

GREATER LIFE CONCERN

GLC MEDIA GROUP

PROJECT TITLE: RADIO STATION PROJECT

PROJECT TO BE IMPLEMENTED BY:

|  |
| --- |
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# Abstract

GLC is a place of transformation with a 3R slogan – rescue, rehabilitation and reintegration of alcoholics into the society. A lot of people being rescued have great stories of how they got into addiction that they would want to share with the world. The main purpose being to prevent those who are not addicts not to engage in alcohol and drug use and also to motivate who are in addiction and show them that they are able to get out of the situation and transform their lives…

# Acknowledgements

There are some people who really helped coming up of ideas on how to develop this project. But before anything we would like to thank God for giving us the strength as a group to develop the project. We would like to thank Mr. Josphat kiniaru - who is one of the GLC board members – he is the one who actually came up with original idea of putting in place a media group for people to share their stories. He have been also very supportive interms of materials required. Secondly we would like to thank Mr. Gitau for the support and ideas on how to develop and acquire content for the radio stations. Finally we would like to thank the GLC bord members for letting the project go through and standing with us recovering addicts here in the rehab. May God bless the and increase them for their contributions.

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# CHAPTER ONE: INTRODUCTION

1. **Introduction**

Digital radio have become very popular and very cheap to implement, in [digital broadcasting](https://en.wikipedia.org/wiki/Digital_broadcasting) systems, the analog audio signal is [digitized](https://en.wikipedia.org/wiki/Digital_audio), [compressed](https://en.wikipedia.org/wiki/Audio_compression_(data)) using formats such as [MP2](https://en.wikipedia.org/wiki/MPEG-1_Audio_Layer_II), and transmitted using a [digital modulation](https://en.wikipedia.org/wiki/Digital_modulation) scheme. The aim is to increase the number of radio programs in a given spectrum, to improve the audio quality, to eliminate [fading](https://en.wikipedia.org/wiki/Fading) problems in mobile environments, to allow additional [data casting](https://en.wikipedia.org/wiki/Datacasting) services, and to decrease the transmission power or the number of transmitters required to cover a region. However, analog radio (AM and FM) is still more popular and listening to radio over IP ([Internet Protocol](https://en.wikipedia.org/wiki/Internet_Protocol)) is growing in popularity (Wikipedia).

1. **Statement of the problem**

GLC is doing a lot of good things in transforming lives and rehabilitating addicts, and the need to reach more people in the society led to us developing a media platform where we can reach more people in the community. The easiest and the most effective way for doing so being the use of a digital radio. Through this we can reach more people and more they are able to reach us in turn we can get income and support through local advertising.

1. **Purpose of the project**

After knowing the communication and awareness problem we had, we came up with the idea of developing our own radio station specifically for addressing this problem. The boy child have been forgotten by society and there are almost no organization responsible for them. Therefore, we us a rehabilitation center need to pass on this information to the community.

1. **Overview**

The radio station will have different modules which would be integrated to come up with the complete system, this will be categorized into 2 parts;

1. Studio ‘source’ equipment which includes a 8 channel mixer, digital recorder, a phone, computers, microphones booms and stand, audio monitor system (headphones with an amplifier), audio cables and connectors.

2. Transmission equipment include an AMD Athlon 64bit CPU, streaming software, power and audio connector cables internet router and LAN cables.

1. **Significance of the study**

The main aim of this project is to pass information to the general public and let them know that addiction is a disease. And the good part of this is that this disease is curable by the grace of God and rehabilitation program. There is a lot of myths and misconception about addicts in the society and this has led to their discrimination. But through this project we are able to address this issues and create awareness.

# CHAPTER TWO: LITRATURE REVIEW

1. **Introduction**

To come up with the project we first had to look at existing project of the same architecture and our research have proven that they work and they are easy to implement. The previously done projects have requirements that were available to us, that included the content, space, electronic devices and skilled labor. Some of the materials we used for our research are listed below.

* 1. **Reviews**
* <https://mediarealm.com.au/articles/building-radio-studio/>
* <https://en.wikipedia.org/wiki/Digital_radio>

# CHAPTER THREE: METHODOLOGY

1. **Introduction**

Methodology is the systematic, theoretical analysis of the methods applied. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. According to this project, it mainly involves the methods that we will use to implement this project.

1. **Methodology**

Radio studio involves creating good sound thus the studio is designed to ensure that outside noises are not transmitted/recorded and so as to hear the voice of the speakers clearly. To achieve this we started with studio acoustics ‘wall padding’ involving readily available material such as mattresses and styraforms from dismantled cold room walls, with the help of Kenyatta who is versed in construction and carpentry we are able to do the walls install a door and a glass screen to separate control room and recording booth.

After the studio acoustics is complete the electrical wiring including installation of 2 sockets an ‘on air’ warning bulb and one standard bulb for the studio lighting, which will be done by Mr. George Kanage.

# CHAPTER FOUR: PROJECT ANALYSIS AND DESIGN

1. **project Analysis**

This system mainly targets the rehabilitees life experiences of addiction in their outside life and recovery in the center. The main aim being how to pass their stories to the public and empower others facing the same problem.

