**CHAPTER ONE**

**INTRODUCTION**

## 1.1 BACKGROUND OF STUDY

Online New Born Birth Certificate System (ONBBCS) is the official recording of the birth of a child by a state administrative process of the country, and coordinated by a particular branch of government. Lalitha and Ameerah (2015). It is the permanent and official record of a child’s existence and is fundamental to the realization of children’s rights and practical needs. Securing children’s rights to a nationality will allow them to get a passport, open a bank account, vote and find employment. It helps ensure access to basic services, including immunization, health care and school enrolment at the right age. At present it is estimated that millions of Zimbabwean children are not being registered at birth, meaning that these children are being denied the right to a name and nationality, a situation that may also lead to barriers in accessing other rights including health care and education.

One important area where data collection is essential on human population is vital registration; which according to Lalitha and Ameerah (2015) is “the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population as provided through decree or regulation in accordance with the legal requirements of a country.” collecting data on human population is, therefore, a complex series of related activities. There is no gainsaying the fact that accurate population statistics is vital to sound development planning and economic management. This explains the seriousness attached to the assemblage of population and vital statistics in the country today. Apart from the information on the stock of country’s population, it is essential to know the rate at which the population is changing, structurally and in the aggregate. Vital statistics as computable from registration of important events (especially births and deaths), constitute an important set of data for studying the dynamics of a country’s population.

According to Zubema (2008), the Department of Registrar General is one of the core department of the National Population Commission mandated to undertake the continuous and compulsory registration of Births in Zimbabwe, through an Act titled “Births, deaths, etc for the national population planning and for estimating the number of children that is born into the country every year.‟ (Compulsory) Registration no 69 of 1992 dated 14th December, 1992. (The Registration of Births and Deaths Act, (1969)), this act empowers the Commission to register such vital events nationwide. The Act clearly spelt out the registration hierarchy, responsibilities, and establishment of centers, procedure for Registration, time limit for registration and documentation of vital events such as, Births, Deaths Stillbirths, Marriage, Divorces, and the penalties for various offences among other issues. The authority is given to the Commission to perform these statutory functions of Registrations of birth and death in every locality, Local Government Area (LGA) and State of Zimbabwe. The Data collected can therefore be processed and analyzed for government to use for planning and also as a data source to other research bodies, non-governmental bodies and also agencies that require such data.

## 1.2 STATEMENT OF THE PROBLEM

There is much wastage of time and money because of manual registration, it takes a long process for someone to get a birth certificate. They are so many complains which are filed because of long queues and the slowness of the process using human effort.

## 1.3 OBJECTIVES

1. To provide online birth certificate registration of newly born babies so that they will be a digital repository containing children
2. to notify birth applicants about their applications through email.

## 1.4 HYPOTHESIS

A number of solutions can be employed to the current system as follows:

H 0: Online New Born Birth Certificate System

H 1(a): To buy a system for newly born birth certificate

Of the above alternatives Online New Born Birth Certificate System is the best more modern alternate.

If partially automated, the system will be flexibly able to retrieve, update information and status quickly, when required without taking much time. Users will be able to apply, to view application status from any angle of the country.

## 1.5 JUSTIFICATION

The significance of this project work is to proffer solutions to current backdrops experienced in the registration of birth thereby fostering a more effective and efficient data collection, storage, processing and retrieval method. This project would also provide a means for nation planning and population forecasting.

## 1.6 CONCLUSION

Online New Born Birth Certificate System is the best to overcome problems as it has been introduced, there is a great need for another system as the problems are causing long queues, delay in registration and unfair distribution, and the objectives of the proposed system are well explained and justifiable. Hoping that the limitations of this study will not affect the research and the next phase is the design phase.

**CHAPTER 2**

PLANNING PHASE

1. **Introduction**

The system will be developed using the Systems Development Life Cycle. The cycle consists of the following stages: Determination of scope and objectives, system investigation and feasibility study, system analysis, system design, implementation or change over then evaluation and maintenance. This system development methodology was chosen because it enhances communication between the analyst and user to be. It encourages design of structured programs that are clear to quote, easy to test and can be easily modified. It also encourages documentation which will act as a permanent record of the system.

* 1. ~~Business Value~~

~~“Benefits may be quantified by comparing the increase (or avoid decrease) in factors such as market share due to the new system”~~

* + 1. ~~Identification of business value~~
    2. ~~Benefits expected to be derived from the system~~
* ~~Tactical benefits-these enables the company to continue functioning in the way but at a lower level of costs, or with increased profits~~
* ~~Strategic benefits- these enables the company to enter new markets, either offering a new product or reaching new markets~~
  1. Feasibility study

“Are the necessary components in place for the initiation of the project?”

Before embarking on project it is essential to verify whether it is feasible to carry out that project. The feasibility can be characterized into technical, economic and operational. This feasibility analysis enables the analyst to provide justification on whether the proposed Digita l Soccer System desired objectives can be achieved within the prevailing economic, financial, organizational and technological constraints and a descriptive comparison between the benefits and the costs.

* + 1. Technical feasibility

The proposed system will be characterized by new technology and thus it is essential to validate its technical feasibility. The extent of the successful development and implementation of the system also depend on the availability of technical expertise. An analysis of the current infrastructure at Registrar General office shows that it is sufficient enough for the system to be said to be technically feasible to develop and implement.

The following are some of the reasons that verify the technical feasibility of the system: - There is a fully fledged network system at Registrar General that has at least a servers operating well below their actual capacity.

