



**PROJECT RISK MANAGEMENT PRACTICES AND PERFORMANCE OF
DIGITAL LITERACY PROGRAMME IN PUBLIC PRIMARY SCHOOLS IN
MOMBASA COUNTY KENYA**

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ABSTRACT

The study aimed to examine the effect of project risk management practices on performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya. Specifically, the study sought to establish the effect of risk identification and risk responses performance on digital literacy programme in public primary schools in Mombasa County Kenya. The study was underpinned by the Control theory. The population for this study was 94 public primary schools Mombasa County Kenya. The unit of analysis was 94 public schools in Mombasa County under the digital literacy programme. The unit of observation was 194 respondents involved in digital literacy programmes comprising of teachers and multi-stakeholders' agencies involved in implementation of the digital literacy programme. The study found that risk identification and risk response were significant related to the performance of the Digital Literacy programme in Mombasa County. The study recommended for implementation of the risk management practices to ensure improved performance of the Digital Literacy Programme in Mombasa County.

Keywords: Project risk management practices, performance of Digital literacy programme, Mombasa County

INTRODUCTION

A key deliverable of the Kenya Vision 2030 is the enhancement of teaching and learning in schools through the Digital Literacy Programme (DLP) also called 'Digischool'. The government of Kenya, through a multi stakeholder engagement is implementing the DLP countrywide. The focus of the programme is all public primary schools in Kenya to use digital technologies in learning. In addition to the programme the government intend to promote research and development, enhance job creation, promote locally assembling or manufacturing of goods and services, and develop innovation skills for the knowledge economy. The DLP aims at improving learning and building of 21st century digital skills among primary school students through the use of digital technologies in education (ICT authority, 2016).

The DLP was an initiated in 2013 by the Jubilee government then, however some of the hurdles included lack of infrastructure as most public schools were not connected to the power grid especially the remote areas. The government embarked on the rural electrification programme to bring electricity to schools and communities. The DLP was to be rolled out in three phases namely 'Learning to use', Using to Learn' and 'using to produce'. The first phase the targeted young learners up to grade three, second phase rolled out in July 2019 targeted grade four to six pupils, while the third phase targeted grade seven and above and it was to be implemented from 2023 to 2029 (ICT Authority, 2019).

According to Kendrick (2019), risk management in a project or organization is dependent on the ability of the team to understand the sources and variations in projects, and then working to minimize threats while maximizing opportunities wherever it is feasible. The objective of project risk management is to increase the likelihood and impact of positive events and decrease the likelihood and impact of negative events on the project. Project risk has its origins in the uncertainty present in all risks (PMI, 2017). Alsaadi and Norhayatizakuan (2021) established that practicing risk management ensures improvement of performance on construction projects in Oman. Thus, it is essential for projects to hire qualified project managers with sufficient knowledge in risk management. Singh and Hong (2020) reported in a survey conducted on risk management practices in project environments in Oman found that most of the construction companies are reliant on subjective judgement, intuition, and practical experiment in assessing project risks. The risk management practices were also unformal and non-systematic and more of reactive on firefighting basis with main focus on risk avoidance strategy rather than adopting mitigating strategy for the circumstances that trigger the occurrence of the risk.

Digital Literacy Program in Mombasa County

The ICT Authority reports that over a million devices were installed in more than 23,000 public schools in the country. The 2nd phase was rolled out in July 2019 to expose learners to technology's ideas in learning in order to enhance innovation and creativity. The phase is to be implemented up to 2023. It is expected in this phase that shared Digital Literacy resources centres will be set in schools with the appropriate tools and infrastructure. The 3rd phase aims at making use of technology for creation of employment, mentoring learners for development in the tertiary and universities. Advance labs will be introduced for the development of prototypes of products. The phase targets grade seven and above and it is to be implemented from 2023 to 2029 (ICT Authority, 2019).

