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The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 8, Iss. 4, pp 841 – 852. November 29, 2021. www.strategicjournals.com, ©Strategic Journals

INFLUENCE OF CAPACITY BUILDING ON PERFORMANCE OF SAFETY MANAGEMENT SYSTEM IN AVIATION INDUSTRY IN KENYA

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Accepted: November 20, 2021

ABSTRACT

The study examined the influence of capacity building on performance of safety management system in aviation industry in Kenya. This study adopted a cross-sectional survey research design. The study used primary data collected from the aviation service providers using structured questionnaires. It also utilized secondary data collected from publications of aviation authorities such as KCAA, ICAO, FAA and IATA as well as from the respective services providers' journals and websites. The study involved a census of the managers in all the aviation service providers registered in Kenya. One hundred and thirty-two (132) questionnaires were distributed corresponding to the total number of organizations registered as aviation service providers under the Kenya Civil Aviation (Safety Management) Regulations, 2018. Prior to the actual study, a pilot study was conducted using twenty (20) questionnaires that were randomly distributed among the respondents and the results used to edit and modify the questionnaire. The data collected from the respondents during the actual study was analysed using both descriptive and inferential statistical methods. To achieve this, the data was coded, assigned labels to variables categories and entered into the computer. Qualitative responses were analyzed using content analysis. The descriptive technique involved generation of frequencies, mean and percentages while inferential analysis technique involved establishing significant linear relationship between the dependent variable and the independent variables. Pearson's correlation analysis and regression analysis was performed under the inferential analysis. The ANOVA F-statistic was used to test the research hypothesis for the regression coefficients for each variable. The data was presented in form of tables, graphs, and charts. This data was used to establish the influence of capacity building on the performance of safety management systems in aviation industry in Kenya and hence deduce appropriate models. Capacity building will enhance performance of safety management systems in aviation industry in Kenya. The study recommends harmonization of aviation training among African States so as to offer an opportunity, not only to increase the availability of affordable and quality training throughout the continent, but also promote compatibility among operators and safety oversight organizations.

Keyword: *Capacity Building, Performance of Safety Management System*

CITATION: Thendu, B. K., Kariuki, P., & Muturi, W. (2021). Influence of capacity building on performance of safety management system in aviation industry in Kenya . *The Strategic Journal of Business & Change Management,* 8 (4), 841 – 852.

INTRODUCTION

Strategic firm level dimensions are exact functions of a particular business and are very important for any organizational activity or productivity of the company. The performance of an organization is enhanced by the combination of various strategic firm level dimensions. According to Aldag and Kuzuhara (2018), these dimensions are structures, systems and processes, style, staff, resources, shared values, strategy and strategic performance. Strategic firm level dimensions are usually associated to firm performance and these include capacity building (Doğan, 2018).

There are two diverse opinions on what really influences performance. The first viewpoint is that it is actually strategic firm level dimensions that highly influence performance (Galbreath & Galvins, 2018) whereas the second point view is that industry characteristics are the ones influencing organization performance. Performance in a firm reflects the implementation of strategies that give competitive advantage over other firms. Decision making process of a firm relies heavily on its performances that determine the direction the firm can take in the future. Decisions may therefore be based on strategic firm level dimension such as capacity building (Robert Baum & Wally, 2017).

For the aviation industry to thrive in a competitive environment, it requires unique activities that will strengthen its capacity. Capacity is the ability of an organization to perform and marshal its resources towards the attainment and sustenance of organization goals. According to Enjel, Land and Keijzer (2017), capacity is the overall ability of an organization to perform and sustain itself. This ability is the coherent combination of competencies and capabilities, in which competencies refers to the individual skills and abilities while capabilities refer to a broad of collective skills of organization or systems which can be financial resources, management policy, technical analysis etc. and all other attributes that cover the totality of an organization's efforts. As Brown, Lafond and Macintyre (2020) affirmed that capacity building is a multidimensional and dynamic process that improves the ability of organization to meet its objectives or perform better in a competitive environment.

