

Enhancing Performance of Air Transport in Kenya through Implementation of Appropriate Monitoring and Evaluation Process

Nelson Kyalo Mwikya¹, Dr. Mulwa, Angeline Sabina², Dr. Mbugua, John Mwaura³

¹Ph.D. Candidate (Project Planning and Management), Department of Open Learning, School of Open and Distance Learning, University of Nairobi, Kenya

²Senior Lecturer, Department of Open Learning, School of Open and Distance Learning, University of Nairobi. Kenya

³Lecturer, Department of Open Learning, School of Open and Distance Learning, University of Nairobi. Kenya

Abstract: *This paper focuses on improved Performance of air transport through appropriate implementation of Monitoring and Evaluation Process. It is based on an empirical study carried out in Kenya focusing on the Air Ports in Nairobi County. The objective of the study was to establish the extent to which monitoring and evaluation process influences the performance of Air Transport in Kenya. The Monitoring and Evaluation was measured in terms of Preparation of M&E work plans, Data collection on aviation safety compliance, Data Analysis and Dissemination of M&E results. To validate the findings inferential statistics were used to test the hypothesis that Monitoring and evaluation process has no significant influence on performance of air transport in Kenya. The study was hinged on pragmatism philosophical standpoint, mixed methods of data collection and sequential triangulation strategy. This study adopted a descriptive cross sectional survey and correlational research design. A sample of 224 participants was selected from a target population of 269 who included Directorate of Safety standards and regulation (DASSR) and registered air operators. Data was collected through structured questionnaire, interview guide, observation guide and document analysis. Responses in the questionnaires were processed by use of Statistical Package for Social Science (SPSS) version 20.0 programme to analyze the data. Non-parametric data was analyzed descriptively by use of measures of central tendency as the tools of data analysis. Pearson's Product Moment Correlation analysis(r) was used to establish correlation between variables. The findings of the study reveal that monitoring and evaluation is correlated to performance of air transport as seen from responses where majority of the respondents strongly agreed that adherence to Monitoring and Evaluation plans in aviation improves performance (61.7%) and the level of satisfaction where operators maintained that they are satisfied with the way Monitoring and evaluation is done in air transport industry (M=2.16, SVD=0.86). In conclusion, analysis revealed that both KCAA and the air operators emphasized that adherence to monitoring and evaluation plans in aviation improve performance and lead to proper analysis of the client's needs hence boosting performance of air transport. The influence of Monitoring and Evaluation on performance of air transport implies that there is need to invest more resources on Monitoring and Evaluation and sensitize all players in the aviation industry on the appropriate process to enhance performance of air transport. This paper contributes to knowledge on the field of air transport which had not been widely researched previously especially monitoring and evaluation process and performance of air transport.*

Keywords: aviation standards, monitoring and evaluation, training, compliance, Performance of Air Transport.

1. Introduction

The performance of Air Transport has been measured using different parameters by different scholars. For example, Geoffrey (1998) defines a set of aviation performance indicators as accessibility to desired destinations through air transportation, accessibility to airport system, cost effectiveness of air transport, industry sustainability, air transport safety and security and customer satisfaction among other things. The United States Department of Energy (1995) found in Mokaya, Chocho, and Kosgey (2009) also defined a set of system performance indicators, including; system delays, flexibility, predictability, reliability and availability. These indicators have been used to define performance measurement criteria for the civil aviation industry within their states. Aviation performance assessment is for the purpose of improving system operations, determining progress against strategic goals as an integral part of performance-oriented management, to diagnosing constraints within the system and to ascertain the general health of the system (Learmount, 2006). The global nature of the aviation industry, the complex and dynamic aviation environment requires that aviation regulators, air

operators, and service providers cooperate to maintain a safe air transport system (Dannatt, 2006; Lu et al., 2006).