Mombasa county has 6 sub counties namely: Jomvu, Mvita, Kisauni, Likoni, Nyali, and Changamwe. According to the Digischool website, the county has 97.2% installation of the DLP equipment. The county has a total of 96 public primary schools where 94 have been installed with 5963 learners' devices that were distributed to the the schools, 188 teachers' devices, 94 routers, 94 projectors, and 94 Hard Disk Drives. Changamwe subcounty has 12 schools where 822 student's devices have been installed and 24 teacher's devices, 12 routers, 12 projectors, and 12 hard disk drives. Jomvu subcounty has 8 schools installed with 755

learners' devices, 16 teacher's devices, 8 routers, 8 projectors and 8 hard disk drives. Likoni and Kisauni sub counties both have 19 schools each, fitted with 1205 learner's devices, 38 teacher's devices, 19 projector, 19 routers, 9 hard disk drives. Nyali subcounty has 7 schools installed with 515 learner's devices, 14 teacher's devices, 7 routers, 7 projectors, 7 hard disk drives. Mvita subcounty has 29 schools installed with 1241 learner's devices, 58 teacher's devices, 29 projects, 29 routers, and 29 hard disk drives (Ministry of information, communication and the digital economy, 2024)

Statement of the Problem

According to the Digischool website, a total of 94 public primary schools have been installed with the digital literacy programme devices give 100% installation in Mombasa County. Based on the government implementation plan of the DLP, currently we should be making use of technology for creation of employment, mentoring learners for development in the tertiary and universities. Going by the plan by now learners in grade 1-3 should have their tablets, while the teachers to have their laptops (Ministry of ICT, 2019). However, some of the challenges that the Competence Based Curriculum (CBC) has been facing in ICT application has been lack of infrastructure, connectivity, burglary, lack of maintenance of devices, inadequate devices due to growing number of students and many others (Morara, Makworo, & Abuya, 2020). Further, on the ground there is mismatch between what status of the project verse what the beneficiaries of the programme see.

Bill (2023) mentions some of the challenges in implementation of the digital programme in Kenya general include lack of infrastructure, shortage of trained teachers, integration of technology into teaching and learning, bridging the regional digital divide, leveraging private sector partnerships, and lack of emphasis on the importance of digital literacy. Despite Mombasa County receiving recognition for Best digital innovation and leadership award on Early childhood training programme where over 30, 000 nursery pupils were to be trained on robotics annually, there has been slow implementation of the programme with only 6 ECD centres benefiting so far. They include Utange, Jomvu, Khadija, Likoni, Longo, Khadija, and Kadzandani (Ochieng, 2021). The ministry of ICT (2020) reports that Mombasa County is among the bottom four counties with poor DLP resources implementation.

Research objectives

The general objective of the study was to examine the effect of project risk management practices on performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya.

- i. To investigate the effect of risk identification on the performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya.
- ii. To determine the effect of risk response on the performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya.

LITERATURE REVIEW

Theoretical Review

The theory of control was developed by Emerson in 1917 from thermostat model (Ogunnaike & Harmon, 1994). Control theory is divided into two parts; performance reporting and overall change control. Performance corrections agreed for the implementation processes, while change control changes are set for the planning processes. Cost control consider performance reporting, based on agreed performance baseline, and associated corrections to implementation (PMI, 2017) the theory ensures that there is a standard of project performance which is measured at the deliverable; the likely variance between the standard and the measured value is used for adjusting the project process so that the desired standard can be achieved (Koskela & Howell, 2002). This theory is a guidance theory in the project cost control as it shows the capacity of the project to attend to specific cost problems that need to be reviewed within

projects implementation. It further offers guidance on what areas need to be emphasized on during the project cost monitoring process (Donald & Preston, 1995). The use of this theory gives the advantage of offering cost information to the projects that could lead to additional explanations regarding the problem, the solutions and the best course of actions to be carried out in order to obtain the intended project cost results. In addition, the theory can be used to enhance project decision making and increase conceptions of solutions to any project difficulties (McClintock, 1990). The theory was useful in linking risk response and risk analysis and how they influence performance Digital Literacy programme in public primary schools in Mombasa County.