Kenya being a member state of ICAO community is mandated to comply with the SMS implementation and operations requirements (ICAO, 2019). Strategies employed by the organizations implementing and operating a new system will determine its performance (Safarova 2020). This study aimed at examining how capacity building influence performance of safety management system in aviation industry in Kenya.

In Kenya, Chebiego and Kariuki (2018) studied on the strategic firm level factors and performance of manufacturing firms in Kenya, a case of Unilever Kenya Limited. Their study revealed that management traits of the leaders have boosted their effectiveness in the organization and competencies contribute to enhanced employee performance and organizational success. International Civil Aviation Organization being the global reference on civil aviation domain defines organizations providing certified aviation services. This body develops standards and procedures that direct management of safety cases in the civil aviation. Consequently, an annex to the Convention on International Civil Aviation (ICAO) was adopted by the ICAO Council on 25th February 2013 and became applicable on 14th November of the same year (ICAO 2021). Annex 19 of the ICAO convention on safety management services outlines strategies for managing aviation safety that brings on board all service providers in the aviation industry (ICAO, 2021). The organizations whose activities are considered within the purview of ICAO SMS include Air Traffic Services, Approved Training Organizations, Aircraft Maintenance Organizations, International and Commercial Operators of Aircraft or Helicopters, and Certified Aerodrome Operators (ICAO, 2019).

Statement of the Problem

Aircraft accidents and incidents have persisted globally, regionally and more so in Kenya in spite of

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the introduction of safety management systems in the aviation industry. The European Union Aviation Safety Agency Annual Safety Review (2020) indicates that the numbers of non-fatal accidents and serious incidents in 2019 increased in comparison with the average of the previous 10-year period. According to the ICAO safety report (2020) the yearly accident statistics increased in 2019 with a 16 per cent increase in the total number of accidents (ICAO 2020). The trend is no better in Kenya as evidenced by the statistical analysis depicted on Appendix I and II.

This is worrying not only for the safety of passengers but also for Kenya's economy and her bid to strengthen the grasp of the regional aviation hub in Nairobi. It is evident from the above reports that the SMS performance has not yielded enough positive results as aviation accidents and incidents are regularly occurring and audit gaps persist in subsequent inspections. Appropriate implementation of SMS was envisaged to see a reduction of these numbers (ICAO 2019).

Successful managers understand the need for a sound business strategy and thus invest significant time, effort, and money in strategy development. Nevertheless, the real value of strategy can only be recognized through implementation; the ability to implement strategy is more important than the quality of the strategy itself (Martin, 2010). Holbeche (2015) avows that organizations find themselves in an execution trap i.e., the inability to execute a well-designed strategy. All organizations are therefore prompted to adopt strategic firm level dimensions to ensure their survival and development of a competitive edge over their competitors. Effective implementation of safety management systems ensures hazard identification and resolution as well as promoting continuous safety monitoring (Airport Council International, 2016).

Crichton *et al.* (2018) concentrated on the role of non-technical expertise and its effects on the performance of safety elements in aviation industry. In Kenya several studies have been undertaken in the aviation industry. Odhiambo and Kaibui (2016) revealed that stakeholder's involvement affected implementation of air safety projects at KCAA. Nyaga (2010) undertook a study on successful implementation of safety management system programs focusing on Kenya Civil Aviation Authority but left out other agencies as set by ICAO (2019).

Due to contextual and managerial differences among organizations, issues gained from these previous studies may not be assumed to explain the influence of capacity building in the aviation industry in Kenya. The studies do not also sufficiently address the subject of SMS performance as a strategy to minimize safety concerns in the industry. It leaves a gap that this researcher sought to fill by focusing on the influence of capacity building on performance of safety management system in aviation industry in Kenya

Objectives of the Study

The objective of the study was to examine the influence of capacity building on performance of safety management system in aviation industry in Kenya. The study was guided by the following research hypotheses,

- **H_{01}:** Capacity building has no significant relationship with the performance of safety management system in aviation industry in Kenya.