In this study, performance was operationalized as the increment in aviation operators, reduction in number of air accidents, on time performance (OTP) for scheduled flights, fleet growth, continuous training of staff, frequency of oversight surveillance and routine audit of AMO's. The assumption behind this definition is that any positive change on these indicators will lead to positive performance of the air transport and vice versa. The year 2015 was termed as an extraordinarily safe year when it came to aviation's safety performance in terms of the number of fatal accidents (Global Claims Review, 2015). The International Air Transport Association (IATA) (2016) released data for the year 2015 safety performance of the commercial airline industry. The data revealed that in 2015 the global jet accident rate which is measured in hull losses per 1 million flights was 0.32, which was the equivalent of one major accident for every 3.1 million flights. However, this performance was not as good as the rate of 0.27 achieved in 2014 but notably a 30% improvement compared to the

previous five-year rate (2010-2014) of 0.46 hull loss accidents per million jet flights (IATA, 2016).

In Africa, although IATA (2016) affirms that African aviation safety is moving toward the right direction with the year 2015 seeing improvements compared to the 2010-2014 five-year accident rates for both jet and turboprop aircrafts. Globally Africa remains lowest in the performance of air transport in terms air safety. African Governments need to accelerate implementation of ICAO's safety-related standards and recommended practices (SARPS), according to the Universal Safety Oversight Audit Program (USOAP). By the end of January 2016, only 21 African States, Kenya included, had accomplished at least 60% of implementation of the SARPS (IATA, 2016). Performance in this study is defined as increase in the number of registered air operators, reduction of reported air accidents, and adherence to time schedule, fleet growth, continuous staff training, frequent oversight surveillance and routine audit of Approval Maintenance Organizations. The researchers believe that if Monitoring and evaluation process is given a center role, performance in the air transport would be enhanced.

Monitoring and evaluation mechanisms are integral part of aviation safety program. The set standards must be adhered to in order to ensure safety and security of air transport users, cargo and environment. A Monitoring and evaluation mechanism in this study means the continuous process of information gathering, analyzing and disseminating the information for corrective action. Monitoring and Evaluation mechanisms are the practical ways used for information gathering. The areas of focus include: development of M&E work plan, designing M&E indicators, engaging in site visits, Stakeholder meetings and presentation of terminal report (Rooyen, 2013). A monitoring and evaluation (M&E) plan describes how the whole M&E system for the program works. This includes the indicators, who are responsible for collecting them, what forms and tools will be used, and how the data will flow through the organization. Data collection on deficiencies, analysis and dissemination refer to the whole research process. Lastly, sustainability of corrective actions will be defined through trend analysis to quantify the behavior of the organizations as far as carrying on with the corrective actions are concerned for a period of time.

Monitoring and evaluation is a process that helps program implementers make informed decisions regarding program operations, service delivery and program effectiveness using objective evidence. It involves an on-going and routine gathering of information that is used to assess if the program is on track by focusing on program efficiency on use of resources and the extent to which the program has reached its objectives in terms of outputs (program activities) and outcomes and impact on the intended population. Monitoring and evaluation (M&E) is a process that helps improve performance and achieve results. Its goal is to improve current and future management of outputs, outcomes and impact. It is mainly used to assess the performance of projects, institutions and programs set up by governments, international organizations and NGOs (Conyers and Huls, 2013). Monitoring and evaluation falls under the control function of project management. It provides regular feedback that helps the organization track

costs, personnel, implementation time, and organization development, economic and financial results and compare what was planned to actual performance (Emanuel, 2015). Evaluation on the other hand is a systematic process that attempt to determine objectively relevance, efficiency effectiveness and impact of the activities in relation to objectives intended to achieve so as to provide insights to the future performance of the program.