Conceptual Framework

This study's conceptual framework sought to demonstrate the relationship between project risk management practices and performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya. The conceptual framework is illustrated in figure 1 below

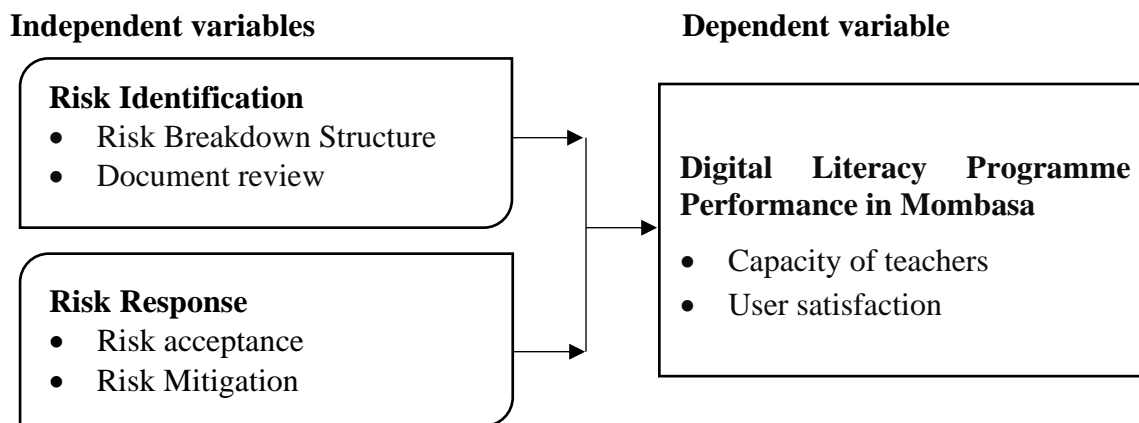


Figure 1: Conceptual framework

Risk Identification

Risk identification it is the process of gaining a thorough understanding of the negative outcomes of the project (Pm4dev, 2019). It is the first step in risk management process where the all the project risks are identified and named by the project team. In identifying risks several methods are used including review of risk plans from similar projects and also brainstorming. It is the responsibility of the project team members and the project manager to investigate the possible potential project risks from all sources of information. Project risk identification should be captured in risk log that is updated throughout the entire life of the project so that new information on risks and their impact as well as probability are captured (PMI, 2017). The project team examines the project scope and the Work Breakdown Structure (WBS) for possible risks that might affect the project (Ayudhya & Kunishima, 2019). Risks associated to the triple constraints of schedule, scope, and resources; scope risks are a priority since they determine whether the project is feasible. Thus, decisions are made on whether the scope should change or the project is abandoned when the project has significant scope risks. Scope changes and scope creep are the most common sources of scope risk as mentioned in the project experience risk information library (PERIL) (Kendrick, 2019).

Projects are faced with many risks owing to the environment they have to act. It is important for projects to build a good awareness for both internal and external factor that have an influence on the project environment that create risk to projects. The factors include but not limited to; poor local infrastructure, unclear project objectives, stakeholders' interests, poorly define scope, social, political and economic environment and many more (Pm4dev, 2019). Risks can be categorized as internal and external risks. The internal risks originate from the project organization or the internal conditions of the project and include stakeholders,

beneficiaries, lack of resources, unqualified team members, and lack of management commitment (Doval, 2019). The internal risks which originate from internal factors are manageable and their impact can be reduced through commitment and support to the project. As for the external risk which originate from factor that the project has little or no influence in changing them, are most of the time difficult to manage and the project needs to develop best strategy to minimize their impact. The factors include natural environment, political system, infrastructure, and socioeconomic context (Pm4dev, 2019).

Risk Response

The PMI (2017) describes risk responses as the choices, plans of action, and tactics k intended to mitigate project risk exposure and threat to the project. There are numerous risk response strategies that can be used to counter a specific hazard. It is occasionally possible to turn a risk or an unforeseen event into an opportunity. Positive risk response techniques consist of four basic strategies: sharing, accepting, enhancing, and exploiting. In other situations, a threat-posing risk just needs to be reduced or neutralised and this is a negative risk response strategy. Risk acceptance, contingency planning, risk transfer, likelihood reduction, and avoidance are a few of the most popular forms of risk response techniques for negative risks (Doval, 2019; Lester, 2017). In managing risk, it involves planning for the risk responses, identification of the risk triggers, allocating the responsibility for dealing with the risk (Doval, 2019). These risk response techniques are frequently used in concert to produce an all-encompassing risk response strategy.

