ALUMNI TRACER FOR BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY PROGRAM PHILIPPINE CHRISTIAN UNIVERSITY, DASMARINAS

By:

ERALD P. PANTOJA, PhD

IMELDA L. FLORES, MBA

ANGELO FREDERICK A. TOH, MIT

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CHAPTER 1

INTRODUCTION

It has been found that alumni tracer studies are the most important vehicle to build strong bonds between the Alma Mater and the ever-increasing graduates. This is feasible through two perspectives. From one perspective, the alumni are the rich source of feedback for improvements in the course curriculum, teaching, research, extension, and networking. On the other, the tracer study helps to measure the extent of professional and academic careers pursued by the graduates after gaining knowledge and skill through academic institutions like Philippine Christian University (PCU) starting from 1976. The latest tracer study was conducted in 2019/2020 targeting recent past graduates (2010 to mid-2019).

Institutions involved in developing human resources through long and short term programs have the duty to keep track of the performance of their graduates to determine accountability and whether or not their programs have impacted on the individual, the institution, or the country. Tracer study constitutes one form of empirical study which provides valuable information for evaluating the results of the education and training of a specific institution of higher education. This information may be used for further development of the institution in the context of quality assurance (Schomburg 2003). A tracer study enables the institution of higher education to get information on possible deficits in a given educational programme which can serve as a basis for curricular improvement.

Graduate surveys provide rich experience about the whereabouts of graduates, which might help to broaden perspectives among administrators, faculty and students. Such information like the income, economic sector, current job title, working time, duration of search for the first job, methods of job search, values develop and practice in work, skills acquired are relevant for higher education institutions to note. Philippine Christian University continues to raise its educational standards to produce graduates who are highly competent, efficient and competitive in the labor market. Efforts have been exerted to provide the students with quality education like providing facilities and instructional materials as well as improving learning

experiences and environment to ensure that its graduates acquire the standard competencies that will prepare them to meet the challenges in their chosen profession.

BACKGROUND OF THE STUDY.

Philippine Christian University (PCU) is a private, coeducational Christian university located in the Philippines. It has two campuses; one in Taft, Manila and the other in Dasmarinas, Cavite. It was founded in 1946 through the initiatives of the Laymen of the Evangelical Association of the Philippines. Originally named as Manila Union University, it was renamed as Philippine Christian College (PCC). In 1976, the PCC acquired university status.

Innovation has made possible the operation of the computer easy enough in processing record systems such as creation of data records, storing, filing and retrieving of data. Philippine Christian University population has increased in graduates and at the same time, the work load of data processing increased as well.

In order to provide an accessible and affordable process of interaction between Philippine Christian University and her graduates, the development of an Alumni Tracer was proposed.

The success of the Philippine manpower industry largely depends on the quality of education and training. Philippine schools need to reconsider their mission of preparing their students for the profession in the light of changes in the local and international markets; new knowledge and skills to adapt to changing job demands; and dealing with an increasingly competitive labor pool.

In the light of ensuring relevant, efficient and quality education and training as a key to increasing competitiveness in the society, the PCU pursues graduate tracer studies for BS IT, impact analysis tools, that aim to assess the employability of its graduates. This is conducted to get valuable information for the development of the school, to evaluate the relevance of higher education, to contribute to the accreditation process and to inform students, parents, teachers and administrators.

As a Philippine higher education institution, PCU aims to ensure the employability of its graduates in the world business. To this end, an employability analysis of the seven (7) batches

of BS IT program graduates from the academy is being worked on. This study gathered relevant data which will be used to devise measures or programs for the continual quality improvement of the curriculum to ensure that students are well-prepared to face the challenges of the outer world.

STATEMENT OF THE PROBLEM

Specifically, this graduate tracer study sought answers to the following questions:

1. What are the biographic characteristics of PCU BS IT graduates with regard to: Gender, Age bracket, City of residence, Region of origin, etc.

2. What are the educational, training, professional licensing qualifications and competencies of the respondents in terms of: Whether currently enrolled in another degree program, Training/advance studies, Reasons for pursuing advance studies Professional licensure/eligibility examinations passed, Enrolment situation during tenure at PCU.

3. What is the employment status of respondents in terms of: Whether currently employed, Reasons why if not yet employed, Present employment status, If self-employed, skills learned in college they are able to apply, Industry, Place of work, Income level, Job level position etc.

This study aims to follow up the performance of Philippine Christian University BS IT graduates as basis for curriculum enhancement. Specifically, it sought to present profile of the graduates in terms of demographics and employability. It also aimed at exploring the perceptions of the graduates towards competencies developed by PCU BS IT graduates, values that are developed in their Alma mater and the skills that should be further developed.

The study only include graduates of PCU in BS IT program from school year 2010-2011 to school year 2017-2018. The results of this study are beneficial to the following recipients:

Administrator. The result of this study may provide guidance to school administrators with the end view of coming up with evidence-based recommendations to be undertaken to improve the employability and eventually, improve the program of studies. It will help the office of the alumni to keep in touch with and foster relationship and partnership with its former graduates.