Air transport in Kenya does not operate in isolation but it is linked to other international Aviation industries. Kenya is number four in Africa and number one in East Africa in air transport development (Abbamonte, 2013). Kenya has three international airports which include Nairobi, Mombasa, and Eldoret and four main domestic airports at Wilson, Malindi, Kisumu, and Lokichogio. Air transport has, in the recent past, gained popularity among the residents of Kenya and is no longer considered as a preserve for rich foreigners and senior government officials (Irandu, 2006). There are new trends in the country, as elsewhere in Africa, which will create opportunities for aviation to thrive. Currently, domestic air transportation in Kenya serves the tourism industry by transporting tourists to and from Mombasa, Nairobi and other tourist sites such as the Maasai Mara, Mt. Kenya, Malindi, Western Kenya and Lake Turkana region. Air passenger services are operated to and from Nairobi, Mombasa, Kisumu, Eldoret, Malindi, Lokichogio and Maasai Mara among other destinations. The growth of air traffic in Kenya after independence has led to rapid development of airport infrastructure. Numerous airports and airstrips have been developed. Today, the country has about 568 aerodromes spread all over the country, including national parks and game reserves. About 160 of them are public aerodromes manned by Kenya Airports Authority (KAA), a parastatal that was established by an Act of Parliament in 1991 (KAA, 2015).

Although Air transport in Kenya has grown tremendously in the last two decades, there are some factors such as industry competitiveness and many others that affect the transportation business in aviation industries in Kenya, the costs of running such business is enormous (Kamau, 2015). According to the Ministry of Transport (2013), Air Accident Investigation records reveal that aircraft accidents have continued to rise despite Kenya Civil Aviation Authority having strengthened its safety oversight by recruitment, training, developing safety procedures and enforcement. A number of safety oversight program have also been conducted by US Federal Aviation Administration (FAA) through its program Safe Sky for African initiative and World Bank to both the aviation regulator and the industry (Ministry of Transport, 2013). Kenya has experienced a number of air accidents particularly with light aircrafts and helicopters in the recent years, and preventing accidents has remained a major challenge (Ombasa and Ngugi, 2014). Even though Kenya is experiencing challenges in terms of air accidents, the growth of air transport evidenced by increased number of passengers through the airports, increase in number of operating aircrafts, increased license registrations and increased importance of the aviation sector in the development of Kenya cannot go unnoticed. There was need for a study to establish the extent to which

monitoring and evaluation process influence performance of air transport in Kenya the two variables.

2. Statement of the Problem

Globally, air transport has achieved a remarkable safety record, with fewer than 4 accidents experienced per million departures worldwide (Roelena and Klompstra, 2012). Nonetheless, runway-related event categories consistently represent a large percentage of accidents on a yearly basis. According to Roelena and Klompstra (2012), improvements in aviation safety such as runway safety is essential for achievement of the overall objective of continually reducing the global accident rate, as well as related fatalities. ICAO adopted a new Training Policy in 2010 to better support implementation and standardization efforts through courses, workshops and seminars on emerging issues. The organization has also implemented a more formal assessment process addressing the following critical areas affecting the provision of effective aviation training: organizational and official certifications, facilities and technology supporting training, training delivery, instructor qualification, training design and development, training quality systems as an effective tool to implement competency-based and cost effective training (ICAO, 2014).

In Kenya, the Kenya Transport Sector Support Project (2013) affirms that the aviation industry has recorded major growth over the last 10 years. For instance, in 2004, about 5.5 million passengers were handled at Kenyan airports. This figure rose to 6.9 million in 2009 and to 8.6 million in 2012. However it is worth noting that Kenya has experienced a number of air accidents particularly with light aircrafts and helicopters in the recent years, and preventing accidents has remained a major challenge (Njeru, 2015; Ombasa and Ngugi, 2014). Even though Kenya is experiencing challenges in terms of air accidents, the growth of air transport evidenced by increased number of passengers through the airports, increase in number of operating aircrafts, increased license registrations and increased importance of the aviation sector in the development of Kenya cannot go unnoticed. The growth and overall performance in the air transport industry can be attributed to KCAA's safety oversight monitoring and regulatory functions. There is desire to establish the influence of compliance with aviation safety standards and performance of the air transport industry in Kenya and also the moderating influence of monitoring and evaluation process on the two variables.