Since risk associated with the project are present throughout the entire project lifecycle, it costs the organization both time and resources to deal with the risks. Risk mitigation is usually the most preferred risk management strategy because it focuses on reducing risk. With this strategy, the project manager takes countermeasures to reduce the impact of risks (Association for Project Management, 2018). The mitigation process helps the project to be completed within its timeline without hinderances. The mitigation strategies taken help the project team to pre-emptively anticipate the consequences of the project risk and thus, mitigation process help reduce threats to a project to ensure success is achieved. Brown (2022) explained that there are several methods used to reduce the threats in a project. Thus, the project team ensures that various mitigations strategies in the entire life cycle of the projects are easily identified monitored and evaluated. The common five mitigation strategies include acceptance, avoidance, control, transfer, and monitor. Risk mitigations need to implemented throughout the project and this is only possible when the project team members are knowledgeable and trained enough to implement the risk management strategies and also the mitigation practices in the projects (Kerzner, 2022).

Project Performance

According to Kendrick (2019) projects may fail due to three main reasons. They are practically impossible since the project objectives is beyond the technical capability that is currently available; they are over-constrained; and lastly projects also failed due to poor project management. It is through risk and project planning that a project is able to deal with the aforementioned reasons. Project that are impossible, proper planning and analysis helps in generating sufficient information either to change the objective or terminate the project earlier. As projects with unrealist timeline and resources, or other constraints, risk and planning data provides the compelling data for the basis of project negotiation for amore a plausible objective. As for project failing due to poor execution, a thorough project risk planning provides insight for better decision making. Data from risk management is an important input during project selection (Kendrick, 2019).

According to Hyseni (2024) risk assessment in project management ensures there is enhanced preparedness, resource optimization, informed decision making, and also improved project outcomes. Integrating risk assessment in project management lifecycle is imperative for

successful delivery of projects. According to Aarthipriya *et al.* (2020) risk identification and risk assessment has an impact on the project success, schedule time planned budget, and adherence to technical specifications. By minimizing the risks in projects, the project output will improve. Thus, risks significantly impact the construction project's performance in terms of quality, time and cost (Chang, Hwang, Deng, & Zhao, 2018). Due to increase in project size and complexity risk management capability in the construction process is a pivotal element in preventing unwanted outcomes. Moreover, risk management is thus recognized to be a crucial exercise for achieving better construction projects' performance (Alsaadi & Norhayatizakuan, 2021).

Empirical Review

The empirical review provides scholarly literature on the issues under study.

Risk Identification and Performance of Projects

Algremazy *et al* (2023) investigated the 'effects of risk management practices on project performance of the Libyan construction industry'. The risk management practices defined in this study included risk identification, risk assessment and risk monitoring. The study adopted exploratory design method. More than 300 construction companies in Tripoli and Benghazi which were characterized by actively involved in big projects and large investment. The study used a questionnaire and cluster sampling was used to administer the questionnaires to respondents. Structured equation modelling was used for analysis by use of Smart-PLS program. The study found that risk management practice to have substantial and favourable effect on project execution. Risk identification had a significant influence on performance of project in the Libyan construction industry (Algremazy, Ideris, Alferjany, & Akram, 2023). The study was done in Libya and targeted construction projects while the current study is digital literacy program in Mombasa County.

Igihozo and Irechukwu (2022) assessed 'project management process and performance of Mpazi channel construction project in Nyabugogo, Kigali-Rwanda'. A descriptive survey design with a mixed qualitative and quantitative approached was adopted. A sample of 118 respondents was drawn from a population of 168. The study specifically sought to examine the effect of project risk identification, project risk management plan, and project risk plan responses and how they affect performance of Mpazi channel construction project in Rwanda. The study found a strong positive significant correlation between project risk identification and performance of project in terms of cost ($r = .962$, $sig = .000$), quality ($r = .979$, $sig = .000$), and time ($r = .874$, $sig = .000$). the study also established that risk identification has positive significant relationship ($B = .300$, $sig = .000$) with performance of projects. Project risk identification influenced project performance by (beta = .557) 55.7% (Igihozo & Irechukwu, 2022). The study was done in Rwanda and targeted construction projects while the current study is in Mombasa County targeting digital literacy programme.

