



The Influence of Private Security Companies' Infrastructure on the Provision of Services for the NGOs in Juba city, South Sudan

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ABSTRACT

The protection of the public and their property is a significant global concern. Security issues are an inherent aspect of human habitation, and the safety of individuals and their belongings has consistently been of paramount importance across cultures, regardless of their level of development. This holds true whether the culture in question is relatively simple or complex. In South Sudan, numerous private security firms are operating; however, attacks and looting of NGO facilities in Juba City have continued unabated. The rationale of this research is to assess the factors that disrupt the performance of private security companies in providing security services to NGOs in Juba City. The objective of the study was to establish the influence of private security firms' infrastructure on their performance concerning NGOs. The research was supported through the two theories namely resources-based theory and expectancy theory. The target population was 500 employees and sample size included 222 respondents, and the study employed a descriptive research design. The research was guided using interviews and questionnaires for data collection or gathering. Respondents were selected using systematic random sampling and simple random sampling techniques. Data analysis was conducted using SPSS version 23 statistical software, with results presented in tabular form for clarity. The findings from this study aim to inform NGOs decision-making in implementing security measures that mitigate risks while protecting operations within limited resources. It also seeks to foster cooperation and improve security arrangements among humanitarian sectors. Ultimately, the findings will guide policy development and establish guidelines to enhance effectiveness and accountability in conflict zones. The study concluded that there is a significant relationship between private security infrastructures and the provision of security services within Juba City. This is evidenced by small p-values, less than 0.05, indicating statistical significance. The study recommends that private security companies in Juba prioritize investment in advanced security infrastructure—such as CCTV cameras, mobile patrol vehicles, security dogs, and forensic systems—to enhance the security of NGO offices and facilities. Additionally, involving staff in decision-making processes and providing leadership and management training is essential to ensure operational integrity and reliability.

Key Words: Factors Influencing, Performance, Private Security Companies, Providing Security Services, NGOs

1. INTRODUCTION

The protection of the public and their property is a global concern, driven by the universal need for safety and security (Jorge and Jean, 2016). Historically, safeguarding individuals and their belongings has always been central to societal development. Security concerns have been instrumental in shaping social structures, from simple tribal societies to complex urban environments. These concerns remain a constant across different cultures and societies throughout history.

Fischer (2012) emphasize the significant role of private security companies (PSCs) within the U.S. and internationally. These companies tackle various societal issues, extending beyond traditional security roles. Among the most pressing concerns addressed by private security are violence prevention, fear reduction, and victim protection—factors critical to personal well-being, economic stability, and social progress.

According to Abrahamsen and Williams (2011), a widespread misconception persists that public security and crime prevention fall solely on government bodies and law enforcement agencies. However, the United Nations Crime Prevention Guidelines stress the importance of recognizing and integrating various stakeholders in the security sector. Security is a collective effort involving individuals, governments, Non-Governmental Organizations, civil society, and the private sector. The private sector, particularly PSCs, plays a crucial role in enhancing community safety and

combating crime, not as a supplement but as a vital part of the security landscape. Effective collaboration between the public and private sectors is essential to prevent crime and apprehend offenders.

The private security industry (PSI) has expanded significantly, partially due to increased violence and insufficient public security resources. This growth highlights the need for a more inclusive approach that integrates private security with public initiatives to ensure a safer society. Spearin (2014) explores the proliferation of private security firms in China, which now surpass the number of police officers. These firms provide a wide range of services, from law and order maintenance to safeguarding commercial establishments and transporting high-risk items. These companies often fill gaps in the public law enforcement system, and their increasing authority within legal frameworks raises important questions about the governance of security.

In Africa, the Private Security Institutions has grown significantly, especially in South Africa. The expansion began in the late 1970s and 1980s when the South African police shifted focus away from political authority, leading to the growth of private security companies (Abel, 2021). According to Abel (2021), inefficiencies within the South African Police Service (SAPS), including understaffing, low wages, and increased legal challenges, led many individuals and businesses to rely on private security firms. These firms now play an essential role in compensating for perceived shortcomings in public law enforcement.