A few studies attempting to shade some light on the subject under study are more general or give limited insights and analysis on the influence of compliance with aviation and performance of air transport in Kenya and how this is influenced by the moderating variable monitoring and evaluation process. In her study Njeru (2015) attempted to establish factors influencing aviation safety in Kenya where she focussed on the activities of Kenya Civil Aviation Authority. The study established that professional qualification has a major effect on aviation safety at the KCAA as the authority had few qualified technical inspectors and technical safety staff in the safety management system. The study also revealed that the

percentage of training execution in the organization was very low as the organization was somewhat committed towards staff development. The recruitment and retention policy were not efficient and it had a negative effect on the morale of the safety officers subsequently compromising the overall safety of the industry.

In their study, Mokaya and Nyaga (2009), sought to find out the challenges experienced in the successful implementation of Safety Management Systems (SMS) in the Aviation Industry in Kenya. The study findings revealed an unsatisfactory implementation of SMS as per the ICAO standards. The implementation was mainly affected by a weak safety culture, inadequate human capacity, lack of clear policy guidelines, poor management support and commitment. The results manifested a weak institutional implementation capacity which required immediate attention. Further the study found that players in the aviation industry did not have documented safety management systems and had no defined roles in implementation. Therefore, implementation was below the prescribed ICAO standards.

Ombasa and Ngugi (2014) carried out an empirical study to determine the effects of reporting safety concerns on aviation safety in the general aviation industry a case study of Wilson Airport Kenya. The findings revealed that the organizational commitment on reporting systems was the most significant factor that affects aviation safety, followed by the level of implementation of reporting systems at Wilson airport. The study focused on employees working at Wilson airport and how their organizations handled aviation safety occurrences. The results suggested an improvement on the level of implementation of reporting systems and organizational commitment on reporting systems, however there is need to further improve aviation safety.

A number of scholars in their studies related to the air transport industry in Kenya did not delve into the influence of monitoring and evaluation process performance of air transport in Kenya. Some of the studies include; Mwikya (2013) who established the relationship between relational factors and on-time service delivery at Kenya Airways, Wang'ondu (2009) established factors affecting customer satisfaction in airline industry with reference to Kenya Airways Ltd and Kamau (2015) studied factors affecting strategic choices in airlines in Kenya focusing on Kenya Airways. Looking at areas of interest in these studies, there is a clear indication that there is a scarcity of published work on compliance with aviation safety standards and performance of the air transport industry, particularly in the context of developing countries in the dynamic African region and specifically in Kenya. Equally, there is paucity of information on the moderating effect of, monitoring and evaluation process on the relationship between compliance with aviation safety standards and performance of air transport.

Therefore, this study was grounded on hypothetical theory that, it is monitoring and evaluation process that influence the performance of air transport in Kenya. This was therefore the focus of this study.

Objective of the Study

To establish how monitoring and evaluation process influence performance of air transport in Kenya

Hypothesis of the Study

H_0 : Monitoring and evaluation process has no significant influence on performance of air transport in Kenya.

3. Research Methodology

The study was hinged on pragmatism philosophical paradigm using mixed methods of data collection and sequential triangulation strategy. Data were collected using a structured questionnaire, interview guide, observation guide and document analysis tools. Descriptive cross sectional survey and correlational research design were employed. A sample of 224 participants was selected from a target population of 269 who include Aviation safety inspectors and registered Air operators. Responses in the questionnaires were processed by use of a computer Statistical Package for Social Science (SPSS) version 20.0 programme to analyze the data. Non-parametric data was analyzed descriptively by use of measures of central tendency as the tools of data analysis. As for the parametric data, Pearson's Product Moment Correlation analysis(r) was employed. At all times the researcher adhered to ethical issues including; informed consent, honesty and trust, privacy, anonymity, disclosure, cultural sensitivity, harm and risk policy and voluntary

participation. During data analysis and reporting, the researcher endeavored to practice acceptable analytical methods and reporting.

4. Data Analysis and Findings**Influence of Monitoring and Evaluation Process on performance of Air Transport**

This section of the study presents results of data that were collected based on sixth objective that sought to establish the extent to which monitoring and evaluation process influence performance of air transport in Kenya. This objective aimed at understanding how preparation of M&E work plans, data collection on aviation safety, data analysis, and dissemination of M&E results influence performance of air transport in Kenya.