LITERATURE REVIEW

Theoretical Framework

A theory is a set of correlated definitions, propositions and ideas that present a systematic view of phenomena by indicating the relationship of variables with the intention of explaining or predicting the phenomena (Wilson, 2014). A theoretical framework is the blueprint for the entire research and serves as the guide on which to build and support a research idea. It provides a structure to define how a researcher will analytically, methodologically and philosophically approach the study as a whole (Grant, 2014). The study was guided by capacity building theory as it sought to examine the influence of capacity building on

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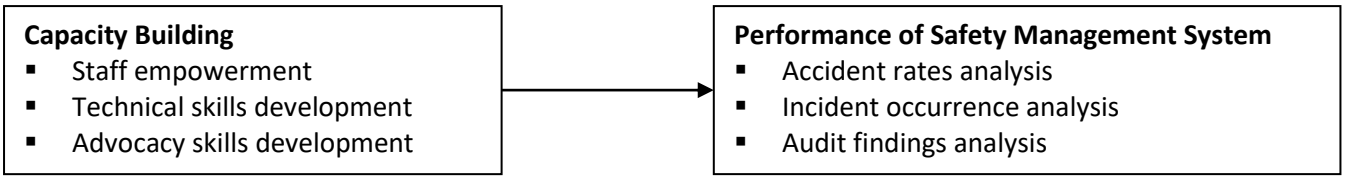
performance of safety management system in aviation industry in Kenya.

Capacity Building Theory

Capacity building is described by Boesen and Therkildsen (2014) as a key pillar in the learning by doing approaches. Approaches adopted by firms to build capacity of staff affects its performance and that of the employees. Capacity building theory aims at enhancing competency of individuals through the development of skills and knowledge. Learning by staff directly relates to the policies drawn by the organization. Successful organizations develop clear policies on individual professional development including provisions such as funding and academic leaves (Palmer & Kaplan, 2014). A conducive learning environment is created within the organization and individual staff members facilitated to enhance their academic and professional qualifications which consequently leads to improved performance of the organization. Therefore, given the importance of capacity building on the performance of safety management system in aviation industry in Kenya, this theory is linked to the variable and research hypothesis of this study.



Independent Variables **Dependent Variable**

Figure 1: Conceptual Framework

Capacity Building

Capacity building is the conceptual approach to development that focuses on understanding the obstacles that inhibit people, governments, international organizations and non-governmental organizations from realizing their development goals while enhancing the abilities that will allow them to achieve measurable and sustainable results (Sewell, 2010). Capacity building is one vital pillar in the performance of an organization. It is considered in various research and in practice (Odhiambo & Kaibui, 2016). Aviation industry is known for efficiency, orderliness and safety and therefore in order to achieve the high levels of safety measures, it requires high staff capacity and capability.

Safety Management System

According to ICAO (2021), safety management system is a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures. Johal (2015) observed that ICAO safety management system framework conform to the Plan-Do-Check-Act cycle because it ensures process control and continuous safety improvement. The aviation industry adopted the use of SMS concept which had been developed by industries such as petrochemical, nuclear, occupational health and construction in the aftermath of a number of disasters that led to enactment of safety management legislation especially in Europe (Stolzer *et al.*, 2015; Hudson, n.d). ICAO (2020) dictates that the SMS framework at a minimum shall be established in accordance with the four component pillars of safety management. According to ICAO (2020), these pillars include safety policy, risk management, assurance and safety promotion. The four elements are incorporated in an organization's structures to the extent that is proportionate to the size and complexity of the organization in hand (ICAO, 2020; Arendt & Adamski, 2017).