In other emerging countries, private security companies have become more prevalent. For example, Tanzania experienced a proliferation of PSCs after transitioning from the restrictive Ujamaa policy to a more market-oriented approach in the early 2000s (Mnyawami, 2022). By 2011, there were over 495 registered PSCs in Tanzania, employing around 1.7 million workers, compared to only 29,918 police officers (Chakupewa & Japhace 2022), and the increasing reliance on private security is similarly observed in Kenya, where high-profile terrorist attacks in the late 1990s and early 2000s exposed weaknesses in the existing public security framework. This led to a demand for private security services, attracting international clients.

According to Global Humanitarian Assistance (2015), in South Sudan, the emergence of PSCs was a response to rising insecurity following periods of unrest. Although private security companies have become increasingly necessary, concerns have been raised about their practices. Allegations of illegal activities and underpayment of employees working in high-risk environments have surfaced. According to the Ministry of Justice, Juba City currently has 26 licensed private security companies. However, despite the significant presence of these firms, incidents of robbery, car hijacking, and organized theft have increased, highlighting potential shortcomings in the private security sector.

The reliance on PSCs in South Sudan is further complicated by the rising number of attacks on NGOs, businesses, and individuals (Keku, 2013). Despite the widespread presence of private security, NGOs in Juba City continue to face security deficiencies. Efforts to improve safety have not resulted in the expected outcomes, raising concerns about the ability of PSCs to meet the security needs of these organizations. Moreover, while the demand for private security services has increased, there is a lack of research on the effectiveness of PSCs in protecting NGOs in Juba City. This gap highlights the need for further investigation into the performance-related challenges faced by PSCs in South Sudan, with the goal of improving security services and enhancing stability in the region.

This research aims to fill that gap by examining the challenges faced by PSCs in South Sudan and their ability to meet the security needs of NGOs. By addressing these challenges, the study hopes to provide insights that can improve the provision of security services and contribute to the long-term stability of the region.

1.1 Statement of the Problem

A thorough examination of existing literature underscores the critical significance of security for individuals across the globe, highlighting a pervasive and ongoing struggle with inadequate safety measures. This ongoing concern transcends geographical boundaries, affecting populations in various contexts. Numerous studies (Jorge and Jean, 2016, Fischer, 2012, Abrahamsen and Williams, 2011, Spearin, 2014, Abel, 2021, Abel, 2021, Mnyawami, 2022), both at the global scale and within localized frameworks, have illuminated the substantial role that private security companies (PSCs) fulfill in safeguarding individuals and properties. These entities have become increasingly integral in maintaining safety, especially for Non-governmental organizations (NGOs) operating in regions plagued by conflict and instability.

Specifically, in Juba city, South Sudan, private security companies are tasked with the crucial responsibility of protecting NGOs personnel and their assets amid a challenging environment characterized by violence and uncertainty. Despite their essential contributions, these companies face a multitude of persistent obstacles that impede their operational effectiveness. Factors such as insufficient resources, lack of training, and inadequate regulatory frameworks significantly challenge the capacity of PSCs to ensure the safety of those they are tasked with protecting. The performance of these security providers is directly correlated with the well-being of NGOs staff and the continuity of humanitarian operations, making their performance a vital focal point.



Each of these challenges will require an analysis of the various elements that influence or hinder the operational performances of private security companies in Juba. Their identification will point out not only the existing deficiencies but also highlight a way forward for developing specific strategies aimed at their improvement. The study aspires to deliver an in-depth analysis of the factors that influence the performance of PSCs in Juba, thus contributing to a more secure operational environment for NGOs

1.2 Research Objective

- i. To determine the demographic factors of employees of private security Companies for the provision of services for the NGOs in Juba city
- ii. To examine the influence of private security companies' infrastructure on the provision of services for the NGOs in Juba city

1.3 Research questions

- i. What are the demographic factors of employees of private security Companies for the provision of services for the NGOs in Juba city?
- ii. How does the infrastructure of private security companies influence the provision of services to the NGOs operating in Juba city?

