CHAPTER I
INTRODUCTION

1.1 Background

Information technology (IT) has played a big role in the development of human beings on earth in the 21st century. Information technology is either the study or the use of systems (especially computers and telecommunications) for the storing, retrieving and sending of information from one end to the other in forms of electronic data. IT has built both the world and our society in general. Many fields have been impacted by information technology and these include; sports, education, health, entertainment, communication, business organization, government, military forces, research, security to name a few.

A website is a set of related webpages typically served from a single web domain. A website is hosted on at least one web server, accessible via a network such as the internet or a private local area network though an Internet address known as uniform resource. Many interactive websites, such as community sites, can only function by allowing people to add information. Members must be able to add and share messages. There have to be rules to determine who can see what information and what they are allowed to do. As well as websites where interactivity is a fundamental requirement, there are times when it offers subtler benefits.

The world of sports is continually changing over the years and the use of technology is just one of those areas that has made an impact in the modern day.

Rugby Union or simply rugby is a contact team sports which originated in England in the first half of the 9th century. One of the two codes of rugby football, it is based on running with the ball in hand. In its most common form, a game is between two teams of 15 players using an oval-shaped ball on a rectangular field with H-shaped goalposts on each try live. Websites are built to include all the features that sports club need to help run their club. Members associated with the sports can have easy access to updated information game statistics of the teams, team sheets, photo gallery, forum discussions, registered players, arena location, match results, draws, player profile, Club officials, referees and contact form.

Papua New Guinea Rugby Football Union (PNGRFU) was established in 1962 and over that time has enjoyed a degree of success. The game is played throughout the country and presently there are thirteen provinces actively running 15's and/or 7's competitions. There is a need to increase these competitions to provide more for age grade players and women throughout PNG. Port Moresby is the capital city of Papua New Guinea located south of the country near the coastal land. Port Moresby's rugby competition is known as Capital Rugby Union, Port Moresby Papua New Guinea. One such area in the world of technology that Capital Rugby Union lack is its lack of exposer online. Websites nowadays helps supporters and users online updated with the happenings of the sport. However Capital Rugby Union doesn't run a website at the moment. Most of the updates and schedules of the game are published in the newspaper which I strongly think is unprofessional for an organization to operate with. For instance, one of the supporter of the Capital Rugby Union teams wish to

read about the weekly updates (schedules, results, gallery and news,), he or she has to buy a newspaper to have access to, which takes time and effort to go to a nearest destination to purchase. For convenience sake, if there is a Capital Rugby Union website in place, supporters don't need to buy a newspaper every time to have access to the latest updates. He or she simple can log online anywhere in the country or outside the provinces and can have access to daily updates of the Capital Rugby Union competition. Merchandise sales is another issue, most teams associated with CRU usually do sales on their social media pages such as Facebook and Instagram. If the CRU website can contain a merchandise section where supporters of the teams can purchase directly online instead of using social media for privacy and professionalism sake. Team and players information in terms of teams profile and player profile isn't available for supporters to learn more about their favorite teams and players. Having a team information in place on a website would be of great help and again displays the professionalism in the rugby competition CRU.

1.2 Problem identification and Formulation

1.2.1 Problem Identification

From the background outlined above, some of the issues identified in the Rugby Union Organization of the Capital Rugby Union are as follows:

i. The Capital Rugby Union semiprofessional competition does not own a current website for its fans and any individual involved.
ii. The current system still uses the newspaper to publish out schedules, results and the ladder of the weekend's game to the CRU supporters.

iii. The CRU system doesn't have a platform in place for its fans to have access to which teams associated with the union and its player profiles.

iv. The current situation with merchandise sales for the Capital Rugby Union is done on its Facebook fan page

v. CRU uses its Facebook fan page to display galleries of the rugby matches.

1.2.2 Problem Formulation

Therefore, based on the above stated problems, the formulation is as follows;

i. How to analyze the new web-based information system design process of the Capital Rugby Union, in areas of schedules, results, gallery, news, development programs, live streaming, sponsors and subscribe.

ii. How to design the web-based information system to help solve the problems faced by the organization and its supporters.

iii. How to test the web-based information system of the Capital Rugby Union using an offline server so it meets the user requirements such as schedules, results, gallery, news, development programs, live streaming, sponsors and subscribe to avoid system functional errors.

iv. How to implement the web-based information system so that it becomes ready-made website package online for the Capital Rugby Union supporters.