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METHODOLOGY

A positivistic approach was used and is concerned with testing hypotheses, structured research design and objective method using cross-sectional design. Thes study adopted a cross sectional survey research design. A cross sectional survey allows the researcher to collect a wide range of information without interfering with the environment since nothing is manipulated. The population for this study comprised of all the aviation service providers in Kenya that have been mandated by ICAO to implement safety management system in their organisations as described at the scope section of this proposal. ICAO categorizes the aviation industry into aviation service providers. In Kenya, the service providers are as follows: Air Traffic Services, Approved Maintenance Organizations, Approved Training Organizations, International Aircraft Operators (usually referred to as international airlines), and Operators of Certified Aerodromes. ICAO has prescribed designated heads of safety as the responsible persons in charge of implementation of safety management system in these organisations. The target population for the study was the managers of these aviation service providers in Kenya.

Table 1: Aviation Service Providers in Kenya

Organization	Number Operating in Kenya
ATS Providers (KCAA Manned Airports)	9
Approved Training Organizations	19
Certified Operators of Aerodrome	12
Approved Maintenance Organizations	50
International Commercial Aircraft Operators	42

Source: KCAA, 2019

The sampling frame for this study was the managers in the aviation service providers detailed in Table 1. To come up with an appropriate study sample, the study utilized stratified sampling technique and more specifically proportionate stratified random sampling. The population was grouped into five strata representing each category of the services provider. A census of all managers in the five categories of service providers was carried out. Table 2 showed the sampling technique and sample size.

Table 2: Sampling Technique and Sample Size

Organization	Number Operating in Kenya	Respondents (Heads of Safety
ATS Providers	9	9
Approved Training Organizations	19	19
Certified Operators of Aerodrome	12	12
Approved Maintenance Organizations	50	50
International Aircraft Operators	42	42
Total	**132**	**132**

Both primary and secondary data was collected. Primary data was collected using questionnaire whereas information in journals and periodicals was collected from libraries as secondary data. The researcher used questionnaires with both close-ended and open-ended questions where the respondents were required to explain briefly. Secondary data was used to assess the performance of safety management system in the organizations. Questionnaires were self-administered to the 132 respondents. Heads of safety are considered knowledgeable about the performance of the safety management system in their respective organizations. To ensure maximum response, the organizations were first contacted and adequately informed about the intended data collection exercise. The questionnaires were then emailed to the respondents. Secondary data was obtained

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from the KCAA library, ICAO records and respective organization journals, websites, periodicals among other reliable sources. The study carried out a pilot test to test the validity and reliability of the questionnaires in gathering the data required for purposes of the study.

The study gathered both qualitative and quantitative data. Descriptive statistics such as mean, standard deviation, frequency and percentages was used in analysing quantitative data (Kothari & Garg, 2014). On the other hand, qualitative data was analysed using content analysis. The data was presented using frequency, tables and bar graphs. To enhance data handling, Statistical Package for Social Sciences version 25 was used due to its ability to handle both small and voluminous data (Dempsey, 2013). Inferential statistics were also carried out to establish the nature of the relationship that exists between variables.

A linear regression model was used in the analysis to determine the relationship between the independent variables and the performance of SMS in aviation industry in Kenya.

$$Y = \alpha + \beta_1 X_1 + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

Where Y is Performance of SMS, α is the Y intercepts, β_1 is coefficients of regression and ε is the error term of the model.

X_1 = Capacity Building

FINDINGS AND DISCUSSIONS

The study selected a sample of 132 heads of safety from aviation service providers in Kenya. All selected respondents were issued with questionnaires for data collection, but the researcher was able to receive back only 123 questionnaires. The returned questionnaires formed a response rate of 93.2%. According to Mugenda and Mugenda (2013), a response rate of 50% and above is good for analysis and reporting, that of 60% is sufficient while 70% and above is excellent. Therefore, since our response rate was above 70% it was considered to be excellent and was used for further analysis and reporting.

Descriptive Analysis

Respondents gave their opinion on various statements relating to capacity building. The findings obtained were as presented in Table 3.