Program Head. The result of the investigation will serve as the basis for curriculum review and re engineering of the university programs to meet the global competitiveness.

Faculty . The findings of the study will guide the teachers to plan activities and to stay up to date and improved on its shortcomings in order to meet the demands in the field and consequently assisting in its long term sustainability.

Students. The result of the investigation will serve as eye opener to the students entering PCU to triple their effort in preparation for future employment and to be qualified to practice their profession.

Future Researcher. This study will be of help to other researcher undergoing tracer study. They may be guided on what other variables to consider examining the changes in the career pattern of the graduates in order to provide a basis of evaluation of the current program.

OBJECTIVES (GENERAL AND SPECIFIC)

The major objectives of the study was to trace the BS IT graduates to find out their employment status as well as their income and performance level at workplace.

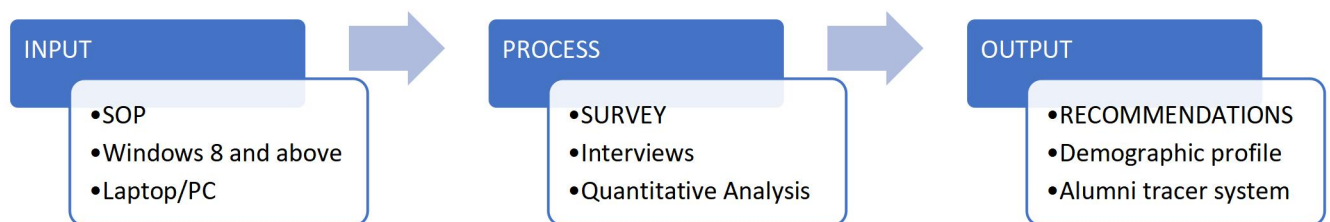The other specific objectives of the study were as follows;

- Identify the employment status of graduates of the PCU BS IT programs.

- Analyze the work place performance level of employed graduates.

- Spell out the determinants of employability and efficiency for such graduates.

- Suggest the measures to promote the quality of Degree programs thereby employability

and efficiency of graduates.

- Understand the different ways in which graduates learn about labor market opportunities

and transition to employment.

- Perform the above analyses dis-aggregated by socio-economic characteristics and

Location factors (e.g., rural vs. urban).

SCOPE AND LIMITATION.

The study is focused on the employability analysis of the last 7 batches of PCU BS IT graduates or alumni. This study utilized a graduate tracer survey accomplished by the class of 2009 to class 2018 respondents through survey or other electronic means. This study is limited to available PCU BS IT alumni who responded to the request of the researcher within the time frame, during the Academic Year 2019-2020.

CONCEPTUAL FRAMEWORK

The Input-Process-Output (IPO) Model will be used as the conceptual framework for this study. In the IPO Model, a process is viewed as a series of boxes (processing elements) connected by inputs and outputs. Information of material objects flow through flow through a series of tasks or activities based on a set of rules or decision point. Flow charts and process diagrams are often used to represent the process. What goes in is the input, what causes the change is the process, and what comes out is the output. In this study, the Statement of Problem (SOP) is the input, the process is the survey and the output is the recommendations.

INPUT	PROCESS	OUTPUT
•SOP •Windows 8 and above •Laptop/PC	•SURVEY •Interviews •Quantitative Analysis	•RECOMMENDATIONS •Demographic profile •Alumni tracer system

SIGNIFICANCE OF THE STUDY.

One of the important ways of evaluating the effectiveness of an educational institution is to keep track of its graduates. It is necessary to find out whether they are employed, unemployed or underemployed in their occupation or vocation for which they were trained; what these graduates are doing and in what ways the school helped them in their present employment are valuable information in determining whether or not the school is achieving its goal of providing quality education. Moreover, this study was geared towards finding the

weaknesses and strengths of PCU curriculum through the performance of graduates in the board examination and the academic adequacy preparation of students.

Institutionally, the management could utilize the results of the study in formulating development plans or curriculum revisions to better improve the quality of PCU education and training that the university provides. They will be better equipped with key labor market information and employability of graduates needed for improving the degree program. Further, the tracing of graduates might help establish co-operation/contacts between the university and the alumni who may help evaluate the relevance of the Degree programs and contribute to the accreditation process. Perceptions of graduates towards the effectiveness of the academic programs, infrastructure, services and administrative systems of the institution of learning are useful for the industry.

On the other hand, the findings of this study will provide a relevant reference for other researchers interested in working on the employability of graduates, particularly PCU BS IT graduates.

CHAPTER 2

REVIEW OF RELATED LITERATURES AND STUDIES

This chapter provides a literature review of key theoretical perspectives regarding career aspirations, which determines the points explored in the conceptual framework regarding the issues for conducting this particular research report. It also includes the synthesis of the state of the art, theoretical and conceptual framework to fully understand the research and lastly, the definition of terms for better comprehension of the study.