Risk Response and Performance of Projects

Njuguna (2019) studied 'risk management practices and performance of projects in Nairobi city county, Kenya'. The study identified risk management procedures including risk retention, risk prevention, risk control, and risk transfer. The study focused on 135 respondents, which include: project managers, finance officers, risk managers, supervisors and construction companies. The study proved this risk management practices significantly and positively affect project performance in Nairobi urban region. They significantly affect risk transfer, risk prevention, risk control and risk retention fulfilment of projects. Although the study focused on risk management practices and in Nairobi city, it targeted construction projects in Nairobi County while the current study is digital literacy programme in Mombasa County.

Oranga (2020) examined the influence of 'risk management strategies on delivery of urban housing projects in Kenya' with specific case of the affordable housing program in Nairobi

County. The objectives of the study were: to examine the how risk control, risk avoidance, risk transfer, and risk retention strategies influence delivery of the housing projects in Kenya. The study target population was 87 middle level managers in the housing projects department. Exploratory descriptive survey design was adopted. The study found that risk avoidance, risk transfer, risk control, and risk retention to significantly influence performance of housing projects in Kenya (Oranga, 2020). The study focused on risk management strategies for housing projects in Nairobi County while the current study is risk management practices and performance of the digital literacy programme in Mombasa County.

RESEARCH METHODOLOGY

The study employed a descriptive survey research design. Descriptive research usually aims at collecting data that describes characteristics of persons, situations or events. The population for this study comprised of 94 public primary schools Mombasa County Kenya as shown in the Digischool website (ICT Authority, 2023), and the multi-stakeholders agencies involved in the DLP which include: ICT Authority, Teacher Service Commission, Kenya Institute of Curriculum Development, Ministry of Energy, Ministry of Education and Ministry of Industrialization (Ministry of ICT, 2019). The unit of analysis was 94 public schools in Mombasa County under the digital literacy programme. The unit of observation was 194 respondents involved in digital literacy programmes comprising of teachers and multi-stakeholders' agencies involved in implementation of the digital literacy program. All the respondents (194) were observed in this research. Stratified sampling was used to group the respondents in to two major cohorts of teaching representatives from the public schools and multi-stakeholders' agencies. This study used both primary and secondary data. In this study, the researcher obtained primary data through semi-structure questionnaires with both open ended and closed ended questions

RESEARCH FINDINGS AND DISCUSSIONS

Response Rate

The study population was 194 and a census was employed. A total of 161 questionnaires were dully filled and returned with a response rate of 83% which is recommended to be excellent for giving general conclusions in a study (Mugenda & Mugenda, 2018).

Descriptive analysis

The descriptive statistics attempt to explain the responses for the items in each variable in relation to the study objectives. The frequency, mean, and standard deviations were used.

Risk Identification

The first objective of the study was to investigate the effect of risk identification on the performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya. The study also was guided by the research question 'What is the effect of risk identification on the performance of the Digital Literacy Programme in public primary schools in Mombasa County, Kenya?' From Table 1 below the study found that risk identification on the performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya ($M = 3.12$, $SD = 1.069$).

Table 1: Descriptives for Risk Identification

Risk Identification	SD %	D %	N %	A %	SA %	MN	STD DEV
The risk identification process identifies the source and types of risks affecting the digital literacy programme.	19.3	60.9	11.2	6.2	2.5	2.12	.876
The digital literacy programme is faced with both internal and external sources	9.9	19.9	19.9	21.7	28.6	3.39	1.347
The digital literacy programme uses document review to identify possible project risks.	9.9	20.5	19.9	28.6	21.1	3.30	1.285
Risk management for the digital literacy programme requires historical data that has a solid base crucial for project estimating, project monitoring and control.	10.6	19.9	29.2	20.5	19.9	3.19	1.263
The digital literacy programme uses a risk breakdown structure to identify all the possible risks	9.9	20.5	18.6	21.1	29.8	3.40	1.362
The RBS is a reflection of the stakeholders' perspectives of the program risk	9.9	19.9	19.9	29.8	20.5	3.31	1.276
Average Risk Identification						3.12	1.069