Table 3: Capacity Building

Statement	Mean	SD
Our organization supports the practice of empowering employees to enhance smooth implementation of safety management systems.	3.959	1.475
Management assists employees with means to discharge their duties successfully	3.967	1.262
The SMS staff in our organisation possess prerequisite technical skills related to conduct SMS activities	3.919	1.343
Our organisation has a database of technical skills gaps geared towards achieving performance of SMS in our organization	3.870	1.322
The SMS staff in our organisation possess prerequisite advocacy skills related to SMS strategies	3.821	1.208
The staff in our organization are sensitized on SMS values, policies and strategies	3.748	1.075

Results presented in Table 3 show that all the statements had small standard deviation values (less than 2) suggesting that respondents had agreeing opinions on the statements with mean. The findings specifically show that the respondents agreed that management assists employees with means to discharge their duties successfully (M=3.967, SD=1.262); their organization supports the practice of empowering employees to enhance smooth implementation of safety management systems (M=3.959, SD=1.475); the SMS staff in our organisation possess prerequisite technical skills related to conduct SMS activities (M=3.919, SD=1.343); their organisation has a database of

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technical skills gaps geared towards achieving performance of SMS in our organization (M=3.870, SD=1.322); the SMS staff in our organisation possess prerequisite advocacy skills related to SMS strategies (M=3.821, SD=1.208); and the staff in our organization are sensitized on SMS values, policies and strategies (M=3.748, SD=1.075). The study findings agree with Dosi and Nelson (2010) that staffing capacity building is an essential determinant in performance of organizations and that organization may improve their abilities for inventions by building the capacities of their employees. A long-term plan is required to achieve high professional and academic levels among the employees of an organization. The study also concurs with the Association of African Aviation Training Organizations (AATO) Consultative Assembly held in Niger in 2013, where it was agreed that harmonization of aviation training among African States will offer an opportunity not only to increase the availability of affordable and quality training throughout the continent, but also promote compatibility among operators and safety oversight organizations. It would also improve efficiency and effectiveness and reduce the economic burden on states and aviation service providers who have to comply with different requirements.

Performance of SMS

Respondents gave the level to which they agreed or disagreed with various statements on performance of safety management system. Table 4 presents the findings obtained.

Table 4: Performance of SMS

Statement	Mean	SD
Organizational culture influences the performance of safety management system in the organization	3.961	1.149
Capacity building influences the performance of safety management system in the organization	3.955	1.199
Firm resources influence the performance of safety management system in the organization	3.902	1.345
Strategic leadership influences the performance of safety management system in the organization	3.836	1.207
Stakeholders' collaboration has a moderating effect on the relationship between firm level dimensions and performance of safety management system in the organization	3.836	1.234

Results in Table 4 show that the standard deviation values for each of the statement are less than two; this suggests that respondent individual responses did not differ from the mean. The findings further show that the respondents agreed that organizational culture influences the performance of safety management system in the organization (M=3.961, SD=1.149), capacity building influences the performance of safety management system in the organization (M=3.955, SD=1.199), firm resources influence the performance of safety management system in the organization (M=3.902, SD=1.345), strategic leadership influences the performance of safety management system in the organization (M=3.836, SD=1.207) and stakeholders' collaboration has a moderating effect on the relationship between firm level dimensions and performance of safety management system in the organization (M=3.836, SD=1.234). The study findings agree with Noble performance framework (2011) that identified that communication is important because the details of performance effort need communication as early and as clearly as possible, while incentives are important to inspire and motivate members to change in accordance with the new strategy. It also agrees with Lares-Mankki (2014) who studied on strategy implementation bottlenecks and revealed that, failure in implementation of strategic plans was due to poor and inadequate information sharing with uncertain responsibility and accountability.

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Inferential Statistics

Relationship between study variables was determined by computing inferential statistics. The study computed correlation and regression analysis.

Correlation Analysis

The study computed correlation analysis to test the relationship between the dependent and the independent variables.