Related Literature

Tracer study is a study to trace graduates of higher education institute. Graduate Surveys, Alumni Researches, Graduate career tracking or Follow-up Study are other term for it. Through a tracer study, an institution is able to evaluate the quality of education given to their graduates by knowing the graduates placements and positions in the society which later can be used as a benchmark in producing more qualified and competitive graduates. There are books

that can be used as a tool for studying different aspects of education and for studying the present topic which is a study on the employment status of PCU graduates of 2010-2012.

In the book, Employment and Career Opportunities after Graduation by Arcelo and Sanyal, the existence of a huge number of educated unemployed can lead to a certain extent of political instability in a country, for they are being among the educated class and knowledgeable about the privileges society can offer, feel doubly deprived. In this matter, the analysis of the unemployment situation in the Philippines shown that the young graduates is still in the job-hunting stage. This book is concerned with the graduates of PCU that will be searching for jobs after they graduated. Also, when the trainings and learning in the journalism program is used on the jobs suited for them.

In the Employment and Employability Profile of a Select Group of Filipino College Graduate by Allan B. de Guzman and Belinda V. de Castro, states that graduate need to develop a personal skills, qualities and experiences that enable to them to compete in the labor market. The author wants these graduate create an empirical portrait that describes the aspects of employment of graduates of an excellence university in the Philippines to identify policy into imperatives for a greater relevance of higher education curricula to industry needs and expectations.

The Philippines may go beyond the standing of employment in the country, rights and importance should be understood. As specified in the book of Labor Economics by Cristobal M. Pagoso, it stated that in view of low literacy rates in rising unemployment in developing countries become imperative that greater educational opportunities should be provided for the great proportion of adult population as well as the large number of youth outside the formal school system to help them acquire further knowledge and skill thereby improve their livelihood and strengthen the country.

On the book Contemporary Social Problems and Issues, it stated that the educational levels and literacy rates of workers in the Philippines are among the highest in Asia, but technical, manual and managerial are poorly developed and in short supply. There is an over-abundance of college graduates that most especially in Manila area were in the field of

education, law and other professionals exceed in demand to find employment appropriate to his educational training. The authors wanted to show how the graduates of PCU used their skills and trainings to gain and develop the technical, manual and managerial skills that Filipino workers lack of. This is the realization that even college graduates may find it difficult to be employed if they are not well-equipped of trainings and programs that their college had provided.

Felixberto Mercado in his study entitled, A Tracer Study of MSEUF Graduates intended to trace graduates from their school origin to their place of employment to obtain the needed information, the research used questionnaire, known as their survey instrument, in connection with this the present study do the same in gathering information's. With the same manner the present study intended also to trace graduates employment status

Employment is the capacity of an individual to showcase his talent and to use the trainings gathered in the course, Thomas Powers in his book Educating for Careers stated the notion that marketable skills provided today's crop of worker's employment opportunities. The statement of Powers is relevant to the present study because he pointed out that education is very important in having the marketability and general skills needed in finding an appropriate job. In this study, it helps to develop such skills among the college graduates for them to find or to get an appropriate job.

Robert W. McIntosh on his book" Employee Management Standards" aimed to determine that the employee's performance on the job and attitude about the job would depend on the degree to which the manager fulfills the needs. The author associated that to the employees that will look at the performance and attitude towards the job that will be strongly affected by the degree on where the superior may reach the fulfillment on the job desires.

The book, Unemployment and the Dual Labor Market stressed that the unemployment is the outgrowth of a process of job search where workers have limited information about the labor market. On the other hand, people who first begin looking for jobs lack basic information will help the graduates to disseminate the rejection of jobs to higher expectations. This book

mainly wanted to view that job searching is a wide-process action where in job-seekers should gain more knowledge or information that will reach their satisfaction on what and where to find jobs that will bring out their profession.

McIntosh, in his book Practicing Better Human Relations aimed to determine that the quality of a person's work life should improve as more and more needed values are satisfy by that individuals job and career progression. This aided that the employee must improve the quality of work life in determining the aspects of work situation for PCU graduates. Also, this will relate to how the graduates progress their career as graduates of the AB Journalism program.

Philippine society nowadays has encountered so many problems in terms of labor or employment. As it is stated in the book, Labor- Only Contracting in a "Cabo" Economy that some economist would justify labor- only contracting as our only weapon to remain competitive. Therefore, some of the workers are seeking for better employment opportunities abroad for a high salary. In the case of the graduates nowadays, their first problem is seeking for a job after graduation. Knowing that it is very hard to find a job suitably to their course right away after graduation that may cause to trigger them to work not aligned to the profession they graduate for their usual reason is the salary that they can get right away. Some go abroad to find their destiny or for some reason that they will get a high salary than to continue their profession as a Journalist if there is no salary increase.

Related Studies

Campus, Nuyda and Icaranom,"Employment Status of the English Graduates 2006-2008". This study aimed to present a feedback mechanism for the department and college to come up with a more productive, competitive and effective program for the students. This study presented the possible reasons on why there are graduates who are unemployed and employed. In the same manner with the study conducted, it leads to show the programs used in providing PCU graduates adequate skills to help them for professional careers, but the program must be open to changes that would effectively lead graduates to a better employment.