The findings revealed that respondents disagreed (80.2%) that the risk identification process identifies the source and types of risks affecting the digital literacy programme. This was supported by the mean (2.12, DS = 0.876). However, 50.3% of the respondents opined that the digital literacy programme is faced with both internal and external sources (M = 3.39, SD = 1.347). It was also agreed by 49.7% of the respondents that the digital literacy programme uses document review to identify possible project risks (M = 3.30, SD = 1.285). The respondents also agreed (40.4%) that risk management for the digital literacy programme requires historical data that has a solid base crucial for project estimating, project monitoring and control. Though 30.5% were contrary (M = 3.19, SD = 1.263). it was also agreed (50.9%) that the digital literacy programme uses a risk breakdown structure to identify all the possible risks (M = 3.40, SD = 1.362). The study also found that the RBS is a reflection of the stakeholders' perspectives of the program risk as supported by 50.3% of the respondents (M = 3.31, SD = 1.276).

Risk Response

The third specific objective of this study was to determine the effect of risk response on the performance of the Digital Literacy Programme in public primary schools in Mombasa County, Kenya. The objective also aimed at answering the research question 'What is the effect of risk response on performance of Digital Literacy Programme in public primary schools in Mombasa County, Kenya?' From Table II below the study found that risk response affects the performance of the Digital Literacy Programme in public primary schools in Mombasa County, Kenya (M = 3.41, Sd = 0.946).

Table II: Descriptives for Risk Response

Risk Response	SD %	D %	N %	A %	SA %	MN	STD DEV
Risk acceptance strategy is considered in risk plan responses	1.2	28	11.2	29.8	29.8	3.60	1.206
The digital literacy programme has a list of risk that have been accepted and their cause action documented	9.3	20.5	21.1	29.2	19.9	3.30	1.259
The digital literacy programme has laid down mitigation strategies for the possible risks.	1.2	20.5	28.6	12.4	37.3	3.64	1.212
Risk mitigation is applicable through the risk response plan	27.3	11.2	20.5	21.1	19.9	2.95	1.491
Some of the risks for the digital literacy projects are transferred to other project stakeholders	18	11.8	19.9	31.1	19.3	3.22	1.372
The digital literacy programme also has outsourced some consultants in order to reduce the impact of the risks	19.9	1.2	36.6	28.6	13.7	3.08	1.049
Average Risk Response						3.41	.946

The study found that the risk acceptance strategy is considered in risk plan responses (59.6%, M = 3.60, SD = 1.206). Respondents also agreed (49.1%, M = 3.30, SD = 1.259) that the digital literacy programme has a list of risk that have been accepted and their cause action documented. The respondents also agreed (49.7%, M = 3.64, SD = 1.212) that the digital literacy programme has laid down mitigation strategies for the possible risks. However, only 41% of the respondents (M = 2.95, Sd = 1.491) agreed that Risk mitigation is applicable through the risk response plan. In addition, 42.9% of the respondents disagreed that Some of the risks for the digital literacy projects are transferred to other project stakeholders (M = 3.22, SD = 1.372). Finally, 42.3% of the respondents opined that the digital literacy programme also has outsourced some consultants in order to reduce the impact of the risks (M = 3.08, Sd = 1.049)

Performance digital literacy programme in Mombasa County

The general objective of the study is to examine the effect of project risk management practices on the performance of the Digital Literacy Programme in public primary schools in Mombasa County, Kenya. From Table III below the study found that risk management practices affect the performance of the Digital Literacy Programme in public primary schools in Mombasa County, Kenya (M = 3.45, Sd = 0.866).

Table III: Performance of DLP

Performance of DLP	SD %	D %	N %	A %	SA %	MN	STD DEV
The teachers in public schools are well-trained to implement the digital literacy programme	15.5	18.6	18	37.9	9.9	3.30	1.225
There are enough teachers with good knowledge and background in information technology to implement the digital literacy programme.	27.3	8.7	9.3	29.8	24.8	3.16	1.569
The pupils are satisfied with the digital literacy programme since it has helped them gain knowledge.	1.2	9.3	18	31.7	39.8	3.99	1.034
The teachers are satisfied with how the digital literacy programme is implemented	24.8	16.8	13.7	32.9	11.8	3.30	1.379
The school has enough facilities such as rooms and connectivity for the digital literacy programme	19.3	21.7	21.7	9.3	28	3.07	1.341
There are enough devices for the both the teachers and pupils for successful implementation of the digital literacy programme	26.1	11.2	32.3	7.5	23	3.02	1.178
The digital literacy programme is in line with the current curriculum utilized in CBC	12.4	8.1	15.5	38.5	25.5	3.57	1.293
The curriculum is stable enough to accommodate the digital literacy programme without affecting the pupils.	18.6	9.3	16.8	31.1	24.2	3.33	1.422
Average Performance of DLP						3.45	.866

