The International Journal of Business Management and Technology, Volume 7 Issue 5 September-October 2023
ISSN: 2581-3889

Research Article Open Access

Influence of Technical Skills on the Performance of Correctional Facilities Projects in Nakuru Main Prison

Boaz Kiptoo Leitich[1], Dr. Nehemiah Kiplagat[2], Dr. Zakayo Kibet Tallam[3]
Kabarak University P.O Private Bag 20157 Kabarak

ABSTRACT: Correctional facilities play a crucial role in maintaining law and order within society. They serve as institutions where individuals convicted of crimes are incarcerated, rehabilitated, and ideally, reintegrated into society as law-abiding citizens. Project performance measures are crucial indicators of the effectiveness of correctional facilities like Nakuru Prisons therefore the study sought to assess the influence of technical skills on performance of correctional facilities projects in Nakuru main prison. The study was guided by the concept of entrepreneurial self-efficacy theory, training needs assessment theory, project management competency theory and the human capital theory. The study adopted descriptive research design. The targeted population was 52 officers in Nakuru Main prison. Since the target population was manageable the study adopted census technique to incorporate all the 52 targeted officers. The study used primary data which was collected through questionnaire. The pilot study was conducted in Naivasha Maximum Prison. was analyzed using descriptive and inferential statistics using Statistical Package for Social Sciences version 24. Descriptive statistics involved the use of measures of central tendencies (mean) and measures of dispersion. Inferential statistic involved the use of correlation and regression analysis to establish the nature of relationship between study variables. After analysis data was presented in form of a table. From the study concluded that there is a strong positive correlation between technical skills and performance of correctional facilities projects in Nakuru main prison, ($r = 0.541$; $p < 0.05$). From the findings the study recommended that the prison department can develop training programs aimed at instilling an entrepreneurial mindset within correctional facilities. In addition the study also recommends is essential to provide administrators with relevant training based on the specific projects within correctional facilities. For instance, if construction projects are underway, administrators should receive training in construction management, quality control, and safety procedures

Key Words: *Correctional Facilities, Technical Skillsand Project Performance.*

I. I INTRODUCTION

Technical skills refer to the specialized knowledge, abilities, and competencies that individuals possess to perform specific tasks or activities within an organization. These skills are often related to a particular field, industry, or job function and are essential for carrying out technical or specialized duties effectively (Blanchard& Thacker, 2020). Technical skills can encompass a wide range of abilities, from using specific software and tools to operating machinery, conducting data analysis, programming, engineering, and other domain-specific expertise (Goldstein& Ford,2021).Measuring technical skills is an ongoing process that aligns with an organization's strategic goals and the specific requirements of each job role. It combines multiple methods and sources of data to ensure a comprehensive evaluation of employees' technical abilities (Noe, 2016).

Technical skills are crucial in the initial design and planning phases of correctional facility projects (Gustafson, 2018). Architects, engineers, and other technical professionals must possess the knowledge and expertise to design secure, compliant, and efficient facilities that meet the unique needs of correctional institutions. Correctional facilities are subject to strict regulations and safety standards (Cunningham, 2019).Technical experts with knowledge of building codes, security measures, and safety protocols are essential to ensure that the facility is compliant with all relevant laws and regulations. Non-compliance can lead to legal issues and delays. Technical skills are vital for implementing state-of-the-art security systems and surveillance technologies within correctional facilities. Security experts are responsible for designing and maintaining systems that monitor inmate activities, prevent escapes, and ensure the safety of staff and inmates (Mays& O'Sullivan, 2019).Effective project management, including cost estimation and budgeting, is critical for correctional facility projects. Technical project managers with expertise in construction management and budget control can help keep projects on track and within budget (Hinze&Kelliher, 2018).

Correctional facilities, also known as prisons, are essential components of the criminal justice system. The performance of correctional facilities projects has been a topic of interest for many researchers, policymakers, and stakeholders. According to a study by the National Institute of Justice (NIJ), the performance of correctional facilities projects can be evaluated based on four primary factors: cost, schedule, quality, and safety (NIJ, 2016). Cost refers to the financial resources required to complete the project, including the design, construction, and maintenance costs. Schedule refers to the timeline for completing the project, including the construction phase and the time required to begin operating the facility. Quality refers to the level of craftsmanship, materials used, and overall design of the facility. Safety refers to the protection of both inmates and staff within the facility.