Table 5: Correlations

		Performance of SMS	Capacity Building
Performance of SMS	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	123	
Capacity Building	Pearson Correlation	.664**	1
	Sig. (2-tailed)	.003	
	N	123	123

From the findings, the relationship between the dependent variable and the independent variables were all significant (p-values<0.05). The findings also show that there was no significant relationship between the independent variables and therefore implying that there was no multicollinearity between the variables. The findings show that capacity building is also seen to have and strong positive and significant relationship with performance of safety management system (r=0.664, p=0.003). The study findings agree with Mtolkwa (2017) that the success of safety management system in Kenya lies in how organizations balance the scarce resources between provision of services and protection in conformity with international standards and that the challenge facing full implementation of SMS range from inadequate resources to unsupportive organizational structures.

Regression Analysis

The objective of the study was to examine the relationship between capacity building and the performance of safety management system in aviation industry in Kenya. To answer this objective, the study computed simple regression analysis between capacity building and performance of safety management system. The findings were as presented in Table 6.

Table 6: Regression for Capacity Building

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.664[a]	.441	.440	5.03580

a. Predictors: (Constant), Capacity Building

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.442	1	229.442	9.048	.003[b]
	Residual	3068.476	121	25.359		
	Total	3297.919	122			

a. Dependent Variable: Performance of SMS

b. Predictors: (Constant), Capacity Building

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.587	0.408		3.890	.000
	Capacity Building	.345	.115	.664	3.008	.003

a. Dependent Variable: Performance of SMS

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Results in Table 6 on model summary show that the value of adjusted R^2 was 0.440; this implies that 44% of variations in performance of safety management system can be attributed to changes in capacity building. The remaining 56% variations in performance of safety management system can be attributed to other factors other than capacity building. The findings also show that capacity building and performance of safety management system are strongly and positively related as indicated by a correlation coefficient (R) value of 0.664. The study findings agree with Dosi and Nelson (2010) that organizations may improve their abilities for inventions by building the capacities of their employees.

The Anova findings show that the p-value obtained was 0.003 which is less than 0.05, an indication that the model was significant. The findings also show that the f-calculated value (9.048) is greater than the F-critical value ($F_{1,121}$=3.919). Since the f-calculated value is greater than the f-critical value it shows that the model is reliable and can be used to predict performance of safety management system in aviation industry in Kenya. This concurs with Dosi and Nelson (2010) that staffing capacity building is an essential determinant in performance of organizations.

From the coefficients table, the following model was fitted.

$$\mathbf{Y= 1.587 + 0.345\ X_1 + \varepsilon}$$

From the equation above, when capacity building is held to a constant zero, performance of safety management system will be at a constant value of 1.587. The findings also show that a unit increase in capacity building will lead to a 0.345 unit increase in performance of safety management system. The findings also show that the t-statistic (3.008) has a p-value (0.003) which is less than the selected level of significance (0.05). Therefore, we accept the null hypothesis (H_{01}) and conclude that capacity building has significant relationship with the performance of safety management system in aviation industry in Kenya. The findings concur with Shen (2004) that staff capacity building plays a significant role in every organization's excellence; it is widely used to gain competitive advantage.

CONCLUSIONS AND RECOMMENDATIONS

Capacity building was found to have a significant relationship with performance of safety management system. Further, the influence of capacity building on performance of safety management system was seen to be positive. The findings implied that improvement in capacity building will result to an increase in performance of safety management system in aviation industry in Kenya. Based on the findings, the study concluded that capacity building has significant relationship with the performance of safety management system in aviation industry in Kenya.

Capacity building will enhance performance of safety management system in aviation industry in Kenya. The study recommends harmonization of aviation training among African States as it will offer an opportunity not only to increase the availability of affordable and quality training throughout the continent, but also promote compatibility among operators and safety oversight organizations. The organizations should also enhance capacity building of its employees and this should start with planning and should involve sensitization of staff, defining roles, and duties for current and future structures taking consideration of projected growth in the industry.

REFERENCES

Airport Council International, (2016). Safety Management System handbook (1st ed.). Montréal, Canada: ACI World.

Aldag, R. & Kuzuhara, L. (2018). *Creating high performance teams: Applied strategies and tools for managers and team members*. London: Routledge.

Arendt, D., & Adamski, A. (2017). Implementing Safety Management System in Aviation. Farnham, UK: Ashgate Publishing Ltd.