II. LITERATURE REVIEW

2.1 Theoretical Review

The research is based on the resource-based theory and the Expectancy theory. Both theories suggest that the use of equipment and improvement of skills by security firms is crucial in enabling them to execute security operations for NGOs in Juba city more efficiently (Dempsey, 2003).

2.1.1 Resources Based Theory

In order to enhance the achievement of competitive advantage, Resource-Based Theory (RBT) advocates for crucial resources and their significant and dynamic combination. Human Capital, an intangible asset, is one such resource (Barney, 2001). RBT helps organizations in affirming that the significant personnel and resources they nurture at work are essential components of organizational success (Armstrong & Taylor, 2023).

Ahmed et al (2016) suggest that a robust and consistent workplace culture supports creativity and nurtures staff development. To ensure private security corporations and NGOs achieve their objectives, the availability of resources is crucial for efficient execution. Penrose (2009) introduced the first resource-based theory (RBT) that included a model for successful resource management, diversification planning, and production prospects. The theory of a company as a network of interconnected resources that is focused on achieving its objectives and behaviors was first introduced in Penrose's book (Penrose, 2009). In the 1980s, RBT was established, with the corporate growth hypothesis as its founder. As a result, throughout the 1990s, Jay Barney's work played a significant role in the development of RBT, which ultimately became the main framework for strategic performance and forecasting. RBT aims to create unique company resources that can offer long-term viability advantages. It presents a set of guidelines for determining and anticipating the nature of organizational performance and competitive advantage (Barney, 1991).

As per Resource-Based Theory, a business is more likely to achieve long-term success when it possesses valuable, rare, distinctive, and non-substitute resources. These strategic resources can establish the groundwork for developing organizational skills that result in superior performance over time. Proficiency is necessary to merge, administer, and exploit resources to benefit clients and gain an advantage over rivals.

2.1.2 Expectancy Theory

Victor Vroom developed the Expectancy Theory in 1964, stating that clearly defined performance goals, sufficient resources, support, and substantial rewards are essential for improving employee motivation and attaining high performance within the organization. Communicating employees' roles guarantees that everyone is aligned and comprehends their duties. According to Expectancy Theory (Rehman, et al. 2019), individuals are motivated to perform when they believe their additional effort will be acknowledged and rewarded. Thus, it is essential to remunerate staff for their extra exertions.

In conclusion, the expectancy theory and the resource-based theory offer valuable insights into the factors that affect the performance of independent security companies that provide security services to non-governmental organizations in Juba City, South Sudan. Expectancy Theory assists in understanding individual motivation, incentives, training, and goal alignment, while Resource-Based Theory prioritizes strategic resource allocation,



investment in human capital, organizational flexibility, and access to critical resources. By synergizing these theories, PSCs can develop effective strategies to enhance their performance and effectively safeguard NGOs and their operations in this challenging environment. Expectancy Theory emphasizes the importance of motivation and belief in achieving desired outcomes, while Resource-Based Theory highlights the significance of resource allocation and adaptability in achieving superior performance. Following these theories enables Private Security Companies (PSCs) to make informed decisions and better meet the security requirements of Non-governmental organizations (NGOs) in this intricate and constantly evolving environment.

2.2 Empirical Review

2.2.1 To Determine the Demographic Factors of Employees of Private Security Companies for the Provision of Services for the NGOs in Juba City

Employee performance is known to be significantly impacted by demographic factors. George (2010) asserts that demographic factors, which include details like color, ethnicity, and family size, are personal traits.

According to Adio (2010), demographic features are individual data on things like gender, age, sex, income, education, marital status, occupation, religion, birth and death rates, average family size, and average age at marriage. For instance, given their age, one should be eager and vivacious from the start of their career. Up until a certain age, when their energy levels decline and performance slows, their performance is expected to improve as they mature within the company; this is why a retirement age must be established (Adio, 2010).