Descriptive Analysis for Monitoring and Evaluation Process

Monitoring and evaluation process was measured by providing respondents (KCAA staff and air operators) with statements rated on a five point Likert scale ranging from Strongly Agree (SA); agree (A); Neutral (N); Disagree (D); and Strongly Disagree (SD). The study aimed at finding out the level of agreement to statements regarding monitoring and evaluation process by the respondents. The findings for the responses by KCAA staff are presented in Table 1.

Table 1: Monitoring and evaluation process (KCAA staff)

Statements	SA F (%)	A F (%)	N F (%)	D F (%)	SD F (%)	Mean	SDV	Total F (%)
Adherence to M&E plans in aviation improves performance	50(61.7)	20(24.7)	11(13.6)	0(0.0)	0(0.0)	1.52	0.72	81(100)
M&E leads to proper analysis of the client's needs hence boosting performance of air transport	35(43.2)	34(42.0)	9(11.1)	3(3.7)	0(0.0)	1.75	0.79	81(100)
Methods of data collection determines the performance in air transport	31(38.3)	30(37.0)	16(19.8)	4(4.9)	0(0.0)	1.91	0.88	81(100)
Data presentation contributes a lot in the performance of air transport	28(34.6)	28(34.6)	22(27.2)	3(3.7)	0(0.0)	2.00	0.88	81(100)
Data is analyzed by experts so I never know what it was all about	13(16.0)	10(12.3)	37(45.7)	14(17.3)	7(8.6)	2.90	1.13	81(100)
M&E has more evil than good and lowers productivity in all ways	2(2.5)	14(17.3)	16(19.8)	19(23.5)	29(35.8)	3.74	1.19	81(100)
M&E is the first step to great performance	37(45.7)	25(30.9)	19(23.5)	0(0.0)	0(0.0)	1.78	0.80	81(100)
Tools of M&E help a lot in task accomplishment	34(42.0)	27(33.3)	18(22.2)	0(0.0)	2(2.5)	1.88	0.92	81(100)
Dissemination of M&E results enhances visibility of an airline thus widening the market share	27(33.3)	26(32.1)	25(30.9)	1(1.2)	1(1.2)	2.04	0.90	81(100)
The mode used to communicate results is very clear to me	9(11.1)	26(32.1)	43(53.1)	3(3.7)	0(0.0)	2.49	0.74	81(100)
I am satisfied with the way M&E is done in air transport industry	4(4.9)	24(29.6)	46(56.8)	6(7.4)	1(1.2)	2.70	0.73	81(100)
Composite for monitoring and evaluation process (KCAA staff)						2.24	0.62	

The study findings in Table 1 indicated that majority of the respondents (KCAA staff) strongly agreed: adherence to M&E plans in aviation improves performance (61.7%), M&E is the first step to great performance (45.7%), M&E leads to proper analysis of the client's needs hence boosting performance of air transport (43.2%), tools of M&E help a lot in task accomplishment (42.0%), methods of data collection determine the performance in air transport (38.3%), dissemination of M&E results enhances visibility of an airline thus widening the market share (33.3%), and data presentation contributes a lot in the performance of air transport (34.6%). The study findings further revealed that majority of the respondents (KCAA staff) were neutral to: they are satisfied with the way M&E is done in air transport industry (56.8%), the mode used to communicate results is

very clear to me (53.1%), and data is analyzed by experts so I never know what it was all about (45.7%). A significant number of respondents however agreed that they are satisfied with the way M&E is done in air transport industry (29.6%). The findings further reveal that majority of the respondents strongly disagreed that M&E has more evil than good and lowers productivity in all ways (35.8%).

