and validity in qualitative research. International journal of qualitative methods, 1(2), 13
- [80] Moncada-paternò-castello, P., & Grassano, N. (2014). Innovation, Competitiveness and Growth without R & D? Analysis of Corporate R&D Investment - A Country Approach: Italy.
- [81] Mulwa, J. M. (2015). Factors influencing adoption of ICT in organisational performance by county governments in Kenya: a case of Kitui county (Doctoral dissertation, University of Nairobi).
- [82] Muthigah, F. W., Kiragu, D., & Sang, A. (2022). Effect of Strategic financial capability on Customer Relationship Management in Private Hospitals in Kenya. International Journal of Academic Research in Business and Social Sciences, 12(1), 2591–2599
- [83] Ngamkroeckjoti, C., Speece, M., & Dimmitt, N. J. (2005). Environmental scanning in thai food SMEs: The impact of technology strategy and technology turbulence. British Food Journal,107(5),285–305.
- [84] NSB. (2012). Research & development, innovation, and the science and engineering workforce.
- [85] Ngugi, K., & Karina, B. (2013). Effect of Innovation Strategy on performance of Commercial Banks in Kenya. International Journal of Social Sciences and Entrepreneurship, 1(3), 158-170
- [86] Njoroge. G. J. (2014). Effects of organizational resources, competitive advantage on firm's performance of mobile phone industry in Kenya (Doctoral dissertation, Kenyatta University).
- [87] Novikov, A. M. & Novikov, D. A. (2013). Research Methodology: From Philosophy of Science to Research Design.CRC Press
- [88] Nwuche, C. A., & Awa, H. O. (2014). Career Planning and Development: The Realities in Nigerian Organizations. International Business and Management, 2(1), 117 – 127
- [89] Norzailan, Z., Othman, R. B., & Ishizaki, H. (2016). Strategic leadership competencies what is it and how to develop it. Industrial and Commercial Training, 48(8), 394-399.
- [90] Ogungbure, A. A. (2011). The possibilities of technological development in Africa : An evaluation of the role of culture. Journal of Pan African Studies, 4(3), 86–100.

International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)

Vol. 10, Issue 4, pp: (33-48), Month: October - December 2023, Available at: www.paperpublications.org

- [91] Onipede, K. J. (2010). Technology development in Nigeria : The Nigerian machine tools industry experience. Journal of Economics, 1(2), 85–90.
- [92] Omboga, J.K. & Okibo, W.B. (2016). Effects of Financial Planning Practices on the Growth of Small Manufacturing Firms in Kisii County, Kenya. International Journal of Economics, Commerce and Management. 4(4), 1224-1233.
- [93] Okejiri, E. (2000). Foreign technology and development of indigenous technological capabilities in the Nigerian manufacturing industry. Technology in Society, 22(2), 189–199.
- [94] Moruf, O. O. (2013). An appraisal of technological entrepreneurship development programmes on the performance of selected SMEs in Lagos- Nigeria. Issues in Business Management and Economics, 1(8), 208–217.
- [95] Orodho, A. J. (2005). Essentials of Educational and Social Science Research methods: Qualitative and Quantitative Approaches. Nairobi: Acts Press
- [96] Ogbeiwi, O. (2021). General concepts of goals and goal-setting in healthcare: A narrative review. Journal of Management & Organization, 27, 324–341.Google Scholar
- [97] Pisano, Ogbo, A. I., Chibueze, N. F., Christopher, O. C., & Anthony, I. A. (2015). Impact of Structure on Organizational Performance of selected Technical and Service Firms in Nigeria. Corporate Ownership & Control, 13(1), 1278 – 1284
- [98] Owuor, E. D. (2018). Strategic Planning and Performance of Pharmaceutical Manufacturing Firms in Kenya (MBA Project, University of Nairobi)
- [99] Pötschke, I. (2021). Supplementing Q-method with narratives: Contextualizing CEOs' values for family firms. Journal of Management & Organization, 27, 270–294.Google Scholar
- [100] Ranjit, K. (2015). Research methodology- A step-by-step guide for beginners (2nd ed.). Singapore, Pearson Education
- [101] Ray, A. S. (2008). Emerging through Strategic technological capability: An Overview of India' s Technological Trajectory. International Journal of Business and Management,
- [102] Rhumbi, G. R., & Ghadhi, M. T. (2017). The relationship between Strategic Management Policies and Service Quality in Public and Private Hospitals in India. International Journal of Social Sciences and Entrepreneurship, 1(1), 56-72.
- [103] Rickson, F., & Harvey, V. G. (2013). Strategic Practices and Organisational performance. International Journal of Business and Management, 5(8), 154 – 163
- [104] Rosilyn H.O (2007). Empirical Study of financial planning capability theory and practice: "Value of Financial Planning" longitudinal study: London, Financial Planning Standards Council (FPSC).
- [105] Samimi, M., Cortes, A. F., Anderson, M. H., & Herrmann, P. (2020). What is strategic leadership developing a framework for future research. The Leadership Quarterly, 101353.
- [106] Peris-Ortiz, M., Devece-Carañana, C. A., & Navarro-Garcia, A. (2018). Organizational learning capability and open innovation. Management Decision, 28(5), 577–609, Available from: https://doi.org/10.1108/JFM-03-2013-0017
- [107] Pham, T. S. H., Monkhouse, L. L., & Barnes, B. R. (2017). The influence of relational capability and marketing capabilities on the export performance of emerging market firms. International Marketing Review, 34(5), 606–628.
- [108] Prhanlad C.K & Hand G. (1990), The core competencies of Corporation Business Review.
- [109] Rajasekar, J., & Fouts, P. (2009). Strategic alliances as a competitive strategy: How domestic airlines use alliances for improving performance. International Journal of Commerce and Management, 19(2), 93–114, Available from: https://doi.org/10.1108/MBE-09-2016-0047
- [110] Reichert, F. M., & Zawislak, P. A. (2014). Strategic technological capability and firm performance. ournal of Technology Management and Innovation, 9(4), 20–35.