As Fletchl (2010) notes, demographic traits have an impact on whether or not workers will be dedicated to their jobs. He notes that the degree to which enterprises address the demands associated with their demographic characteristics has a significant impact on how well employees perform, how long they are willing to serve, and how well they act in the best interests of the company's goals. He does not, however, highlight how the same can be implemented.

2.2.2 To Examine the Influence of Private Security Companies' Infrastructure on the Provision of Services for the NGOs in Juba City

Golwal and Kalbande (2013) conducted an assessment of security protocols aimed at reducing vandalism in Engineering College Libraries within the United States. Their research highlighted that the utilization of biometric identification systems and CCTV proves to be the most efficacious security measures influencing operational effectiveness within security firms. Technology encompasses an array of tools, methods, and innovations, ranging from weapon detection and biometric tracking devices to alarm systems, all harnessed through technical expertise. This technological integration ensures vigilant monitoring and detection of criminal activities within a complex environment, thus fortifying security infrastructure and impacting the performance of Private Security Firms (PSFs). Therefore, it is imperative to establish robust security infrastructures to safeguard NGOs premises, property, and personnel.

Investing in technology, as posited by Akers (2008), enables firms to streamline their operations. Modern technology empowers workers to uphold security quality. Moore's law underscores the rapid evolution of technological capabilities in the security domain over the past decades, a response to the escalating crime records, ensuring heightened performance of security personnel. The utilization of internet-connected networks for triangulating information before dissemination to relevant stakeholders has streamlined the tasks of security personnel. This transformation has fundamentally reshaped the performance landscape of PSFs in the realm of guarding and protective services.

According to Kagame and Ndahiriwe (2021), the realm of information technology facilitates a multitude of surveillance tasks. Additionally, it can enhance and extend established security measures such as closed-circuit television (CCTV) systems, leveraging facial recognition technology for crowd identification and monitoring undesirable behavior. The efficacy of these strategies is further augmented when integrated with other approaches like Internet of Things (IoT) device monitoring. Lee and Kusumah (2020) on the influence of supervision on employee performance with work motivation as an intervening variable indicating that good security infrastructures promotes provision of security among private security companies. However, Jaba (2012) study on the private Security Industry in Tanzania: Challenges, Issues and Regulation contradicts this argument by stating that, having infrastructure is not the ultimate measure for a security company to achieve and enhance providing of security services as this depends on other factors including having competent human resource which is highly motivated in terms of remuneration and working environment.

Akoch (2021) study on the effectiveness of private security companies in the provision of security to commercial enterprises in Juba city, South Sudan. The findings indicate that NGOs that decide to engage private security firms can improve outcomes by anticipating specific factors. Furthermore, the use of technology by private

security firms is highlighted. However, the endeavors of NGOs to improve their security protocols have not significantly affected their reliance on private security services. The investigation demonstrates that successful cooperation between private security firms and other security actors can improve the effectiveness of outsourced private security services for NGOs. However, the efficacy of private security services offered by NGOs has scarcely been influenced by the augmented security measures adopted by NGOs. However, the efficacy of private security services offered by commercial banks has scarcely been influenced by the augmented security measures adopted by NGOs. Similarly, the effectiveness of security services rendered by NGOs has not been notably impacted. The study advocates that private security companies can enhance their efficiency by collaborating with other security entities and subcontracting security duties to NGOs. Furthermore, the study highlights the adverse effects of depending on private security services for the security of NGOs.

III METHODOLOGY

This chapter outlines the methodology used in the study, detailing the research design, sampling methods, sample size, research instruments, reliability and validity testing, data collection processes, and data analysis.

3.1 Research Design

The study employs a descriptive survey design to investigate factors influencing the performance of private security companies (PSCs) in providing services to non-governmental organizations (NGOs) in Juba City. This design allows for the collection of data from a wide range of respondents, supporting the evaluation of multiple scenarios. According to Cresswell, (2017) incorporating both qualitative and quantitative data via questionnaires, it enables the computation of correlations between variables, as recommended.