Statement of the Problem

Correctional facilities play a crucial role in maintaining law and order within society. They serve as institutions where individuals convicted of crimes are incarcerated, rehabilitated, and ideally, reintegrated into society as law-abiding citizens. Project performance measures are crucial indicators of the effectiveness of correctional facilities like Nakuru Prisons. However there are various changes affecting the performance of projects in correctional facilities. One of the fundamental challenges affecting project performance in Nakuru Prisons is the quality of projects. Due to budget constraints and limited resources, correctional facilities may face difficulties in maintaining and upgrading their infrastructure. The cost of projects is another critical aspect affecting the performance of correctional facilities, including Nakuru Prisons. Limited budgets can hinder the facility's ability to undertake essential projects, such as infrastructure improvements or the implementation of rehabilitation programs. Another factor that affects the performance of projects in correctional facilities is delay. Project delays lead to financial overruns, as additional resources may be required to address unforeseen issues that arise during the extended project timeline. In the case of Nakuru Prisons, delays in infrastructure upgrades or the implementation of rehabilitation programs can hinder the facility's ability to address issues promptly and efficiently therefore the study sought to assess the influence of technical skills on the performance of correctional facilities projects in Nakuru Main Prison

II. LITERATURE REVIEW

Theoretical Review

The study was guided by the Training Needs Assessment (TNA) theory which was created by Kaufman and English in 1979. Training Needs Assessment (TNA) is a process used to identify and evaluate the training needs of employees in an organization. It is a critical component of effective training and development programs (Gibbs& Cullen, 2018). According to the TNA theory, an organization's training needs should be aligned with its strategic goals and objectives. The process involves assessing the skills, knowledge, and abilities of employees to identify gaps and determine the type of training that is required to improve their performance (Bee & Bee, 2019). TNA theory is an essential tool for identifying the training needs of correctional facilities project staff in technical skills and improving their performance. The systematic process of identifying, designing, and evaluating training programs ensures that staff has the necessary knowledge and skills to perform their duties effectively. This, in turn, leads to successful outcomes in correctional facilities projects.

Entrepreneurial Skills on Project Performance

Nseobot and Effiong, (2021) did a study on the entrepreneurship skills of prison inmates in Nigeria. The study adopted factor research design with a target population of 5629 according to records of the Nigerian Prisons Service, AkwaIbom State. Simple random sampling technique was used to select 303 respondents out of the population. From the findings of the study revealed that relationship between entrepreneurship skills acquisition for self-reliance among Prison Inmates in AkwaIbom State have a proportional effect on their skills acquisitions.

Munyoroand Gumisiro, (2017) did a study on the significance of entrepreneurship skills on correctional service in Zimbambwe. The study used research questionnaires and focus group discussion to collect primary data from 400 ex-convicts in Harare Metropolitan province. Findings reveal that there is a significant relationship entrepreneurship skill on correctional service. The study recommends that the organization should cultivate an entrepreneurial culture to achieve the 'entrepreneurial society' through public-private partnership so as to improve their service and generate funding to support its own requirements under the retention fund.

Berengu (2012) examined the influence of entrepreneurial skills on the performance of Jua kali artisans in a developing country like Kenya using the current operating Jua kali artisans in Meru Town as a case. The sample purposely consisted of 235 Jua kali artisans who were selected using stratified random sampling. The study employed both qualitative and quantitative research techniques. Data was collected using both open ended and closed ended questionnaires. The design for the study was correlation research design where it was established that there was a

positive correlation between performance and entrepreneurial skills. The study established that managerial skills had a positive correlation with respect to performance.