Jarito Verona, "A Tracer Study of the Employment Status of PUPQC AY 2004-2005", determined the general profile and the present employment status of the respondents who are the graduates of Polytechnic University of the Philippines academic year 2004-2005. This research tackles about a method which is primarily intended to locate graduates of academic institution, past recipient of scholarship grants, former participants and among other situation in order to collect data and update information about this type of students. This kind of study is also a tool to generate or influence decision making and planning of a certain institution about the development of the curriculum. It is likewise regulating document efficiency and support on the demographic profile of a certain institution that can be measured through the quality of its graduates.

The research Tracer Study of the Graduates of Certificate in Teaching Physical Education (CPE) from 1995 to 2005, a tracer study of the graduates of the faculties of Agricultures and Arts, University of Nigeria, Nsukka, answered the profile of the CPE graduates in terms of job position and the employment in terms of job encountered in the CPE. Majority of the CPE graduates are males. Based on the findings of the study, most of the CPE graduates are in the permanent status of employment. They are employ in the national government with the monthly salary of 10,000 Php to 15,000 Php a month. The topmost encountered by the CPE graduates in that they are not given equal opportunities like those of the education graduates. This study may relate to similar study in terms of the employment standing or status of the graduates. It also focuses on the job position that is also one important factor in employing a job because as graduate of a particular course, the job should go along with the profession that they graduated.

Bea, Daep, Fungo, Lorilla, Miraflor Jr., Muni and Ordoñez, "Employer's Review on AB English Graduates of Bicol University College of Arts and Letters SY 2006-2009", the study showed that newly established private companies in Albay hire most of the AB English graduates. Employers of AB English graduates find their job performance and attitude to be very satisfactory, it is more appropriate to use communication skills and skills that should be imposed depends on the line of work one engages in. In this study, the researchers are interested to know if the AB Journalism graduates will find their job performance, personally

development, professionalism, office management and time management will be obtained as well.

A job market offers job trainings to equip employers to develop work environment. Belen, "Employment Prospects for AB English Graduates of 2009"- aimed to determine the job opportunities available for AB English Graduates of 2009, the research aims to know the qualifications require from the AB English graduates that would give them the edge in the job market in terms of academic skills and special skills. It is also about to assess the training needs required by the job market that awaits the AB English graduates. The findings of the researchers will reflected the idea that to the generally skills be functional in the job great demands, special skills are required to enhance specific skills needed in work. So, graduates will enhance competitiveness and to develop one's potential to be suitable for a particular job.

Madriaga and Lucila, "Job Opportunities for Broadcasting Students", discussed that job expectations of the 2nd and 3rd year AB Broadcasting students were almost inclined in the media industry and practice their field of expertise. This will give an overview to the kind of job that will fit AB Journalism graduates.

Raquesa D. Macaraub, "Employment Motivation of Selected Media Practitioners in Legazpi City" showed that respondents were motivated to work because of good relationships with their officemates. Media practitioners are the lowest paid workers and are exploited; some are not receiving regular salary only allowance or talent fee; and are required to solicit advertisement for their salary. As shown in the study, some of the respondents claimed that they are satisfied with the work they are motivated with their officemates. Also, the monthly income they receive and the kind of workplace reaches their satisfaction. It is significant to the present study since graduates will experience the types of satisfactory on motivation at work and providing good quality of relationship between co-workers.

Alcovendas and Espares, " A Tracer Study of AB English Honor Graduates from 1987-2009" the study discussed that AB English honor graduates are gainfully employed have sufficient annual income, have a tendency of staying long in the company, have moderate satisfaction in their present job, indicating a lack of sense of fulfilment in their capabilities, and

a feeling of insufficiency in the returns they get for their hard work. The study of Alcovendas and Espares is relevant because in the study conducted by the researchers the results shows that academic performances in school really affects the employment status of the graduates. Through the honors' that they acquire, it helps them to have higher positions compared to other graduates.

The researchers found out that when it comes to the level of job satisfaction, honor graduates are found to be satisfied with their present job. With these, the graduates will improve learning and communication through experiences. Furthermore, graduate students expose to real, actual and practical situations such as seminars, workshops and conferences are strategies that may better prepare them for future employment.

Employers believed that applicants who have undergone job training are assumed to be more knowledgeable and production. According to Dominguez and Romero, "Employment Status of AB English Graduates of Bicol University" AB English graduates are highly employable in both private and government sectors depending on the student's interest. Also, they are competent enough in relation to the job for there are respondents who have problem with their co-workers in terms of their differences in terms of principles and ideas which are expected in an agency.

In the study, "Employment Status of AB English Graduates of Bicol University" the researchers are interested on the trainings acquired in AB Journalism program that they can easily adapt to the society specifically in their present job. The proposed study also aimed established to be well equipped, improvement of interests, competency and developing working ability.

Nelita M. Lalican, "Tracer Survey of Agriculture Graduates" where the College of Agriculture of University of the Philippines Los Baños traced its graduates, their aim also was to assess its curriculum and discuss the relevance of its productivity with the present condition. In the findings of the study found out that, employers prefer specialists rather than generalists and the employers find the graduates effective, efficient and cooperative. They also find the graduates knowledgeable, dependable and resourceful however, many employers describe

UPLB graduates as academically inclined, having a know it-all attitude although with assertive personality.