International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)

- Vol. 10, Issue 4, pp: (33-48), Month: October December 2023, Available at: www.paperpublications.org
- [111] Schilke, O. (2014). On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. Strategic management journal, 35(2), 179-203.
- [112] Rosa, A., Spanjol, J., & Qualls, W. J. (2011). How many and what kind ? The role of strategic orientation in new product ideation. Journal of Product Innovation Management, 28, 236–250.
- [113] StudyCorgi. (2022). Strategic Leadership Failure Scenario. Retrieved from https://studycorgi.com/strategicleadership-failure-scenario/
- [114] Swamidass, P. M., & Kotha, S. (1998). Explaining manufacturing technology use, firm size and performance using a multidimensional view of technology. Journal of Operations Management, 17(1), 23–37.
- [115] Simsek, Z., Heavey, C. & Fox, B.C. (2018). Interfaces of strategic leaders: A conceptual framework, review, and research agenda. Journal of Management, 44 (1), 280–324. CrossRefGoogle Scholar
- [116] Song, M., Nason, R. W., & Di Benedetto, C. A. (2008). Distinctive marketing and information technology capabilities and strategic types: A cross-national investigation. Journal of International Marketing, 16(1), 4–38.
- [117] Tarutė, A., & Gatautis, R. (2014). ICT impact on SMEs performance. Procedia-Social and Behavioral Sciences, 110(0), 1218-1225
- [118] Teece, D.J (1996), Firm Organisation, Industrial Structure and Technological Innovation. Journal of Economic Behaviour & Organisation, Vol. 31, Pp 193-224.
- [119] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic management journal, 18(7), 509-5
- [120] Teng B.S, Cummings J.L. (2002). Trade-offs in managing resources and capabilities. Academic Management Executive: 18(2):81–91.
- [121] Terouhid, S. A., & Ries, R. (2016). People capability: A strategic capability for enhancing organizational excellence of construction firms. Journal of Modelling in Management, 11(3), 811-841.
- [122] Tian, X., Lo, V. & Zhai, X. (2021). Combining efficiency and innovation to enhance performance: Evidence from firms in emerging economies. Journal of Management & Organization, 27, 295–311.Google Scholar
- [123] Tsai K.H. (2004). The impact of strategic technological capability on firm performance in Taiwan's electronics industry. Journal of High Technological Management Research: 15:183–95.
- [124] Tseng, S. M., & Lee, P. S. (2014). The effect of knowledge management capability and dynamic capability on organizational performance. Journal of Enterprise Information Management, 27(2), 158-179.
- [125] Tuan, N. P., & Yoshi, T. (2010). Organisational capabilities, competitive advantage and performance in supporting industries in Vietnam. Asian Academy of Management Journal, 15(1),60-90
- [126] UNCTAD. (2014). Science, technology and innovation capability gaps, policy environment, and evolving policy tools for sustainable development (p. 19).
- [127] Ullah, S., Ullah, A., & Durrani, B. (2011). Effect of leadership on employee's performance in multinational pharmaceutical companies in Pakistan. Interdisciplinary Journal of Contemporary Research in Business, 2(9), 286– 299
- [128] Vesalainen, J., & Hakala, H. (2014). Strategic capability architecture: The role of network capability. Industrial Marketing Management, 43(6), 938-950.
- [129] Voudouris, I., Lioukas, S., Iatrelli, M., & Caloghirou, Y. (2012). Effectiveness of technology investment: Impact of internal strategic technological capability, networking and investment's strategic importance. Technovation, 32(6), 400–414.
- [130] Woods, C., Callagher, L. & Jaffray, T. (2021). Walk tall: The story of Rex Bionics, Journal of Management & Organization, 27, 239–252.Google Scholar

- [131] Yang, J., Xie, H., Liu, H., & Duan, H. (2018). Leveraging informational and relational capabilities for performance: An empirical investigation. The International Journal of Logistics Management, 29(3), 985–1000.
- [132] Yan, C.M, Guan, J.C, Pun, K.F & Tan, P.Y (2004). An Audit of Technological Innovation Capabilities in Chinese firms: Some Empirical findings in Beijing China, Research Policy, Vol. 33 No. 8, pp 1123-1250.
- [133] Zahra, S.A., Nielsen, A.P., (2002), Sources of capabilities, integration, and technology commercialization, Strategic Management Journal, 23,5: pp.377-398.
- [134] Zawislak, P. A., Alves, A. C., Tello-Gamarra, J., Barbieux, D., & Reichert, F. M. (2012). Innovation capability: From technology development to transaction capability. Journal of Technology Management and Innovation, 7(2), 14–25.
- [135] Zawislak, P. A., Alves, A. C., Tello-Gamarra, J., Barbieux, D., & Reichert, F. M. (2013). Influences of the internal capabilities of firms on their innovation performance: A case study investigation in Brazil. International Journal of Management, 30(1–2), 329–348.