3.4 Sampling Procedures and Techniques

The study focuses on 26 private security companies operating in Juba City, all of which provide security services to NGOs. A systematic random sampling method was applied to select eight of these firms, with the selection based on their existing records. These eight firms collectively employ around 4,000 personnel, averaging 500 employees per company. The systematic random sampling technique ensures that the sample accurately represents the broader population while considering the interests of specific subgroups.

3.5 Sample Size

To determine the sample size, the study applies Yamane's (1967) formula, which accounts for a 5% margin of error. The total workforce of the eight selected PSCs is 500 employees per firm, resulting in a sample size of 222 respondents after calculation. The sample is distributed as follows:

Operations Managers: 8 (4%)

Guard Force: 160 (72%)

Field Supervisors: 54 (24%)

This distribution ensures that each subgroup is represented proportionally in the study.

3.6 Construction of Research Instruments

Data collection involved the use of questionnaires for security personnel and field supervisors, while interview guides were used for operations managers. Additionally, secondary data were obtained from academic journals, textbooks, and reports to provide background information.

3.6.1 Questionnaires

The questionnaire, distributed to the guard force and field supervisors, was structured to gather both qualitative and quantitative data. Coded and processed using SPSS version 2024, the questionnaire included open-ended and closed-ended questions. Closed-ended questions were based on a 5-point Likert scale, which helped minimize bias and allowed for the efficient collection of data from a large number of respondents. Mugenda and Mugenda (2008) advocate this approach to ensure comprehensive data collection.

3.6.2 Interview Guides

An interview guide was used to collect qualitative data from operations managers. The questions, designed in collaboration with the selected Security organizations, focused on gathering detailed information on the management's perspective. The interviews were recorded, transcribed, and analyzed to supplement the quantitative data gathered from the questionnaires.



3.7 Reliability and Validity of Research Instruments

Two weeks before the main research study, a pilot study was conducted at a private security firm in Juba City. This pre-test evaluated the reliability, validity, and practicality of the research instruments. The pilot study helped refine the structure of the questionnaire, clarify the questions, and improve the overall survey process. Although the findings from the pilot study were not included in the final research results, it played a crucial role in enhancing the effectiveness of the data collection process (Alvi, M., 2020).

3.8 Reliability of Research Instruments

According to Amin (2015), reliability, which refers to the consistency of a measurement tool, was assessed using the test-retest method. Twenty staff members from the Private Security Companies (PSCs) in Juba City completed 26 questionnaires across multiple testing sessions, ensuring consistent results. This approach confirmed the reliability of the research instruments, allowing for similar conclusions to be drawn in different instances.

In conclusion, the study employs a robust methodology that includes systematic sampling and the use of reliable and valid research instruments. It incorporates both qualitative and quantitative data collection methods to examine the factors influencing the performance of PSCs serving NGOs in Juba City.

IV. FINDINGS & DISCUSSION

4.1 Demographic Factors of Employees of Private Security Companies for the Provision of Services for the NGOs in Juba City

Table 1

Demographic Information of Respondents

Character	Response	Frequency	Percent
Gender	Male	152	70.4
	Female	64	29.6
Age	Below 25 years	46	21.3
	26-35 years	119	55.1
	36-45 years	31	14.4
	46-55 years	19	8.8
	Above 55 years	1	.5
Education level	Primary	5	2.3
	Secondary	63	29.2
	College	21	9.7
	University	93	43.1
	Postgraduate	34	15.7

N=216,

Table 4. above presents descriptive information in terms of frequencies/percentages regarding respondents' demographic information in terms of gender, age, and education level.

4.1.1 Gender of the Respondents:

The findings presented in Table 4 reveal that a significant majority of respondents, 70.4%, were male, while 29.6% were female. This denounced male predominance may be linked to the challenging working conditions in the study area, which has been affected by conflict, leading many women to be reluctant to work in such an environment. Nevertheless, the perspectives of both men and women were incorporated into this study, effectively addressing the issue of gender representation in research and data collection.