Theoretical Framework

The researchers adapted the General System's theory by Edward Deming (J. Horine, 1993) to support this study. The theory generally states that "the success in any system requires more than best efforts and hard work from the administrators". The most serious observation is that majority of problems to Deming; roughly, 95% of problems belong to the system and the responsibility of the management while the workers are just trying to do the best job that they can deliver within the constraints of the system. The theory explains that a system is a series of functions or activities sub process (stages-hereafter components) within an organization that work together for its aim. People, materials, methods and equipment are the components that form a network in support of common characteristics: purpose, input, process and output (J. Horine, 1993)

Purpose determines the thrust and direction of a system input, on the other hand, is characterized as the primary element that motivates an action of a system. Meanwhile, processes are the sequences of work stages that transform inputs to outputs and output is what the system produces.

**Below is an illustration of Theoretical Framework**
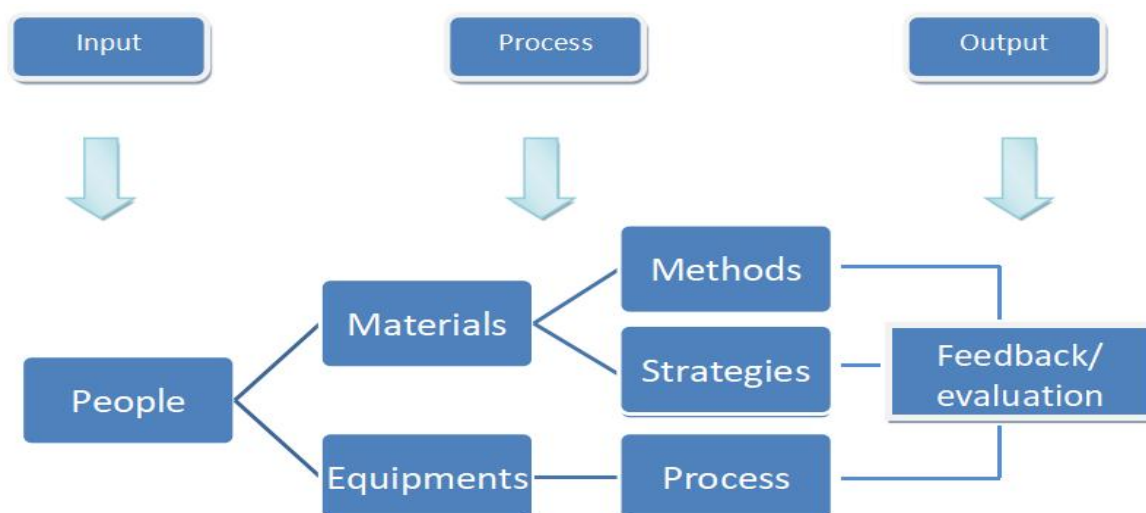
Conceptual Framework

The figure 2 shows the conceptual framework of the study. Using the illustration of the Theoretical Framework it can be asserted that a student gained many experiences during his stay in school. Students cultivate themselves to become productive citizens of their community after graduation.

Following this line of thought, if Philippine Christian University succeeds in properly educating the students who are enrolled in the different programs especially in PCU program it serves as an output they will be able to secure a high quality of education for these students, thus providing better chances for them to land a high paying job.

Graduates have experienced skills that develop his/her skills to become more productive like being enrolled in an internship program proposed by the department, showing off their talents and skills in the extracurricular activities inside and outside the premise of the school. By that, it serves as a process for their academic performance, for them to have a career that they wanted to become.

Good performance of the graduates in their current job has become their self-evaluation for what have learned over all during their stay in school.
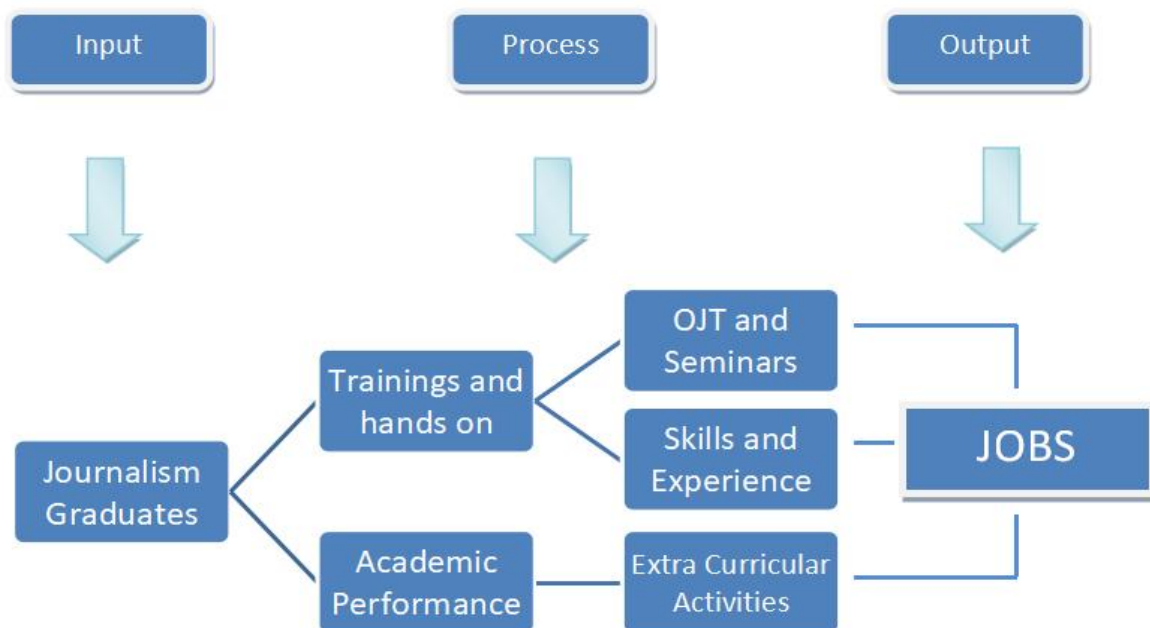
Synthesis of the State of the Art