Barney, J. B. (2011). Firm Resources and Sustained Competitive Advantage. Journal of Management, 27 (9), 99-127.

Barney, S. A. (2011). Success Factor Corporate Culture: Developing a Corporate Culture for High Performance and Long term Competitiveness, Six Best Practices. *Leadership & Organization Development Journal*, *24*(6), 318-334.

Benn, S., Edwards, M. & Williams, T. (2019). *Organizational change for corporate sustainability*. London: Routledge.

Boesen, N., & Therkildsen, O. (2014). A Results-Oriented Approach to Capacity Change, Centre for Development Research for DANIDA. Retrieved from www.evaluation.dk

Brown, E., Lafond, A., & Macintyre, A.S., (2020) Building organizational capabilities for managing the economic crisis: The role of market orientation and strategic management. Journal of Marketing, 65, 67-80.

Burnham, C. (2018). The syndrome of accident proneness: Why psychiatrists did not adopt and medicalize it. History of Psychiatry 19(3):251–274

Cable, D.M., & Parsons, C.K. (2016). *Socialisation Tactics and Person-organisation fit : Personnel Psychology.* Available online: http://doi.org/10.1111/j.1744-6570.x

Cameron, H., & Quinn, R., (2017), Resources, capabilities, and performance of industrial firms: A multivariate analysis. Management and Decision Economics, 25, 299-315.

Chebiego, C. & Kariuki, P. (2018). Strategic firm level factors and performance of manufacturing firms in Kenya: A case of Unilever Kenya Ltd. *International Academic Journal of Human Resource and Business Administration, 3*(3), 243-26

Cooper, D. R., & Schindler, S. P. (2016). Business Research Methods (12th ed.). New Delhi, India: McGraw-Hill Publishers.

Creswell, J. W. (2015). Concise introduction to mixed methods research. Los Angeles, USA: Cengage Learning.

Crichton, M., O'Connor, P., & Flin, R. (2018). Safety at the Sharp end: A guide to non- technical skills. (Rev. ed.). Hampshire, UK: Ashgate Publishing Limited.

Dekker, A. (2018). Just culture: Balancing safety and accountability. (4th ed.). Farnham, UK: Ashgate Publishing Ltd.

Denison, D. R. (2019). Corporate culture and organizational effectiveness. New York, USA: Wiley

Doan, T. (2020). Financing decision and firm performance: Evidence from an emerging country. *Management Science Letters,* 10(4), 849-854.

Doğan, M. (2018). Does firm size affect the firm profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, *4*(4), 53-59.

Enjel, R., Land, H., & Keijzer, R., (2017), Firm factors, industry structure, and performance variation: New empirical evidence to a classical debate. *Journal of Business Research,* 61, 109–117.

European Union Aviation Safety Agency, Annual Safety Review, (2020). Available from: https://cdn.aviation-safety.net/airlinesafety/industry/reports/EASA-Annual-safety-review-2020.pdf [Accessed 23/04/ 2021]

Galbreath, J., & Galvin, P. (2018). Firm factors, industry structure and performance variation: New empirical evidence to a classical debate. *Journal of Business Research*, 61, 109–117.

Grant, C., & Osanloo, A. (2014). Understanding, selecting and integrating a theoretical framework in dissertation research: Creating a blue print for your house. *Administrative Issues Journal*, *4*(2), 12-26.

Genc, E. (2017). *Strategy Implementation, Organizational Culture and Performance in Turkish Local Government*, Unpublished PhD Thesis, Cardiff University.

Holbeche, L. (2015). The Agile Organization: How to build an innovative, sustainable and resilient business. London, UK: Kogan Page Limited.

International Civil Aviation Organization (2016). *Annex 11 to the Convention on International Civil Aviation on Air Traffic Services* (15th ed.). Montreal, Canada: ICAO.

International Civil Aviation Organization (2019). *Annex 19 to the Convention on International Civil Aviation on Safety Management* (2nd ed.). Montreal, Canada: ICAO.