The study results in Table 1 indicated respondents agreed that: adherence to M&E plans in aviation improves performance (M=1.52, SVD=0.72), M&E leads to proper analysis of the client's needs hence boosting performance of air transport (M=1.75, SVD=0.79), M&E is the first step to great performance (M=1.78, SVD=0.80), tools of M&E help a lot in task accomplishment (M=1.88, SVD=0.92); methods

of data collection determine the performance in air transport (M=1.91, SVD=0.88). Majority of the respondents were neutral to: data presentation contributes a lot in the performance of air transport (M=2.00, SVD=0.88); data is analyzed by experts so I never know what it was all about (M=2.90, SVD=1.13); dissemination of M&E results enhances visibility of an airline thus widening the market share (M=2.04, SVD=0.90), the mode used to communicate results is very clear to me (M=2.49, SVD=0.74), and I am satisfied with the way M&E is done in air transport industry (M=2.70, SVD=0.73). The respondents however disagreed to M&E has more evil than good and lowers productivity in all ways (M=3.74, SVD=1.19).

The study results revealed that in regard to monitoring and evaluation process, KCAA the air transport regulator in Kenya affirmed adherence to M&E plans in aviation improves performance, M&E is the first step to great performance, M&E leads to proper analysis of the client's needs hence boosting performance of air transport, tools of

M&E help a lot in task accomplishment, methods of data collection determine the performance in air transport, dissemination of M&E results enhances visibility of an airline thus widening the market share, and data presentation contributes a lot in the performance of air transport. The study findings revealed that KCAA staff were neutral or did not want to comment on their satisfaction with the way M&E is done in air transport industry, the mode used to communicate results being very clear to them, and data being analyzed by experts so they never know what it was all about. A significant number of KCAA staff however were satisfied with the way M&E is done in air transport industry. Overall, the study findings revealed that M&E is the first step to great performance and as a result, adhering to M&E plans in aviation improves performance. M&E also leads to proper analysis of the client's needs hence boosting performance of air transport in Kenya. The study further aimed at finding out the level of agreement to statements regarding monitoring and evaluation process (air operators). The findings are presented in Table 2.

Table 2: Monitoring and evaluation process (Air Operators)

Statements	SA F (%)	A F (%)	N F (%)	D F (%)	SD F (%)	Mean	SDV	Total F (%)
Adherence to monitoring and evaluation plans in aviation improves performance	77(63.6)	41(33.9)	3(2.5)	0(0.0)	0(0.0)	1.39	0.53	121(100)
Monitoring and evaluation leads to proper analysis of the client's needs hence boosting performance of air transport	77(63.6)	39(32.2)	5(4.1)	0(0.0)	0(0.0)	1.40	0.57	121(100)
Methods of data collection determines the performance in air transport	36(29.8)	73(60.3)	11(9.1)	1(0.8)	0(0.0)	1.81	0.62	121(100)
Data presentation contribute a lot in the performance of air transport	38(31.4)	56(46.3)	27(22.3)	0(0.0)	0(0.0)	1.91	0.73	121(100)
Data is analyzed by experts so I never come to know what it was all about	23(19.0)	22(18.2)	48(39.7)	22(18.2)	6(5.0)	2.72	1.12	121(100)
Monitoring and evaluation has more evil than good and lowers productivity in all ways	15(12.4)	13(10.7)	26(21.5)	54(44.6)	13(10.7)	3.31	1.18	121(100)
Monitoring and evaluation is the first step to great performance	74(61.2)	40(33.1)	7(5.8)	0(0.0)	0(0.0)	1.45	0.60	121(100)
Insensitivity to the industry concerns by the regulator	13(10.7)	32(26.4)	52(43.0)	24(19.8)	0(0.0)	2.72	0.90	121(100)
Dissemination of results enhances visibility of an airline thus widening the market share	30(24.8)	66(54.5)	25(20.7)	0(0.0)	0(0.0)	1.96	0.67	121(100)
The mode used to communicate results is very clear to me	15(12.4)	47(38.8)	49(40.5)	5(4.1)	4(3.3)	2.47	0.88	121(100)
I am satisfied with the way Monitoring and evaluation is done in air transport industry	25(20.7)	60(49.6)	28(23.1)	5(4.1)	2(1.7)	2.16	0.86	121(100)
Composite for monitoring and evaluation process (Air Operators)						2.11	0.53	