4.1.2 The age of the respondents:

As shown in Table 4, the findings reveal that most respondents (119, 55.1%) were aged between 26 and 35 years, while only a small fraction (1, 0.5%) were over 55 years old. This suggests that the majority of study participants are relatively young. This trend may be attributed to the nature of the work performed by most firms, which requires individuals with higher energy levels to effectively serve the affected populations in and around the capital city of Juba.



4.1.3 The Participants' Educational Backgrounds

The findings, as shown in Table 4, indicate that all study participants were literate, meaning they could read and write. This literacy facilitated their understanding of the study content and allowed them to provide relevant data. Regarding their education levels, nearly half of the participants (93, or 43.1%) had completed a university education, while a smaller proportion (5, or 2.3%) had only attained a primary education. This illustrates that the study included participants with a range of educational backgrounds, highlighting the diversity of education levels among employees in the private security companies in Juba City. According to key insiders or informants, installing CCTV cameras, tracking devices, alarms, and X-ray equipment considerably enhances the security services given to non-governmental organizations (NGOs) in Juba city. These technologies discourage crime, allow for faster reactions, improve investigations, and make the world a better place. They also give crucial evidence for law enforcement and allow non-governmental organizations (NGOs) to focus on humanitarian operations. While these technologies are critical, other aspects such as human resources and leadership are also essential for providing successful security services. These findings are consistent with prior study by Golwal and Kalbande (2013), Te et al. (2016), and Motlagh et al. (2017).

4.2 Quantitative Results on the Influence of private security companies' infrastructure on the provision of services for the NGOs in Juba city

Table 2: Quantitative Results on the Influence of private security companies' infrastructure on the provision of services for the NGOs in Juba city

Companies' Infrastructure on Provision of Services	Mean	Std. D	Interpretation
Use of biometric identification enhances the services offered to NGOS	4.84	.365	High
Installation of CCTV cameras in the PSFs enhances the services.	4.13	.895	High
PSC use of tracking device and alarms enhances the security offered to NGOs.	3.62	.947	High
PSC use of X-rays enhances the security services offered to NGOs.	4.63	.779	High
Grand Mean and Std. D	4.03	0.748	High

N=216,

The study findings will focus on the one objective as described below.

4.2.1 The Biometric Identification

The study indicates that biometric identification significantly enhances security services for NGOs in Juba City, achieving a mean rating of 4.84 with a standard deviation of 0.365. Key informants noted that this technology improves both access control and response times. One informant highlighted how biometric systems streamline the screening and verification of personnel, allowing for the early detection of security threats and facilitating quick interventions. This finding is consistent with research by Golwal and Kalbande (2013), which concluded that biometric identification systems are among the most effective security measures for enhancing operational effectiveness in security firms.

4.2.2 The CCTV Cameras

The study reveals that installing CCTV cameras significantly enhances security services, achieving a mean rating of 4.13 and a standard deviation of 0.895. Key informants confirmed that CCTV effectively improves the capacity of private security companies (PSCs) to protect NGOs by deterring criminal activity, facilitating rapid responses, and enhancing the quality of investigations. One interviewee mentioned that CCTV footage is invaluable for law enforcement in identifying suspects and reconstructing incidents. These findings align with Golwal and Kalbande's (2013) research, which identified CCTV as one of the most effective measures for improving security operations in organizations.

4.2.3 The Tracking Devices and Alarms

The study indicates that tracking devices and alarms significantly enhance service delivery to NGOs, with a mean score of 3.62 and a standard deviation of 0.947. Key informants supported this finding, explaining that these technologies deter criminal activity, facilitate quick responses, and reduce risks for NGO personnel. One respondent emphasized that real-time location monitoring, combined with intrusion detection, provides comprehensive security solutions, allowing NGOs to focus on their missions with increased confidence. These findings align with the work of Abbas et al. (2017), which highlights the importance of investing in technology to improve security operations.



4.2.4 The X-Rays

The study found that X-rays significantly enhance security services for NGOs, achieving an average rating of 4.63 with a standard deviation of 0.779. Key informants indicated that X-rays are effective in detecting concealed threats, such as weapons and explosives, thereby ensuring the safety of NGO personnel and assets. The use of X-ray scanners allows for non-intrusive and efficient inspections, which minimizes disruption to NGO operations. This enables private security companies (PSCs) to offer improved security while fostering a welcoming environment.