Wamahiu, (2012) carried a study to investigate the influence of entrepreneurship development on employment creation among the youth in Kikuyu District, Kenya. Four research objectives were formulated to guide the study. The study employed the descriptive survey. The target population comprised of one hundred and sixty (160) registered youth groups in the district who were: eligible for funding. The sample comprised of 108 respondents. Findings revealed that awareness, of entrepreneurial duties influenced employment creation. The study also revealed that motivation of entrepreneurs affected employment creation, that self-perception influenced employment, creation and that entrepreneurship education and training influenced employment creation

III. METHODOLOGY

The study adopted correlational research design. The study was conducted in Nakuru Main Prison. The targeted population was 52 officers in Nakuru Main prison. Since the target population was manageable the study adopted census technique to incorporate all the 52 targeted officers.The study used primary data which was collected through questionnaire. The questionnaire was closed ended in nature. The pilot study was conducted in Naivasha Maximum Prison, where six officers, or 10% of the population, received questionnaires. The study did not use the piloted questionnaires. The study's content validity was determined using professional judgment and the researcher and supervisors assessed the research tool. The advice given was used to enhance the instrument's validity. Using Cronbach's coefficient Alpha, the internal consistency of the instruments was assessed. The information that was acquired for this investigation was quantitative. Inferential and descriptive statistics were used to evaluate quantitative data using the Statistical Package for Social Sciences (SPSS) version 24. The study used both descriptive and inferential statistics. Measures of central tendency (mean) and measures of dispersion (standard deviation) were used in descriptive statistics. To determine the type of link between research variables, inferential statistics employ correlation and regression analysis. Data was given after analysis in the form of a table, charts, and figures.

IV. RESULTS

Response Rate

From the distributed 52 questionnaires, 50 of them were correctly completed and submitted. This corresponded to 96% of all responses that were successful.

Technical Skills on the Performance of Correctional Facilities

The respondents were asked to indicate their level of agreement on the influence of technical skills on the performance of correctional facilities projects in Nakuru main prison. The findings are presented in Table 1

Table 1: Technical Skills on the Performance of Correctional Facilities

Statement	S A %	A %	U %	D %	SD %	Mean	Std
Technical skills helps project officer to implement the project according to technical specifications, and that team members are aligned with the project objectives.	47	34	13	6	0	4.210	0.908
Technical skills enable project officer to identify technical risks that may arise during the project.	50	31	15	5	0	4.258	0.886
Technical skills helps the officer to develop and estimate project budget	44	53	3	0	0	4.403	0.557
Technical skills helps the officer to track and monitor project activities	37	44	16	3	0	4.145	0.807
Technical skills help the project manager to effectively utilize project management software.	35	45	5	0	0	4.452	0.592
Overall Mean and Std Deviation						**4.294**	**0.750**

According to the findings 47% of the respondents strongly agreed that technical skills helps project officer to implement the project according to technical specifications, and that team members are aligned with the project objectives, 34% agreed that technical skills helps project officer to implement the project according to technical specifications, and that

team members are aligned with the project objectives, 13% were undecided while 6% of the respondents disagreed with a mean of 4.210 and a standard deviation of 0.908. This implies that technical skills helps project officer to implement the project according to technical specifications, and that team members are aligned with the project objectives. Form the findings 50% of the respondents strongly agreed that technical skills enable project officer to identify technical risks that may arise during the project, 31% of the respondents agreed that technical skills enable project officer to identify technical risks that may arise during the project, 15% were undecided while 5% disagreed with a mean of 4.258 and a standard deviation of 0.886. This implies that technical skills enable project officer to identify technical risks that may arise during the project. The study findings conquer with those of Ugbah, and Smothers, (2017) who found that risk Analysis is a proven way of identifying and assessing factors that could negatively affect the success of a project. It allows the project manager examine the risks that the project face and helps one decide whether or not to move forward with a decision. Thus, project analyzing project risks helps to estimate the project costs.

In addition, 44% of the respondents strongly agreed that technical skills help the officer to develop and estimate project budget, 53% agreed that technical skills help the officer to develop and estimate project budget while 3% of the respondents were undecided with a mean of 4.403 and a standard deviation of 0.557. This implies that technical skills help the officer to develop and estimate project budget. In addition, 37% of the respondents strongly agreed that technical skills help the officer to track and monitor project activities, 44% agreed that technical skills help the officer to track and monitor project activities, 16% were undecided while 3% of the respondents disagreed with a mean of 4.145 and a standard deviation of 0.807. This implies that technical skills help the officer to track and monitor project activities.