In the Related Literature, education is an investment made by students in order to enhance their capabilities in certain aspects in their lives. It is the responsibility of the school to facilitate students in deciding and planning what job they wanted to slot in.

Similarly the related studies showed great relevance to this proposition. It supported the claim of being unique of all studies conducted, though it also agreed on employment and the factors that affects the graduates in choosing the job, their skills that they found least and most useful in their current job will really help the students to understand that there are lot of job opportunities in lined with their course after they graduated.

Definition of Terms

For better understanding of the study, the researchers gave several terms that were defined conceptually and operationally as used in the study.

Database. Refers to the data of the graduates that categorize the following: Family Name, Given Name, Middle Name, Gender, Permanent Address, Present Employment Status, Contact Numbers and Name of Company that be able to fill its alumni directory and can easily access information and contact the PCU graduates.

Demographic Profile. In this study, it refers to the graduate's personal profile in terms of age, gender, civil status, highest educational attainment.

Employed. One who presently working at a job including the part time workers. The respondents who found a job related to their course or has a job.

Employment Profile. It considers personal qualities as important as academic background, professional skills and previous employment experiences. In this study, it refers to the information of the graduates of PCU to know whether they were presently employed or for the researchers to know if they current employment status.

Employment Status. Refers to the work upon which is or may be engage; occupation of trade chose by the graduates to work in the study, it refers to the state of the respondents when it comes to the employment whether they are employed, underemployed or unemployed.

Industry. It refers to the nature of the graduates whether they are employed to private offices, organizations or business or working in a government offices or agencies.

Job. This is a work of a definite extent of a character specially one done in the course of one's profession or occupation. In the study job refers to the work that the PCU graduates will have as soon as they graduated in the university.

Skills gained. It refers to the learning, ability or proficiencies of a graduate achieve in the college that can be a tool for them in to be employed in their respective target working place.

Tracer Study. It refers to the study to trace graduates of higher education institute. Graduate Surveys, Alumni Researches, Graduate career tracking or Follow-up Study are other term for it. In this study, it refers to as a tool for data base for the graduates of PCU Batches 2009-2019.

Underemployed. It refers to those who have worked not enough to do or not being used to have capacity in a job. In this study, it refers to the respondents who were hired not related to their fields of specialization.

Unemployed. Refers to those who are not currently working or the people who failed to look for a job, the graduates who were not able to find a job or those who decided not to work.

CHAPTER III

RESEARCH METHODOLOGY

The study employed descriptive research design since its purpose is to obtain and present facts regarding graduates demographics and investigate their perceptions regarding competencies and values developed in them by the school and the skills that should further be developed by PCU. Its main respondents are the PCU BS IT graduates from school year 2008-2009 to school year 2018-2019.

The instrument to gather data for this study is consist of three sections. The first section contains general information of the PCU graduates which included: (a) year graduated, (b) City of residence, (c) and whether he or she pursued graduate studies or other course. The second section described the graduates' employment data which included: (a) present employment status (b) current job (c) previous job, (e) type of specific area of work (f) type of institution employed (g) years of working experience (h) current gross monthly salary (i) first job after graduation (j) length of time to get the first job (k) ways of acquiring the current job. The third section of the questionnaire contained the evaluation of training received by the graduates which included (a) values develop and practice in work (b) skills acquired in the university.

To facilitate the distribution of questionnaire, the researcher personally distributed or contacted using the cell phone or email addresses and Facebook handles of the graduates.The questionnaires was filled online or may be downloaded as MS Word document, which can be duly filled in and sent either as email attachment or hard copies by post. The questionnaires are assumed to be answered

honestly and truthfully by the graduates despite their hectic schedule so that the validity and reliability of the study can be assured.

Sources of Data

The PCU BS IT graduates are the primary sources of data where in the researchers send questionnaire for them answer the questions given. In addition, the secondary sources of information are the books, Journals, unpublished materials and any other reading resources

containing the discussions related to the present study found in the library and by the use of the internet sources.