* The developer who is going to be responsible for the creation and deployment of the system has the necessary technical expertise to carry out the project.
* Most of the users are computer literate and have practical experience working with computers and should not have minimum problems with running the system.

# Hardware And Software Requirements

The following list of hardware and software is required to run the new system:

Minimum Hardware Requirements

-Two servers (one main server and other for back-up), UPS batteries.

-Networking equipment (hubs, routers, network cables and sockets)

-For any sever upgrade ML150 G9 SERVER will be recommended

## Minimum Software Requirements

- Apache http server 2.0.8

-PhpMyAdmin

-MySQL 5.0.5b

-Other hosting utility can be Internet Information services

Wamp server or XAMPP can substitute items second to penultimate.

* + 1. Operational feasibility

This defines acceptability of the system by users as a solution to their current problems. This also defines the friendliness of the system to users, thus ease of use. In exploring operational feasibility, the PIECES (performance, information, economy, control, efficiency, services) framework is used.

**Performance**- the new system will provide adequate response time

**Information-**the new system will provide accurate, useful and timely information to users and management.

**Economy** -the current manual system provides cost ineffective information to the business because there are high time costs incurred in retrieving information. The new system will provide timely information and help reduce telecommunication costs.

**Control-** the current manual system is prone to fraud and has no guaranteed security. The new system offers effective control to protect` against fraud and unauthorized access. It reduces the number of errors made during data entry.

**Efficiency-** the new system will take lesser time to process information and to produce more accurate results, thereby making it more efficient than the current one.

**Services-** the new system will provide more reliable services, which are flexible.

* + 1. Economic feasibility

Can the expected benefits outweigh the costs to be incurred by the system?

Does the team have sufficient resources to finance the proposed system?

The internet allows for the download of open source developer tools such as the ones which are being used to create the system. This means little or no money is required for the purchase of software. In as far as hardware is concerned, it has been mentioned already that ZIFA office has the necessary infrastructure in place but it is just that it is not fully utilizing the resources. A survey was also conducted to examine the extent to which the benefits outweigh the costs and the developer was able to come up with the following cost benefit analysis:

# Tangible Benefits

Less telephone cost due to the use of web application it will be less expensive than using a phone

Less stationery cost, use of hard copies used to register players will be eliminated by online registration

Reduced staff cost: the cost paying extra staff is cut by the new digital soccer system thus allowing funds to be diverted to other activities.

Reduction in staff working time: due to computer’s supreme and massive calculating information processing speed power the system is going to guarantee the staff a reduction in work.

# Intangible Benefits

Expected increase in production due to improved efficiency user friendly fast query process, fixture making without human effort, online results updates,

Increased job satisfaction and motivation: elimination of long and tedious task by simple and fast computer routines will generally lead to greater motivation in the work place.

# Tangible cost

Such costs are determined by the analyst as well as the accounting personnel these include:

-Equipment and machinery cost (machinery cost)

-Software cost and development cost (training cost)

Such cost is easy to calculate their monetary value. they involve actual cash outflow from the business such that they can be recorded in the organizational cash flow statements.

## Intangible Cost

Like intangible benefits these are difficult to tag dollar value upon them thus they rely on mathematical estimations that are carried out I order to tag a value upon them these include:

1. Opposition from the non-technical user who lack computer exposure.
2. Opposition from the retrenched staff ‘s friends who may also feel threatened by the new system such people may create a bad image and frustrations.
3. Excessive power cuts might mean that the system is prone to failure, as it cannot work.

Power cuts may also result in hardware failure thus loss of valuable information.

## Cost Benefits

|  |  |
| --- | --- |
| **ITEM** | **ASSOCIATED VALUE** |
| Reduced paperwork | 2 800 |
| Reduced resource loss | 900 |
| Reduced work overload/staff | 700 |
| Goodwill | 500 |
| Reduced error cost | 4 000 |
| Total benefit | 8900 |
| **Estimated costs** |  |
| Development cost | 200 |
| Printer | 250 |
| Development labour | 700 |
| Computers and server | 1 500 |
| Training costs | 500 |
| Database software | 600 |
| Software upgrades | 100 |
| Maintenance fees | 100 |
| Stationery | 50 |
| Operation salaries | 400 |
| Hardware repairs | 400 |
| Estimated total costs | 4 800 |

Net benefit = Total Benefit-Total cost

= 8 900– 4 800

= 4 100

# Return on investment

The profitability to project is expected to bring in relation to the cost is determined by ROI .it expenses the net profit /loss as percentage of the cost:

ROI = (BENEFITS – COSTS/COSTS) \*100

ROI = (8900-4800/4800) \* 100

ROI = 85, 42%

The higher ROI for the percentage may suggest that the project is viable.

# Net Present Value (NPV) Analysis

Determine the profitability of the new project in terms of dollar value. It adjusts future costs express them in terms of the current dollar thereby taking into account the time value of money.

**Formula:**

NPV = total benefits-total costs

(1+ r) n

R = interest rate (15%)

N= number of years

NPV after 3 years = 8900 - 4800

(1+0.15)3

= $1188.41

The NPV shows that the project is viable. The NPV value is positive and considers the benefits during the whole life time of the system.

* + 1. Organizational feasibility

Organizational feasibility analysis is conducted to determine whether a proposed business has sufficient management expertise, organizational competence, and resources to successfully launch its business. Two key aspects to consider include management ability and resource sufficiency.

* + 1. Environmental feasibility

An **Environmental Feasibility** Study assesses the viability of a proposed development from an **environmental** and social perspective, identifying potential issues and threats to the successful completion of the proposed development. Solutions and mitigative measures are investigated.

* 1. Conclusion