The study findings in Table 2 indicated that majority of the respondents (air operator) strongly agreed that: adherence to monitoring and evaluation plans in aviation improves performance (63.6%); monitoring and evaluation leads to proper analysis of the client's needs hence boosting performance of air transport (63.6%), and monitoring and evaluation is the first step to great performance (61.2%). Table 4.36 further reveals that majority of air operators agreed that: methods of data collection determine the performance in air transport (60.3%), dissemination of results enhances visibility of an airline thus widening the market share (54.5%), they satisfied with the way Monitoring and evaluation is done in air transport industry (49.6%), data presentation contribute a lot in the performance of air transport (46.3%), and insensitivity to the industry concerns by the regulator (26.4%). Majority of the respondents were neutral to: insensitivity to the industry concerns by the regulator (43.0%), the mode used to communicate results is very clear to me (40.5%), data is

analyzed by experts so I never come to know what it was all about (39.7%), and the mode used to communicate results is very clear to me (40.5%). The study findings also revealed that majority of the respondents however disagreed that monitoring and evaluation has more evil than good and lowers productivity in all ways (44.6%).

The study results in Table 2 indicated respondents agreed that: adherence to monitoring and evaluation plans in aviation improves performance (M=1.39, SVD=0.53), monitoring and evaluation leads to proper analysis of the client's needs hence boosting performance of air transport (M=1.40, SVD=0.57), methods of data collection determines the performance in air transport (M=1.81, SVD=0.62), data presentation contribute a lot in the performance of air transport (M=1.91, SVD=0.73), data is analyzed by experts so I never come to know what it was all about (M=2.72, SVD=1.12), monitoring and evaluation has more evil than good and lowers productivity in all ways (M=3.31,

SVD=1.18), monitoring and evaluation is the first step to great performance (M=1.45, SVD=0.60), insensitivity to the industry concerns by the regulator (M=2.72, SVD=0.90), dissemination of results enhances visibility of an airline thus widening the market share (M=1.96, SVD=0.67), the mode used to communicate results is very clear to me (M=2.47, SVD=0.88), and that I am satisfied with the way Monitoring and evaluation is done in air transport industry (M=2.16, SVD=0.86).

The study results revealed that in regard to monitoring and evaluation process, air operators in Kenya felt that: adherence to monitoring and evaluation plans in aviation improves performance, monitoring and evaluation leads to proper analysis of the client’s needs hence boosting performance of air transport, and monitoring and evaluation is the first step to great performance. The study findings further reveal that majority of air operators felt that: methods of data collection determine the performance in air transport, dissemination of results enhances visibility of an airline thus

widening the market share, they satisfied with the way monitoring and evaluation is done in air transport industry, data presentation contribute a lot in the performance of air transport, and insensitivity to the industry concerns by the regulator. Overall the study findings revealed that air operators in Kenya are satisfied with the way monitoring and evaluation is done in air transport industry and that adherence to monitoring and evaluation plans in aviation improves performance.

Correlational Matrix for Monitoring and Evaluation Process and Performance of Air Transport

Correlation analysis was done using Pearson’s Product Moment technique to determine the relationship that exists between the indicators of monitoring and evaluation process and performance of air transport. Correlation analysis identified the strength and direction of the association between the indicators of monitoring and evaluation process and performance of air transport. Correlation analysis for the sixth objective is summarized in Table 3.

Table 3: Correlation Matrix for Compliance with Monitoring and Evaluation Process and Performance of Air Transport

		M&E work plans	Data collection	Data analysis	Dissemination of M&E results
Performance of Air Transport	Pearson Correlation	.234**	.268**	.125	.414**
	Sig. (2-tailed)	.001	.000	.077	.000
	N	202	202	202	202

**.Correlation is significant at the 0.05 level (2-tailed)*

The correlation analysis results for the sixth objective of the study as presented in Table 3 indicate positive and significant coefficients between the indicators of monitoring and evaluation process and performance of air transport. Table 3 revealed that preparation of M&E work plans had a weak and statistically significant relationship with performance of air transport (r=.234, p value<0.05). Data collection on aviation safety had a weak and statistically significant relationship with performance of air transport (r=.268, p value<0.05). Dissemination of M&E results had a moderate and statistically significant relationship with performance of air transport (r=.414, p value<0.05). However, from the correlation results on Table 3 indicated that data analysis did not have a statistically significant relationship with performance of air transport.

