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Exploring the use of Information System Management in Ugandan Prisons

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ABSTRACT

The article explores the prison management information system in Uganda prisons. The article revealed that the management of prisons in Uganda is still poor due to the manual structure of the processes. However,the system has the scope to be developed as a distributed application where each implementation of PMS in different prisons can be connected and communicate with each other worldwide. In such a scenario a person sitting in Uganda can access the data of different prisons in and outside Uganda. This will make the whole system highly centralized as well as well connected. Most importantly, it will provide the end user who has the necessary security clearance a single portal where he/she can access prison records from all major prisons in Uganda where the PMS would be deployed thus making it a truly practical deployable application that can be used in prisons all over Uganda and other countries.
Keywords: Automation, Database, ICT, Prison information management, Prison system

INTRODUCTION

The Uganda Prison Service was founded in 1896, as a branch of the Kings African Rifle (KAR) and established in 1903 as an independent department. The department was run by the Uganda Police Force (UPF) and the training was done by soldiers of KAR[1]. In 1907, the DEPOT Prison Training School was established at Luzira and run by the soldiers of the KAR as instructors. On the 26th of April 1950, the school was officially opened by His Excellency (HE) Sir, John Harthon, then Governor and Commander in Chief of the Armed Forces. In 1917 an independent Prison department was established from the Protectorate Police but still the prison and police remained under joint command until 1938. The mission for UPS is to provide safe, secure, and humane custody of offenders while placing human rights at the centre of their correctional programs. The UPS is mandated under the Constitution of the Republic of Uganda 1995 and the Prison Act 2006 to provide safe custody and rehabilitate offenders. The UPS is one of thirteen institutions that have been brought together under the Justice Law and Order Sector (JLOS) wide approach to enhance planning and budgeting capacity to improve access to justice. The JLOS has outlined its mission as to "enable all people in Uganda to live in a safe and just society[2]. The laws for the organization, administration, and functions of the UPS are regulated by the Parliament of Uganda to ensure that the members of UPS are recruited from every district of Uganda. The laws provide that the UPS shall be nationalistic, patriotic, professional, disciplined, competent, and productive; and its members shall be citizens of the Republic of Uganda of good character recruited from every district of Uganda[3]. The Prison Act stipulates that every prison officer shall have all the powers, protection, and privileges of a police officer; within the prison, while in charge of prisoners, and to convey any person to or from prison premises. The Act provides that a prison officer shall apprehend any prisoner who may have escaped from the prison or while being conveyed to or from prison[4]. The UPS like other organizations has many prison stations, which accommodate prisoners being remanded, sentenced, or confined for any other reasons. The prisoners may be removed from any prison to another, when sentenced, or on a temporal basis

due to other reasons. Therefore, prison officers are subjected to take control of any prisoner in their custody until otherwise released. For that reason, the UPS is supposed to keep efficient and up-to-date records of the prisoners under their custody to enable them to keep track of proper details for each prisoner[5]. Efficient records management is now a necessity in all institutions for complimentary with legal and regulatory obligations. It supports the core functions and provides the basis for effective and accountable administration. The system ensures sound decisions; necessary trace, scrutiny, and justification of the rationale for those decisions are made based on accurate and up-to-date information[6]. Therefore, the prison management is mandated to keep perfect records/details of prisoners such that they can track their identity, the number of prisoners in custody, offenses committed, and their status. The UPS is supposed to keep records of their officers stationed in any prison to track the number of prison staff under their command and their full details[7]. It is noted that during the establishment of the UPS, the population was very

low hence, leading to a low crime rate. The prison stations could receive a smaller number of prisoners therefore; they were able to maintain manual records effectively. The population growth in the late 1980s led to a high crime rate resulting in a dramatic increase of manual managed volumes of records kept for a longer period of time, thus insufficient to rely on individual personal memory about the past initiative procedures[8].

The day a sentence is passed to a person is the day he/ she becomes a prisoner even before getting to the fore walls of the prison yards. Immediately the sentence is passed, the prison officers become the middlemen between the government and the prisoners. The prisoner on his/her part does anything within his or her limit to see that he or she does not spend a minute beyond the sentence given while the government cannot do away with the prisoner until every bit of the jail term or otherwise is completely secured[9]. But it has been tedious for families and loved ones to easily trace the records of the inmates. This necessitated the present study that explores the management of information systems in Uganda Prisons.

The Concept of Information Systems

The adoption of information technology (IT) in organizations is growing at a rapid pace. The use of technology has evolved from the automation of structured processes to truly revolutionary systems because they introduce changes in fundamental business procedures. Indeed, it is believed that more than being helped by computers, companies will live by them, shaping strategies and structures to fit new information[10]. In the words of Berisha-Shaqiri[11], information system is the assortment of components that are mainly used for collection, processing, storing, and dispensing information to back up the important processes of decision-making and commanding or controlling the organization. Spielman et al.[12] noted that the explosion of sophisticated information and communication technologies (ICTs) creates new opportunities as well as challenges for the whole service delivery systems; particularly in fulfilling the ever-increasing demand of citizens who have high levels of information technology (IT) literacy and advanced knowledge and awareness 7 of their rights. To remain competitive, government

information systems must progress in line with IT advancement without compromising the existing strict government principles and regulations set through acts and policies. The revelation of systems that capture various information, serves as important institutional memory and is central to efficient public service machinery. The management of court records through electronic means has a great impact on the government and citizens as a whole. It preserves the memory of a nation's civilization in judicial matters. The tremendous increase in case disposal rate after the electronic system implementation proves a great improvement and excellent achievement in judicial service delivery[13]. Sabina Klanecek stressed that the Ministry of Justice and Public Administration in Slovenia explained how technology was used to deal with vulnerable groups, in particular children, during court proceedings. In her opinion, the introduced video conferencing ensured avoidance of second or even third victimization of children[14].