The study found that 47.8% of the respondents agreed that the teachers in public schools are well-trained to implement the digital literacy programme (M = 3.30, SD = 1.225). It was also agreed by 39.1% of the respondents that there are enough teachers with good knowledge and background in information technology to implement the digital literacy programme. This was also contrary to 36% of the respondents (M = 3.16, SD = 1.569). The respondents also agreed that the pupils are satisfied with the digital literacy programme since it has helped them gain knowledge (71.5%, M = 3.99, SD = 1.034). It was also affirmed by 44.7% of the respondents that the teachers are satisfied with how the digital literacy programme is implemented (M = 3.30, SD = 1.379). The respondents (41%) disagreed that the public schools have enough facilities such as rooms and connectivity for the digital literacy programme (M = 3.07, SD = 1.341). In addition, 37.3% disagreed that there are enough devices for the both the teachers and pupils for successful implementation of the digital literacy programme, contrary to 30.5% who affirmed the statement while 32.3% were not sure (M = 3.02, SD = 1.178). However, respondents agreed that the digital literacy programme is in line with the current curriculum utilized in CBC (64%, M = 3.57, SD = 1.293). Finally, 55.3% of the respondents opined that the curriculum is stable enough to accommodate the digital literacy programme without affecting the pupils (M = 3.33, SD = 1.422).

Correlation Analysis

The significance, magnitude, and direction of the relationship between the independent variables and the dependent variable in this study was determined by correlation analysis. Using the Pearson correlation (r) the strength of association between the independent variables and the dependent variable was determined. The findings in Table IV indicated a positive strong correlation ($r = 0.610$; $p = 0.000 < 0.05$) between Risk identification and the performance of the digital literacy programme in Mombasa County. This implies that Risk identification is positively correlated to the performance of digital literacy programme in Mombasa County. In addition, the correlation between these two variables was significant since the $p < 0.5$, inferring a linear relationship between Risk identification performance of the digital literacy programme in Mombasa County. There is a direct, significant, and strong association between Risk identification and the performance of the digital literacy programme in Mombasa County. The findings are in line with Igihozo and Irechukwu (2022) who found a strong positive significant correlation between project risk identification and performance of project in terms of cost ($r = .962$, sig = .000), quality ($r = .979$, sig = .000), and time ($r = .874$, sig = .000).

There is a significantly strong correlation ($r = 0.666$; $p = 0.000 < 0.05$) between risk response and the performance of the digital literacy programme in Mombasa County. This implies that risk response is positively correlated with the performance of the digital literacy programme in Mombasa County. In addition, the correlation between risk response and the performance of the digital literacy programme in Mombasa County was significant, that is $p < 0.5$ indicating a linear relationship between risk response and the performance of the digital literacy programme in Mombasa County. The findings are in line with Odhaimbo and Senelwa (2021) who established a weak significant correlation ($r = 3.41$, Sig = .000) between risk transfer strategy and project sustainability in South Nyanza Kenya.

Table IV: Correlation Matrix

		Risk Identification	Risk Response
Performance of digital literacy programme	Pearson Correlation (r)	.610**	.666**
	Sig. (2-tailed)	.000	.000
	N	161	161

Regression model

The regression coefficients were used to determine the optimal model.

