**AN EVALUATION OF THE EFFECTIVENESS OF A WEAPON TRACKING MANAGEMENT SYSTEM IN ENHANCING FIREARM ACCOUNTABILITY AND REDUCING ILLEGAL GUN ACTIVITY: CASE OF TPK SECURITY COMPANY LTD**

**CHAPTER ONE**

**1.0 Introduction**

A Weapon Management and Tracking System (WMTS) is a comprehensive technology solution designed to efficiently manage, monitor, and track weapons in various settings, including military, law enforcement, security agencies, and other organizations that handle firearms and related equipment. The primary goal of a WMTS is to enhance weapon safety, security, accountability, and operational efficiency

* 1. **Background of study**

The importance of a Weapon Tracking Management System (WTMS) in guaranteeing the accountability, security, and control of weapons in various military and law enforcement agencies across the world cannot be stressed. Recent research from academics throughout the world has demonstrated the important role that WTMS plays in lowering weapon theft, increasing operational effectiveness, and boosting overall security. The deployment of a thorough WTMS resulted in a 30% decrease in the instances of stolen weapons, according to 2022 research by Smith et al. that examined data from several military sites located in various nations. This cutback not only prevented these weapons from ending up in the wrong hands, which would have cost millions in possible replacement expenses, but it also improved military and civilian safety.

Research by Brown and Garcia also looked at how WTMS affected the effectiveness of law enforcement agencies' operations. Because they could keep track of maintenance plans and make sure repairs were made on time, the study revealed that agencies who implemented WTMS reported a 25% boost in weapon readiness. The areas these agencies serve saw a 15% drop-in crime rates as a result of the greater preparedness, which also reduced response times. These figures highlight how important WTMS is to upholding security, cutting operating expenses, and enhancing overall company effectiveness. The overall conclusions from these investigations demonstrate the widespread agreement about the efficiency of WTMS in protecting personnel, weapons, and the public. These figures highlight how important WTMS is to upholding security, cutting operating expenses, and enhancing overall company effectiveness (Brown and Garcia, 2023). Conclusions from these investigations demonstrate the widespread agreement about the efficiency of WTMS in protecting personnel, weapons, and the public.

Due to the specific security issues facing the continent, experts and politicians have been more interested in the effectiveness of a Weapon Tracking Management System (WTMS) in the African setting. African scholars have recently done studies that have illuminated the beneficial effects of WTMS in resolving concerns associated with weapons. According to research by Oluwaseun et al. done in Nigeria, the deployment of a WTMS resulted in a 40% decrease in crimes using firearms over the course of two years (Oluwaseun et al. 2023). This large drop enhanced public safety while also creating a more stable climate for economic growth.

In a similar vein, research conducted in Kenya by Kamau and Mwangi in 2022 found that the deployment of WTMS in the Kenyan military led to a 25% decrease in weapon losses, which had previously presented a serious danger to national security. The study also showed that the WTMS simplified weapon maintenance, resulting in a 15% improvement in weapon readiness and faster reaction times in security situations. These data show how WTMS significantly improves security and stability in African countries, making it a vital tool in solving the many security issues the region faces.

In regard to maintaining security and accountability, private security organizations in Uganda frequently use age-old techniques to track the firearms used by their employees. The licensing and registration of firearms is one typical procedure. Private security firms, like people, are obliged to register their guns with the appropriate authorities, and their employees must go through background checks and satisfy certain requirements for firearm ownership. The Uganda Firearms Act of 1970 specifies the prerequisites for licenses and firearm possession, and it regulates the registration and usage of firearms by private security firms (Uganda Ministry of Internal Affairs, 2023). This procedure enables law enforcement to keep track of the weapons possessed by private security firms and to carry out routine audits to confirm their stockpiles.

In addition, physical markers and logs are an additional conventional technique. During production, private security businesses' firearms are often tagged with distinctive serial numbers and other identifying information. These marks allow for the tracking of the weapons and the assurance that only authorized persons are using them (Okello, Samuel, 2019). Businesses keep meticulous logs and records of the distribution and use of firearms, detailing the dates and parties involved in the distribution, the return of the firearm, and any maintenance or repairs carried out. These logs assist businesses and regulatory organizations in tracking the use and transportation of weapons and holding people responsible for their appropriate use (Small Arms Survey, 2016).

**1.2 Problem Statement**

Due to lack of modernized way of monitoring and tracking of weapons, arms robbery, improper use of weapons and lack of proper accountability of firearms continues growing rampant especially in the local private security companies in Uganda. Apparently in TPK Security Company, the situation at the company is increasing every now and then since they still hold on to the traditional ways of accounting for their weapons and knowing a person who used any number of the gun is traced manually since the company does not have any modern system that can do it automatically. In addition, Paper-based recordkeeping and manual inventory management are the cores of traditional techniques that are ineffective, prone to mistakes, and unable to track activities in real-time of which TPK Security Company limited remains also a victim in this.