5. Discussion of the Findings

The main findings for the sixth objective of the study are linked to previous studies that were reviewed in the literature review section. The study stated the following hypothesis: Hypothesis 1: There is a significant relationship between monitoring and evaluation process and the performance of air transport. Muchelule (2018) found out that monitoring techniques and their adoption impact project and organization performance. The study concluded that monitoring best practices have positive impact on project performance in state corporations in Kenya. While studies related to the influence of monitoring and evaluation process on performance of air transport seem to be limited, there are a number of studies based on the influence of monitoring and evaluation process and organization performance. Since the airline performance and organization performance are interrelated, then references can be made on the studies. Hypothesis 1 was supported by the study data and hence

there exists a significant relationship between monitoring and evaluation process and the performance of air transport.

6. Conclusion

The objective of the study was to establish how monitoring and evaluation process influence performance of air transport in Kenya. The indicators for monitoring and evaluation process were: preparation of Monitoring and Evaluation work plans, data collection on aviation safety, data analysis, and dissemination of Monitoring and Evaluation results. Based on both descriptive and statistical analysis it is concluded that preparation of Monitoring and Evaluation work plans, data collection on aviation safety, data analysis, and dissemination of Monitoring and Evaluation results are important are significant factors in enhancing the performance of Air Transport.

7. Recommendation

This section of the study presents the recommendations that where based on the research findings, analysis, interpretation, and discussion. The recommendations for policy and practice are presented here.

This study recommends training of aircraft maintenance engineers on manual and intellectual skills, sound knowledge of basic theory and a comprehensive understanding of the aircraft or systems upon which they have to work. The instructors and trainers charged with the responsibility of training aircraft maintenance engineers (AMEs) should be highly knowledgeable, skilled and experienced AME’s so as to maintain and enhance their competence at the desired levels.

The learning institutions should be approved training organizations (ATO's) by aviation regulators. The ATO's should have training facilities that are conducive to learning of engineers and training programs, curriculum, and guidance manuals approved by the civil aviation authority. The study further recommends that the ATOs need to create distant e-learning to support continuous learning, short courses, and familiarization courses aimed at reaching AME's conveniently this mode learning low cost, is convenient to the working people, has a large population and if properly managed is appropriate for current generation.

The study also recommends that aviation regulators need to conduct continuous inspection, evaluations, analysis, surveillance, and interventions to ensure the industry maintains highly qualified personnel in area of specialization as part of their aviation safety oversight. The study recommends the need for electronic documentation of all valid information by aviation regulator departments. There is also need for e-documentation in regard to qualification of personnel to be under custody and updated by personnel licensing. This database will be accessible by the interested public through KCAA website.

Urgent need for two aircraft runways in the international airports such as JKIA to solve problems of diversions when one runway is closed due to operational reasons,, the infrastructures in Nairobi county will be upgraded providing smooth operations. Wilson Airport in particular has serious challenges of encroachment by housing developers to an extent that there is no available expansion space for air operators to construct Hangars, workshops, operational offices, and for activities such as aircraft parking, aircraft movements, aircraft taxiing and is fire high risk because firefighting trucks have limited access or non to the equipment and existing structures. This is a serious phenomenon that need Government experts' intervention urgent.

Implementation of processes and procedures to resolve identified deficiencies impacting aviation safety which might have been residing in the aviation and have been detected by regulatory authority or other appropriate bodies. Aircraft accidents reports should be made available to aviators in order to learn of deficiencies and safety concerns related to the accident as a learning curve. The accident could be due to manufacturing of the aircraft systems or components.

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