1.3 Research Objectives

The main purpose and objectives for conducting this research are as follows:

1.3.1 Purpose

The main aim of this study is to design and develop a reliable web-based information system for the Capital Rugby Union Competition, which will cover procedures under the schedules, results, gallery, news and the rugby development program.

1.3.2 Objectives

The purpose of this study is as follows:

i. To analyze the web-based information system design process of the Capital Rugby Union, in areas of schedules, gallery, news, sponsors.
ii. To design the web-based information system to help solve the problems faced by the organization and its supporters
iii. To test the web-based information system of the Capital Rugby Union using an offline server so it meets the user requirements such as schedules, results, gallery, news, development programs, live streaming, sponsors and subscribe to avoid system functional errors.
iv. To implement the web-based information system so that it becomes ready-made website package online for the Capital Rugby Union supporters.

1.4 Research Implications

It is expected this study will be used by the following parties:

1.4.1 Practice Uses

The development of the informative website will be used the by the supporters and followers of the Capital Rugby Union competition and the public online users in general. In addition to the, the website may also be implanted in other sporting codes in Papua New Guinea, who have similar issues faced by the CRU.

1.4.2 Academic Uses

1. Institutions

Hopefully, this research paper will be used as a reference journal for the future students working on a similar projects.

2. Other Researchers

The ideas generated in this research may also be implemented by the future researches, who wish to broaden their knowledge about information systems development.

1.5 Limitations of Study

Taking into consideration the time limit and ability of the researcher, the discussion of this study will be restricted to the following regarding the development of the web-based information system of the Capital Rugby Union:

1. The development of the web-based information system of the Capital Rugby Union be applicable to only one language i.e. British English (United Kingdom).
2. The development of the schedules section of the Capital Rugby Union. This section will only display schedules of the Capital Rugby Union weekend games venue and time.

3. The development of the schedule section of the Capital Rugby Union. This section will only display weekly results of scores and table placings (ladder) of each teams.
4. The development of the gallery section of the Capital Rugby Union. This section will only display pictures of teams and associates that deal with the Organization only.
5. The development of the news section of the Capital Rugby Union. This section only displays news regarding the Capital Rugby Union teams, players and sponsors
6. The development of the sponsor's section. This section only displays the logos of the companies that Capital Rugby Union is sponsored by.
7. The development of the subscription section. This section is allocated to any viewers or supporters willing to get updated information of the Capital Rugby Union Competition website directly to their email address after they have filled in their personal information on the website.
8. The development of the merchandise section. This section only allows;
    - ATM transfers for payment of items only
    - No delivery of items, there's a specific location (CRU office) for the purchased items to be picked up
    - Only available for fans and supporters within the Nation's Capital City only.

1.6 Research Time and Location

This research was conducted at the Capital Rugby Union Office in Port Moresby, Papua New Guinea. P.O Box 450, Waigani, National Capital District, Papua New Guinea. The duration of time allocated for thus research was from March 1st 2016 through to 15 of August 2016.

Table 1.1 Research Schedule

No	Time Table	2016																							
		March				April				May				June				July				August			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Data Collection :																								
	• *Interviewing*	■																							
	• *Observation*		■																						
2	**Prototyping**																								
	a)Identify information system requirements (meet with clients):																								
	• *Analysis*			■	■																				
	b) Development of initial prototype:																								
	• *Coding*					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	c) Use of Prototype by users:																								
	• *Experimentation*												■	■	■	■	■	■	■	■	■	■	■	■	■
	d) Revision and enhancement of prototype																								
	• *Revision*																			■	■	■	■	■	
3	Operation of Prototype																								
	• *Operation*																				■	■	■	■	■

1.7 Thesis Outline

CHAPTER I: INTRODUCTION

This chapter proposes the research background, problem identification, research objectives, research usability and the limitations of the research.

CHAPTER II: LITERATURE

This chapter contains the citing of literature and previous studies, related to the development of the informative website.

CHAPTER III: RESEARCH METHODOLOGY

This chapter basically discusses the research methodology and procedures used in the development of the informative website.

CHAPTER IV: SYSTEM ANLYSIS AND DESIGN

This chapter proposes the analysis and design of the informative website. It discusses the development of the proposed website, including processes, data interpretation, database design, coding and software testing.

CHAPTER V: CONCLUSION

In this chapter, a conclusion of the research will be made, and certain recommendations concerning the usability and maintenance of the developed system will be outlined.