Moreover, 35% of the respondents strongly agreed that technical skills help the project manager to effectively utilize project management software, 45% agreed that technical skills help the project manager to effectively utilize project management software while 5% of the respondents were undecided with a mean of 4.452 and a standard deviation of 0.592. This implies that technical skills help the project manager to effectively utilize project management software. The study findings conquer with those of Moroz, and Hindle, (2012) who found that project manager, in the software industry should have basic knowledge of technical skills. Project Managers are well versed in handling projects. Technical skills are required of project managers because they need to navigate all aspects of the project they oversee. Technical work takes up a large portion of the work project managers do, which is why recruiters look for someone who has valuable, relevant technical skills.

Performance of Correctional Facilities Projects

The study sought to determine the trend of performance of correctional facilities projects in Nakuru main prison. The findings are indicated in Table 2.

Table 2: Performance of Correctional Facilities Projects

Statement	S A %	A %	U %	D %	SD %	Mean	Std
Projects are delivered within stipulated timelines time	44	46	7	3	0	4.307	0.738
The projects are delivered within the estimated budgets	55	33	7	5	0	4.387	0.869
The project stakeholders are satisfied with the projects	44	50	6	0	0	4.371	0.607
The project officers are satisfied with the project	55	42	3	0	0	4.516	0.565
Overall Mean and Std Deviation						**4.395**	**0.694**

According to the findings 44% of the respondents strongly agreed that projects are delivered within stipulated timelines time, 46% of the respondents agreed that projects are delivered within stipulated timelines time, 7% were undecided, 3% disagreed while none of the respondents strongly agreed with a (mean= 4.307; std dev=0.738). This implies that projects are delivered within stipulated timelines time. In addition, 55% of the respondents strongly agreed that the projects are delivered within the estimated budgets, 33% agreed that the projects are delivered within the estimated budgets 7% were undecided while 5% disagreed with a (mean=4.387; std dev 0.869). This implies that the projects are delivered within the estimated budgets.

From the findings 44% of the respondents strongly agreed that the project stakeholders are satisfied with the projects, 50% agreed that the project stakeholders are satisfied with the projects, 6% of the respondents were undecided while none of the respondents disagreed or strongly disagreed with a (mean =4.371; std dev=0.607). This implies that the project stakeholders are satisfied with the projects. From the findings 55% of the respondents strongly agreed that the project stakeholders are satisfied with the projects. The project officers are satisfied with the project, 42% of the respondents agreed that project stakeholders are satisfied with the projects he projects officers are satisfied with the project while 3% were undecided with a (mean=4.516; std dev=0.565). This implies that project stakeholders are satisfied with the projects the project officers are satisfied with the project. Volery, and Siemens, (2012) who while conducting a study on customer satisfaction rate in construction projects found that project stakeholders are satisfied with the projects quality and products generated.

Table 3: Correlation Analysis

Technical Skills	Pearson Correlation	.541**
	Sig. (2-tailed)	.000
	N	50

The study further examined the correlation between technical skills on the performance of correctional facilities projects in Nakuru main prison. The study established that there was a strong positive correlation existed between technical skills on the performance of correctional facilities projects in Nakuru main prison, ($r = 0.541$; $p < 0.05$). The results of the correlation analysis indicated that better technical skills on the performance of correctional facilities projects in Nakuru main prison. The study findings are in line with the findings of Nganu, (2018) who found that there is favorable effect on technical skills with company performance. The study findings is in tandem with those of Maina (2012) who found that technical competence level of the local authorities' workforce had a significant effect on the performance of local government projects.

V. DISCUSSION

The study revealed that technical skills helps project officer to implement the project according to technical specifications, and that team members are aligned with the project objectives. In addition, the study revealed that technical skills enable project officer to identify technical risks that may arise during the project. Furthermore, the study revealed that technical skills help the officer to develop and estimate project budget. Further, the study revealed that technical skills helps the officer to track and monitor project activities. It was also noted that technical skills help the project manager to effectively utilize project management software.