Data Gathering Procedure

The present study gathered data first in the library where the researchers were able to search for the different reading materials that will help the study to gather information. The related literature and studies that were taken from the secondary sources were gathered in different websites and books that are available.

The researcher first requested the registrar for the information about the lists of the BS IT graduates of PCU 2009-2018. This helped to trace the graduates by the use of the directory. The researchers also used the social media/ internet sites such as Facebook and Twitter. This enabled them to easily contact target respondents. The researchers also conducted a survey and gathered data through sending questionnaires with a cover letter. E-mail was utilized for those respondents who are currently working and residing outside the province of Cavite. However, for those who live within Dasmarinas City, the researchers gave the questionnaire through Facebook Messenger. After the survey, the researchers interpreted and analyzed the data obtained from the PCU BS IT graduates for batches 2009-2018.

Instrumentation

This study used a survey questionnaire in the data gathering procedure. The questionnaires were designed based on the statement of the problem that the researchers have formulated. The questionnaire is composed of three sections. The first division is composed of demographic profile and employment profile. The second part is composed of the continuation of the employment profile. The third part is composed of the factors that affect the choice of the job, the relevance of the PCU IT program to the job that they presently have. Questions presented in the survey were based from the factors stated in the first chapter affecting the decision-making of the graduates. The questions are tested if they are related and relevant in the success of the study.

Respondents

The sixty-seven (67)respondents who were the primary sources of data were the respondents of Philippine Christian University BS IT graduates from batches 2009-2018. The profile such as age, gender, civil status and educational attainment were primarily considered in the given questionnaire, as they will relate to the response, that will served as indicators provided in the instrument.

The researchers determined the sample size to get the number of the respondents of the study. The sampling procedure was done through the use of Slovin's formula in determining the sample size, as follows:

$$n = \frac{N}{1 + Ne^2}$$

Where:

n= sample size/number of respondents

N= total population/total number of BS IT graduates

e= margin of error

1= constant value

Wherein:

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{186}{1 + 186(0.01)^2}$$

$$n = \frac{186}{1 + 1.86}$$

$$n = \frac{186}{2.86}$$

$$n = 67$$

Random sampling was used to determine the respondents of the study. Through this, each graduate had an equal chance of being drawn into the sample. The following is the tabulation of the population of the graduates from 2009-2018.

Graduates of BS IT Philippine Christian University from year 2009-2018 are the main respondents of this research study. On batch 2009-2010 there are eleven male and thirty-nine female, having a total of fifty respondents. In batch 2010-2011, only 10 males and fifty-three female and a total of sixty-three respondents, and lastly in batch 2011-2012 there are only twelve males and sixty-one female, a total of seventy-three respondents. The overall total is one hundred eighty-six, through using the slovin's formula by getting the 10 % error, the researchers come up with a total of sixty-seven respondents.

Statistical Treatment

The researchers summarized the data though frequency counts and percentages to answer the problems 1,2 and 3 of the study. The data was analyzed using descriptive statistics in order to get the percentage. The percentage was used to determine the portion of the graduates of each year including on their status, along employment.

The formula to get the percentage is shown below.

$$\text{Percentage} = \frac{f}{\sum f} \times 100$$

Where   f = frequency
          $\sum f$ = summation of frequency
          100= constant

SYSTEM ANLYSIS

1.1 Requirement Analysis.

After the researches gathered all information needed, they analyzed the information so as to design a model that would solve the existing problems in the school. They reviewed well all the necessary requirements to meet the desired idea for an alumni tracer to be developed.

1.2 Design

The researchers considered productive online interactions with the alumni by the way it will work. They created the tracer system in accordance to Philippine Christian University system. The purpose of the system design is to create a technical solution that satisfies the functional requirements for Philippine Christian University.

1.3 Development.

In this phase, the system was developed*.* This includes encoding the software. They identify all problems and fix them.

1.4 Deployment.

In this phase, the system was implemented. They also started testing it and explaining how to use or operate the system. It also includes maintaining all solutions that fixed all existing problems.

1.5 Operation and Maintenance.

In this phase, they maintained the system's availability and performance in executing the work for which it was developed.

Architecture of the System

The architecture used for the system is a 3 tier Client/Server Architecture where a client can use Internet browsers to access the online report provided by the system within the local area network of the school or any where using the Internet. The data tier maintains the applications data such as alumni data, admin data,events/announcement data etc. It stores these data in a relational database management system (RDBMS).

The middle tier (web/application server) implements the business logic, controller logic and presentation logic to control the interaction between the application's clients and data. The controller logic processes client requests such as requests to view alumni data, to view alumni profile or to retrieve data from the database. Business rules enforced by the business logic dictate how clients can and cannot access application data and how applications process data.

A web server is a program that runs on a network server (computer) to respond to HTTP requests. The most commonly used web servers are Internet Information Server (IIS) and Apache. The web server used in this system is IIS. HTTP is used to transfer data across an Intranet or the Internet. It is the standard protocol for moving data across the internet.