The security of firearms, accountability, and regulatory compliance remains a difficulty as a result of this issue. For instance, due to lack of proper weapon management and monitoring system a couple of people in Uganda have fallen victims of mishandling of guns like on Friday, March 16, 2018, former Assistant Inspector General of Police Andrew Felix Kaweesi was killed by unknown weapon handlers and the culprits could not easily be gotten (Monitor, 2018). After these recurring incidences, the government decided to install CCTV cameras along the roads of the Kampala in order to curb these challenges of mishandling of arms but Regardless of these efforts being put together by TPK security company LTD, the problems of un necessary shootings and misplacement of guns by their security guards remain unaddressed and hence the researcher seeks to address how effective Weapon Management and Tracking System (WMTS) can be helpful in as far as curbing of the addressed problem is concerned if implemented and made use of it by TPK security company LTD.

* 1. **Purpose of the Study**

The intention of this study is to design a Weapon Management and Tracking System (WMTS) in order to be able to reduce the number of mishandling of guns, and unnecessary shootings.

## 1.2.1 The specific objectives

The study will be guided by the following objectives;

1. To examine the current Management and Monitoring practices of weapons by TPK Security Company.
2. To identify and recommend best Management and Monitoring practices of guns to achieve an efficient and effective way of stopping unnecessary shooting.
3. To design, develop and validate Weapon Management and Tracking System (WMTS) to reduce unnecessary shootings and mishandling of guns.

**1.3 Research questions**

1. What are the current Management and Monitoring practices of weapons TPK Security Company LTD?
2. What are the best Management and Monitoring practices of weapons to achieve an efficient and effective way of stopping unnecessary shooting?
3. How helpful will designing, developing and validating Weapon Management and Tracking System (WMTS) reduce on unnecessary shootings and mishandling of guns?

**1.4 Significance of the study**

**Public Safety**: The general public is a primary beneficiary of effective weapon management and monitoring systems. Such systems reduce the risk of unauthorized access to firearms, helping to prevent accidents, suicides, and homicides. Improved public safety contributes to the overall well-being of communities by reducing fear and promoting a sense of security.

**Law Enforcement Agencies**: Police departments and law enforcement agencies benefit from robust weapon management and monitoring systems as they assist in solving crimes, tracking illegal firearms, and ensuring that individuals comply with firearm regulations. This enhances law enforcement's ability to maintain public order and protect communities.

**Victims of Weapon Violence**: Individuals who have been directly affected by weapon violence, such as victims and their families, stand to gain from effective weapon management and monitoring systems. These systems can help bring perpetrators to justice and may serve as a deterrent to potential offenders, reducing the occurrence of gun-related violence.

**Government and Policymakers**: Government authorities and policymakers benefit from research and data generated by studies in this field. It provides them with evidence-based insights to formulate and amend firearm laws and regulations, contributing to improved public safety and the responsible use of firearms.

**Private Security Industry**: The private security sector benefits from effective weapon management and monitoring systems by enhancing professionalism, credibility, and accountability. This, in turn, can attract clients and improve the reputation of private security companies.

**Firearm Owners and Enthusiasts**: Responsible firearm owners and enthusiasts can benefit from improved firearm management systems, as they provide assurance that others are also following safety protocols and regulations. This helps protect the rights and interests of law-abiding weapon owners.

**Healthcare and Emergency Services**: Healthcare providers and emergency services benefit from reduced gun-related injuries and fatalities resulting from improved weapon management and monitoring. This lessens the burden on healthcare systems and allows resources to be directed toward other pressing healthcare needs.

**Academic and Research Communities**: Researchers and academics studying weapon management and monitoring systems contribute to the body of knowledge in this field, which informs policy development and best practices. Their work enhances the understanding of the complex dynamics surrounding firearms.

**1.5 Justification of the study**

The study on "The Effectiveness of a Weapon Tracking Management System in Enhancing Firearm Accountability and Reducing Illegal Gun Activity: Case of TPK Security Company Ltd" is supported by its crucial importance in solving urgent issues linked to public safety and security. The harm posed by illegal weapon use to society is significant, and private security firms like TPK Security Company Ltd. are essential in reducing it. It is crucial to evaluate how a Weapon Tracking Management System (WTMS) affects the operation of such a company since it may reveal if such systems are effective at promoting firearm accountability and lowering the incidence of unauthorized gun use. Moreover, this research has practical implications, as it can provide TPK Security Company Ltd with data-driven insights to optimize their firearm management practices, reduce potential risks, and enhance their overall operational efficiency. Ultimately, the study may also contribute to the broader discourse on improving firearm management within the private security sector, potentially leading to policy enhancements and regulations aimed at creating a safer environment for the general public.

**1.6 Conceptual framework**

The focus of this study is to evaluate the Effectiveness of a Weapon Tracking Management System in Enhancing Firearm Accountability and Reducing Illegal Gun Activity: Case of TPK Security Company Ltd. The independent variables of this study are Implementation of Weapon Tracking Management System and its indicators are Accuracy, Integration, Timelines, Access control, Audit trail, Reporting and Notification and Scalability. In addition, Dependent variables in this study are firearm accountability and illegal gun activity.

**Independent variables Dependent variable**





**1.7 Scope of the Study**

### **1.7.1 Content scope**

The study will focus on development of Weapon Management and Tracking System (WMTS). The study will focus on developing a system that will reduce the time, personnel and cost for carrying out management and monitoring tasks.

### **1.7.2 Geographical scope**

The study will be carried out at TPK Security Company LTD which is located in Naguru Estates that started in 2019

### **1.7.3 Time scope**

Developing of this management and Monitoring system, intends to take a period of 4 months and that is to say from August, 2023 to December, 2023