Electronic Information Management Systems

The efficiency of service delivery sets the benchmark for public service excellence. An effective information management system guarantees the accountability and integrity of an organisation that provides services to the public at large and serves as a strategic resource for government administration[15]. To minimize the

risks and costs of regulatory and legal non-compliance, litigation, discovery, business inefficiency, and failure; organizations need to remove the human element by automating information management via technology[16]. This transformation means removing freedom of choice, enforcing electronic record creation,

indexation, classification, and naming conventions; creating and preserving meta-data, minimizing duplicate records by creating a central information repository that also facilitates knowledge and content management, systematically archiving and tracking records and amendments; applying retention schedules to purge redundant ones, but preserving their access logs, audit trails, and meta-data[8]. The major issues in implementing electronic information in organizations are regarding access, security, and interoperability. Widiatmoko[17] urged that the use of electronic communications increases citizen participation in the public decision-making process. The use of information technology improves the management of government, from streamlining business processes to maintaining electronic information and improving the flow and integration of information. Blessed and Diegmann[18] proposed that the police stations

that lack electronic information management systems to aid their data capturing ability to effectively control crime; should have electronic databases where the reported crimes with all details can be recorded and stored regularly other than the paper-based records that hinder their efficiency. This information management system can enable the police to draw accurate analytical statistics regarding the information about reported cases. Brits et al.[19] observed that information systems help managers analyze business capabilities and levels of individuals in the workforce problems, visualize complicated subjects, and develop new ventures and projects. Rukanyangira and Mijjumbi[20] stated that an information management system comprises manpower, instruments, and processes to accumulate, classify, examine, assess, and then dispense to the decision-makers within an organization in a timely and accurate manner.

The Concept of Databases

Zadorozhny[21] defined computer databases as structured collections of records or data that are stored in a computer system. The structure is archived by organizing data according to database relational models. The computer database relies upon software called database management system (DBMS) to organize data storage. Database management system relies on the database model which tends to determine the query language that is available to access the database. A typical data

structure of the database is made up of linked tables in the form of rows and columns used to store organized information in an organization. A database is an electronic filing system or a collection of information organized in such a way that a computer program can quickly select desired pieces of data. Traditionally databases are organized by fields, records, and files. A field is a single piece of information, a record is one complete set of fields and a file is a collection of records[22].

Why use electronic databases?

Databases are the major sources of information, therefore, increasingly being published only in electronic formats. A single database may refer to a variety of sources, including periodical articles, books, government documents, industry reports, papers at meetings, newspaper items, film and video recordings[23].Wilson et al.[24] argued that databases can form a key part of information management strategy to support researchers and

facilitate data management. An ever-increasing corpus of heterogeneous digital materials such as documents, pictures spreadsheets can be efficiently managed by the use of databases. Customized methods of inputting data for different contexts allow diverse bodies of information to be captured. However, databases can be complex and the technical skills required to develop and maintain them represent a barrier to theresearchers.

Prison management systems

An automated prison management system is the collection of registered cases for each prisoner entering the prison for an automated release diary generator. A good system for prison service should be automated, because it enhances the administration and experience to design, develop, and implement a prison management system for prison defense and security[14]. The prison is a very large yard where prisoners, warders, and other prison staff reside. Researchers and prison staff like any other human always need the latest technology in the field to reduce stress encountered in their fields. In developed countries of the world, people are already fighting over how prisoners can gain access to the internet in their cell rooms or their common rooms. This electronic technology offers

competitive speed which is important for prisoners[7]. To this end, a micro-computer-based prison management system was developed to practically enable the prison staff and concerned parties and render capability for the use of a computer for effective services. In this project, attention was based on an automated prison management system "a document-based system" that is used in many parts of the world (mostly in under-developed countries), including Uganda. In light of the difficulties faced in the manual system, there has been a constant stream of advice from both individuals and professionals calling for the overhaul of the manual prison systems in the world to IT-based systems. This can offer the best option and advantages to the prison institutions in

evaluating the success and failures of Prisons. Instructively**,** the management of prisons as well as prison records is a vital aspect of national security which becomes all the more important in the current volatile security situation. Prison management in Uganda is still in a nascent stage using a manual system of files and folders to store and organize prison records. This system is inefficient as well as looking up of specific information is cumbersome and tedious. This greatly impedes the flow of Critical information. All these deficiencies are removed using the online prison management system (PMS). PMS effectively stores all the information in neat prison profiles which have all the necessary information about a prisoner as well as his/her fingerprint signature attached to the profile. ID numbers can be used as a search key to identify prison records by comparing them with external databases that are found at crime scenes. All these improvements greatly reduce the time at which specific information is delivered to concerned agencies.

CONCLUSION

Currently, the prison management system can only be deployed for all prisons in Uganda. However, the system has the scope to be developed as a distributed application where each implementation of PMS in different prisons can be connected and communicate with each other worldwide. In such a scenario a person sitting in Uganda can access the data of different prisons in and outside Uganda. This will make the whole system highly centralized as well as well connected. Most importantly, it will provide the end user who has the necessary security clearance a single portal where he/she can access prison records from all major prisons in Uganda where the PMS would be deployed thus making it a truly practical deployable application that can be used in prisons all over Uganda and other countries.

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