VI. CONCLUSION

The study concluded that technical skills on has no statistical significant influence on the performance of correctional facilities projects in Nakuru main prison. Technical skills encompass specialized knowledge and expertise relevant to the project's technical aspects. Administrators and project managers with strong technical skills would be well-equipped to make informed decisions, address technical challenges, and ensure the correct application of technical knowledge in project execution. Technical Expertise Theory is relevant in this scenario, as it focuses on the critical role of technical knowledge and expertise in shaping project outcomes. Administrators with strong technical skills are better equipped to address technical challenges, make informed decisions, and ensure the correct application of specialized knowledge, leading to improved project performance.

VII. RECOMMENDATIONS

The study recommended that it is essential to provide administrators with relevant training based on the specific projects within correctional facilities. For instance, if construction projects are underway, administrators should receive training in construction management, quality control, and safety procedures. Supporting administrators in obtaining certifications or licenses in their respective technical fields will enhance their expertise and credibility. Additionally, on-the-job training and apprenticeship programs should be facilitated to allow administrators to acquire practical technical skills through hands-on experience.

REFERENCES

[1.] Cooper, D. R., & Schindler, P. S. (2003). Business Research Methods. McGraw-Hill Education.

[2.] Cunningham, M. (2019). The Challenge of Designing Prisons for Rehabilitation. *American Journal of Criminal Justice, 44*(4), 570-583.

[3.] Gibbs, P., & Cullen, F. T. (2018). The Geography of US Prison Crime Prevention. Geography Compass, 12(6), e12393.

[4.] Gravetter, F. J., &Forzano, L.-A. B. (2006). Research Methods for the Behavioral Sciences. Cengage Learning.

[5.] Gustafson, A. (2018). Sustainable Construction in Correctional Facilities: Perceptions, Strategies, and Barriers. *Journal of Sustainable Development, 11*(2), 96-109.

[6.] Hinze, J., &Kelliher, D. (2018). Enhancing Project Performance through Effective Budget Management. *Journal of Construction Engineering and Management, 144*(6), 04018044.

[7.] MacDonald, M. (2018). Developing an Integrated Security Management System for Prisons. *Security Journal, 31*(1), 228-242.

[8.] Mays, G. L., & O'Sullivan, A. J. (2019). Prison Architecture: Policy, Design, and Experience. *Annual Review of Criminology*, 2, 349-369.

[9.] Molenaar, K. R., &Songer, A. D. (2018). Quality Management and Control in Prison Construction. *Journal of Construction Engineering and Management, 144*(7), 04018055.

[10.] Moroz, M., &Hindle, J. (2012). The Importance of Technical Skills for Project Managers in the Software Industry. *International Journal of Project Management, 30*(5), 525-536.

[11.] Orodho, A. J. (2005). Elements of Education and Social Science Research Methods. Kanezja Publishers.

[12.] Oso, W. Y., &Onen, D. (2009). Research Methods: Concepts, Principles and Practices. Nairobi: Kijabe Street Publishers.

[13.] Schmalleger, F., &Smykla, J. O. (2018). Corrections in the 21st Century. McGraw-Hill Education.

[14.] Smith, C. V. (2019). Correctional Facility Maintenance: A Comprehensive Overview. *International Journal of Facility Management, 10*(4), 97-108.

[15.] Smith, D. A., & Davis, G. A. (2018). The Effectiveness of Prison Design and Management: Assessing the Impact of Penal Environments on Reoffending. *The British Journal of Criminology, 58*(2), 477-496.

[16.] Ugbah, J., & Smothers, R. (2017). Risk Analysis in Project Management: Identifying and Assessing Factors Affecting Project Success. *International Journal of Project Management, 35*(6), 1037-1050.

[17.] Volery, T., & Siemens, J. (2012). Customer Satisfaction in Construction Projects: Assessing the Quality and Products Generated. *Journal of Construction Engineering and Management, 138*(8), 954-961.