These findings align with the results of Te et al. (2016), who emphasized the importance of effective security infrastructure in enhancing service delivery. However, Motlagh et al. (2017) argued that infrastructure alone is not sufficient for improved service provision; having skilled and motivated human resources is also essential. In conclusion, key technologies such as biometric identification, CCTV, tracking devices, alarms, and X-rays play a vital role in enhancing security services for NGOs in Juba City. Nonetheless, as Motlagh et al. (2017) suggest, the effectiveness of these technologies largely depends on the presence of competent and motivated personnel. Key informants emphasized the need of various security technologies in improving the protection of NGOs in Juba city. CCTV cameras increase access control, reaction speed, and investigative skills, resulting in a safer environment. Biometric systems improve screening and verification procedures, allowing for early danger detection. Alarms and tracking devices curb crime, enable quick responses, and reduce threats to NGO staff. X-ray machines improve security by identifying hidden dangers, therefore protecting workers, assets, and operations. Overall, these technologies contribute to a more secure environment, allowing NGOs to function successfully and provide critical services.

4.3 Qualitative Results

4.3.1 The Biometric Identification

The first key informant indicated that biometric identification strengthens security measures for NGOs in Juba City, improving response times and access control and the second key interviewee lamented that in Juba City, implementing biometric identification systems for NGOs enhance security by streamlining personnel screening and verification processes which make easy detect any security threat at the early stage for quick intervention by the officer in charge.

4.3.2 The CCTV Cameras

The first key informant indicated that CCTV cameras enhance the security services of private security companies (PSCs) in Juba city and significantly enhances their ability to protect NGOs. This technology can deter crime, facilitate swift response, enhance investigations, and optimize operations, ultimately creating a safer environment for NGOs and their personnel. Therefore, PSCs employ this technology to ensure better security services for their clients and the second interviewee heightened that in the event of a security incident, CCTV footage provides valuable evidence for law enforcement investigations. Recordings can help identify perpetrators, reconstruct events and support investigations

4.3.3 The Tracking Devices and Alarms

The initial key informant asserted that collaborative efforts involving alarms and tracking devices serve to deter criminal activity, facilitate prompt responses, and minimize the risk to NGO personnel, thereby enabling them to pursue their humanitarian missions with greater confidence. The second interviewee indicated that the utilization of tracking devices and alarms represents a robust security solution for NGOs. By integrating real-time location monitoring with intrusion detection, PSC can implement a comprehensive security framework that significantly reduces risk. This allows NGO personnel to focus on their core humanitarian work with greater confidence.

4.2.4 The X-Rays

The first key informant stated that X-rays help to detect hidden threats such as weapons, explosives or contraband that could be smuggled into NGO premises or deliveries. This strengthens overall security and protects everyone involved, including NGO staff, beneficiaries and valuable assets while the second key informant reaffirmed that the use of x-ray scanners allow for quick and non-intrusive inspections, minimizing disruption to NGO operations and beneficiaries. This is particularly important in situations where maintaining a welcoming environment is crucial, so by incorporating X-ray technology into their security protocols, PSCs can significantly enhance the services they provide to NGOs.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

Basing on the study objective, it was concluded that the use biometric identification machines, CCTV cameras, tracking devices, alarms and x-rays by private security companies significantly enhances NGO service delivery in Juba City. These security infrastructures not only promote security and reduce theft, but also contribute to a safer and more conducive working environment for NGOs, thereby improving their operational efficiency in delivering humanitarian services to the community

5.2 Recommendations

Based on the study results, the study recommends that; Private security companies in Juba city should prioritize investment in advanced security infrastructure such as CCTV cameras, mobile vehicles, security dogs and forensic systems to enhance the security of NGO offices and facilities. It's crucial that these companies meet the infrastructure requirements to obtain government licenses.

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