International Civil Aviation Organization (2021). Safety Management Manual. (4th ed.). Montreal, Canada: ICAO.

International Civil Aviation Organization (2020). Aviation Safety Report. Available from:

https://www.icao.int/safety/Documents/ICAO_SR_2020_final_web.pdf [Accessed on 23/04/2021]

Kariuki, M. P. (2015). *Firm Level Factors, Industry Environment, Competitive Strategy and Performance of Large Manufacturing Firms in Kenya*. Doctoral dissertation: University of Nairobi.

Kenya Civil Aviation Authority (2021). Approved Training Organizations. Retrieved from http://www.kcaa.or.ke/

Kilmann, T., (2015). *Antecedents of firm performance in the emerging economies business group, strategy, industry structure, and state support*. Linkoping University.

Kothari, C. R., & Garg, A. (2014). Research Methodology; Methods and Techniques (3rd ed.). New Delhi, India: New Age International (P) Ltd.

Lares-Mankki, L. (2014). Strategy Implementation Bottlenecks: *Identification, Analysis and Removal*. Lappeenranta, Finland: Lappeenranta University of Technology.

Lewis, D. (2013). Theorizing the organization and management of non-governmental development organizations towards a composite approach. *Public Management Review, 5*(3), 325-344.

Makhlouk, H & Shevchuk, O. (2018). *The importance and the influence of the corporate culture in a merger and acquisition context.* Unpublished Master Thesis, Kalmar: University of Kalmar.

Martin, R. L. (2010). The Execution Trap: *Drawing a Line between Strategy and Execution almost Guarantees Failure.* Harvard, US: Harvard Business Review.

Mugenda, O.M., & Mugenda, A.G. (2012). Research methods: Quantitative and qualitative approaches. Nairobi, Kenya: Acts Press.

Olanipekun, A. O., Aje, I. O., & Falemu, J. O. (2018). Effects of organizational culture on the performance of quantity surveying firms in Nigeria. *International Journal of Humanities and Social Science* 3 (5), 206-215.

Palmer, D., & Kaplan, S. (2014). A framework for strategic innovation: Blending strategy and creative exploration to discover future business opportunities. Retrieved from http://www.innovationpoint.com/StrategicInnovation/WhitePaper.pdf.

Safarova, C.K., (2020). Strategy, distinctive competence and organizational performance. *Administrative Science Quarterly,* 25(2), 317-336. doi: 10.2307/2392457

Saunders, M., Lewis, P., & Thornhill, A. (2014). Research methods for business students (8th ed.). London, UK: Pearson Education Limited.

Schein, H. E. (2019). Organizational Culture and Leadership. *(*Rev. ed.). San Francisco, USA: Jossey-Bass Publishers.

Serfontein, H., (2018). Impact of organizational structure and strategies on construction organizations performance. University of Cape Town, South Africa and Auckland University of Technology, New Zealand.

Sewell, B. (2010). Early Modernisation Theory? The Eisenhower Administration and the Foreign Policy of Development in Brazil. English Historical Review, 125(517), 1449-1480.

Shen, J. (2014). Iinternational training and management development, theory and reality: A conceptual study. *Journal of Management Development*, *24*(11), 656-666.

Vafeas, N. (2019). The nature of board nominating committees and their role in corporate governance. *Journal of Business Finance & Accounting*, *26*(1-2), 199-225.

Wilson, J. (2014). Essentials of Business Research*: A* Guide to Doing Your Research Project. London, UK: Sage Publication Ltd.

Yazdanfar, D. (2019). Profitability determinants among micro firms: Evidence from Swedish data. *International Journal of Managerial Finance*, *9* (2), 150-160.

Yukl, G. (2018). Contingency theories of effective leadership. *The SAGE handbook of leadership*. Thousand Oaks: Sage Publications.

Zheng, W., Yang, B., & McLean, G.N. (2015). Linking organizational culture, structure, strategy and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research, 63*, 763-771.