Table V: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.938	.297		3.155	.002
	Risk Identification	.340	.117	.420	2.896	.004
	Risk Response	.437	.092	.477	4.741	.000

a. Dependent Variable: Performance of DLP

The coefficient for Risk Identification 0.340 indicates a positive significant (sig = 0.004) relationship with performance of digital literacy programme in Mombasa County. The findings imply that a unit increase in risk identification practices lead to an increase performance of the digital literacy programme by 0.340. Risk identification also a significant influence on the performance of the digital literacy programme with an influence of 0.420 or 42% on

REFERENCES

- Algremazy, N. A., Ideris, Z., Alferjany, M. A., & Akram, A. (2023). 'The effect of risk management practices on project performance : A case of the Libyan construction industry'. *Intern. Journal of Profess. Bus. Review*, 8(6), 1-20. doi:<https://doi.org/10.26668/businessreview/2023.v8i6.1420>
- Alsaadi, N., & Norhayatizakuan. (2021). 'The Impact of Risk Management Practices on the performance of construction projects'. *Estudios de Economia aplicada*, 39(4). Retrieved from <http://dx.doi.org/10.25115/eea.v39i4.4164>
- Association for Project Management. (2018). *APM Body of Knowledge*, (6th ed.). Association for Project Management: Buckinghamshire.
- Ayudhya, B. I., & Kunishima, M. (2019). Assessment of risk management for small residential projects in Thailand. *Procedia computer Science*, 164, 407-413.
- Chang, T., Hwang, B.-G., Deng, X., & Zhao, X. (2018). 'Identifying political risk management strategies in international construction projects'. *Advances in Civil Engineering*.
- Donald, T., & Preston, L. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications. *Academy of Management Review*, 20, 66-67.
- Doval, E. (2019). Risk management process in projects. *Review of general management*, 30(2), 97-113.
- Hyseni, V. (2024). '*isk-assessment-in-project-management*'. Retrieved from [pecb.com: https://pecb.com/article/risk-assessment-in-project-management](https://pecb.com/article/risk-assessment-in-project-management)
- ICT Authority. (2019). *Digital Literacy Programme Management Guidelines*. Nairobi: Ministry of Information, communications and Technology.
- Igihozo, L., & Irechukwu, E. N. (2022). 'Project Risk Management Process and Performance of Mpazi Channel Construction Project in Nyabugogo, Kigali-Rwanda'. *Stratford Peer Reviewed Journals and Book Publishing*, 6(2), 31- 44.
- Kendrick, T. (2019). '*Identifying and managing project risk : essential tools for failure-proofing your project*' (3rd ed.). United States: American Management Association.
- Kerzner, H. (2022). '*Project Management: A systems approach to planning, scheduling, and controlling*' (13th ed.). New Jersey: John Wiley & Sons, Inc.
- Lester, A. (2017). *Project Management, Planning and Control: Managing Engineering, Construction and Manufacturing Projects to PMI,APM and BSI Standards* (7th ed.). Oxford OX5 1GB, United Kingdom: Elsevier Ltd.
- Ministry of ICT. (2019). *Digital Literacy Programme*. Retrieved 2023, from [digischool.icta.go.ke: http://digischool.icta.go.ke/](http://digischool.icta.go.ke)
- Ministry of information, communication and the digital economy. (2024). *Digital literacy programme*. Retrieved from [/ict.go.ke: https://ict.go.ke/digital-literacy-programmedlp/](https://ict.go.ke)
- Morara, G. N., Makworo, E. O., & Abuya, T. K. (2020). Ranking challenges facing digital literacy programme in primary schools in Kisii County, Kenya. *International Journal of research in business and social science*, 9(5), 302-306.
- Mugenda, O., & Mugenda, A. (2018). *Research Methods*. Nairobi: Acts Press.
- Ochieng, O. (2021). '*Mombasa gets global award for ICT projects*'. Retrieved from the [star.co.ke: https://www.the-star.co.ke/counties/coast/2021-12-07-mombasa-gets-global-award-for-ict-projects/](https://www.the-star.co.ke/counties/coast/2021-12-07-mombasa-gets-global-award-for-ict-projects/)
- Ogunnaike, B., & Harmon, R. (1994). *Process Dynamics, Modeling, and Control*. New York:: Oxford University Press.
- Oranga, O. S. (2020). '*Influence of risk management strategies on delivery of urban housing project in Kenya : A case of affordable housing program in Nairobi County*'. MA thesis in project planning and management, University of Nairobi, Nairobi.
- Pm4dev. (2019). '*Project risk management*'. Project management for development organizations.
- PMI. (2017). *Guide to the Project Management Body of Knowledge PMBOK Guide 6th Edition*. Newtown Square: Project Management Institute, Inc.