1. **Data Collection**

* Data collection was mainly through the internet, observation on the existing digital radio stations and brainstorming.
* First hand experiences in Mass Communication/Radio and Studio sound production

1. **project Design**

Major step in this system design is setting up the studio and the machines required for audio recording and transmission.

# CHAPTER FIVE: IMPLEMENTATION

* 1. **Introduction**

This is mainly the process of putting in place the design of the studio and setting out the digital recorders.

* 1. **Parts of the project.**

There are two different parts of the studio:

* Control room
* Recording booth
  1. **Control room**

The control room is an important place in the radio broadcast and studio recording as it is connected with all the other segments of broadcast.

When the speaker/presenter speaks to the microphone, it is captured in the control

room with a mixer or a sound card and it’s sent to the computer for recording/transmission to the listeners

* + 1. **Recording booth**

The recording booth is padded with soft materials to prevent sound waves from bouncing back and creating an echo effect and also to prevent unwanted sound from the surrounding environment.

It also creates a cool and private space for the presenter or interviewees for easy communication without destructions.

# CHAPTER SIX: REQUIREMENTS, BUDGET AND PLANNING

1. **Requirements**

|  |  |
| --- | --- |
| Requirement | Comments |
| Number of people in the studio | A minimum of one person in the studio and a maximum of four people considering the available space |
| Microphones | At least two microphones would be required |
| Headphones | At least two Headphones would be required one for the presenter and the interviewees |
| Computers | At least two computers would be required, one for recording/streaming and the other for broadcasting |
| Phones | At least two phones would be required for talkbacks in the studio |
| Chairs | At least four |
| Air conditioner (fan) | At least one |
| Audio console | 8 – channels |
| Microphone mounts | At least two |
| Microphone stand | One is enough |
| Coloured bulb | One red in colour |
| Headphone amplifier | At least one(4 – channel) |
| Wall clock | At least one |
|  |  |
|  |  |

1. **Budget**

|  |  |  |  |
| --- | --- | --- | --- |
| ITEM | QTY | PRICE | DESCRIPTION |
| Microphone | 1 | 2060/= Jumia |  |
| Headphones | 2 | 700/=Jumia |  |
| Microphone stand |  | 250/=Jumia |  |
| Digital Recorder |  | 3500/=Jumia |  |
| Power Cables | 6 | @150-900/= |  |
| VGA Cables | 4 | @200-800/= |  |

1. **Planning**



# CHAPTER SEVEN: PROJECT TESTING

1. **Introduction**

The complete radio/studio set up will be tested as per the requirements, to find out if it will be able to achieve the objectives set in place. Various types of tests which will be done will be:

* Unit testing:-control room and recording room.
* Integration testing (combinig control and recording room)
* Acceptance testing (Audience literature review

1. **Unit testing**

The smallest unit in the system is the segment e.g control room and recording booth.they will all be tested thoroughly to see if they meets the objectives. Adequate test data are already available from the previous done recordings and interviews. This data is available with Madam Becky – the center administrator. We will do control room testing, recording room testing and evaluate the general acoustic of the sound to make sure it’s of good quality for recording and transmission:

1. **Integration testing**

In this testing, the modules will be combined and tested if they work together in unison. After a successful integration of the system i.e. control room and the recording room, the results will be recorded for further development.

1. **Acceptance testing**

In this test, the system will be tested if it is acceptable and friendly to the user (listeners). This will include doing the actual field work and get the listeners response. If they will be satisfied, the system will be ready for deployment (going on air).

1. **Deployment**

After successful testing the system will be deemed ready for deployment. And content can be broadcasted to the internet.

1. **Maintenance**

This happens when problems occur in the operation of the studio. The technicians will be readily available (Mr George and my partner Mr Kibet). The main assistance can come up in the process of incorporating changes in the existing system. The system will be maintained as follows:

1. **Enhancement**

This involves addition of new features into the system, the initial plan includes developing a Television Station . The project will provide a place for expansion and alteration of the studio. The system also keeps track of its performance by maintaining a log of events performed by the presenter and the technicians.

These logs help the project developers to enhance functionality such as studio operations, field interviews and video recordings.

1. **Adaptation**

This involves customizing the system to run on various environments. The system can be modified to run efficiently on mobile devices since it is an online radio.

1. **Correction**

This involves correcting bugs existing in the system.

The system will provide a mechanism where problems found in the system are logged and can be accessed by the administrator or system developer in the mobile app. These logs detail the error encountered, severity and the stack trace of the error.

# CHAPTER SEVEN: CONCLUSION AND RECCOMENDATION

1. **Conclusion**

This project can be reliable and effective if all that is needed is put in place. The main challenge that face the media groups is the lack of content to air and understanding the project vision. On our side to get content is no longer a problem since each and every rehabilitee have a story to tell and testify on what God has done on his life.

1. **Recommendation for further development**

* We will recommend having a TV station also in the near future and by the grace of God we believe that it is going to happen.

### **References**

* <https://mediarealm.com.au/articles/building-radio-studio/>
* <https://en.wikipedia.org/wiki/Digital_radio>