The client tier is the applications user interface containing data entry forms and client side applications. It displays data to the user. Users interact directly with the application through user interface. The client tier interacts with the web/application server to make requests and to retrieve data from the database. It then displays to the user the data retrieved from the server.

2.0 **Functional Requirements**

The functional requirements of the system are:

Alumni register

Admin confirms alumni,

Alumni logs in and can view events and announcements, edit profile.

2.1 **Non Functional Requirements**

Security requirements are important factors in this system as classified data will be stored in the database. User validation will be done during login to insure that the user is valid and that the user only has access to his or her permission data. General users will only have access through the user interface.

The system will have consistent interface formats and button sets for all forms in the application, will have a form based interface for all data entry and viewing formats, and will generate reports that are formatted in a table and that should look like the existing manual report formats for user friendliness.

The system will be easily maintained by the developer or other authorized trained person and it shall respond as fast as possible in generating report and producing data.

2.2 **Analysis Model**

To produce a model of the system which is correct, complete and consistent we need to construct the analysis model which focuses on structuring and formalizing the requirements of the system. Analysis model contains three models: functional, object and dynamic models. The functional model can be described by use case diagrams. Class diagrams describe the object model. Dynamic model can also be described in terms of sequence, state chart and activity diagrams. For the purpose of this project we have described the analysis model in terms of the functional model and dynamic models using use case and sequence diagrams.

Use case Diagram

Use cases of the system are identified to be "Register-alumni", "confirm Alumni", "Generate-report", "View alumni" and "Produce data". The diagram depicted in the figure below shows the use case diagram of the system.
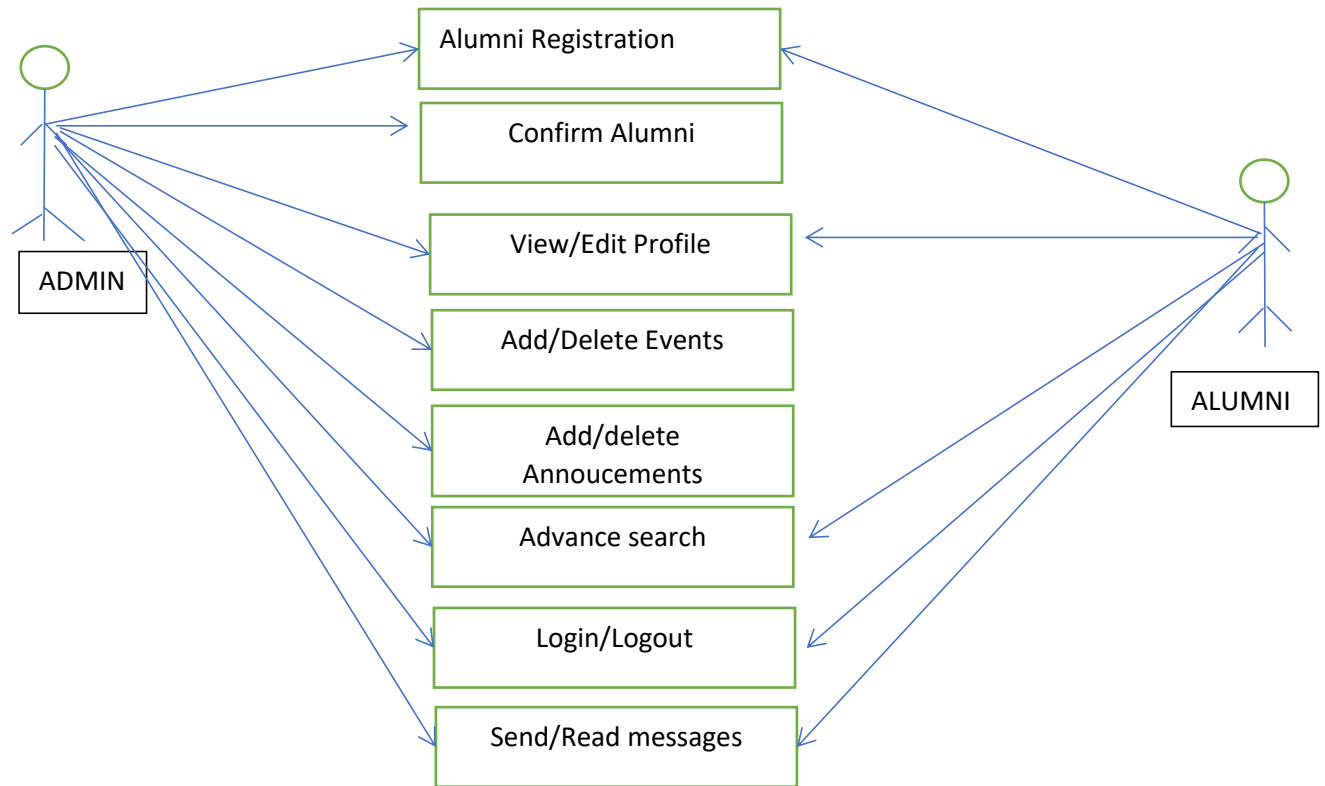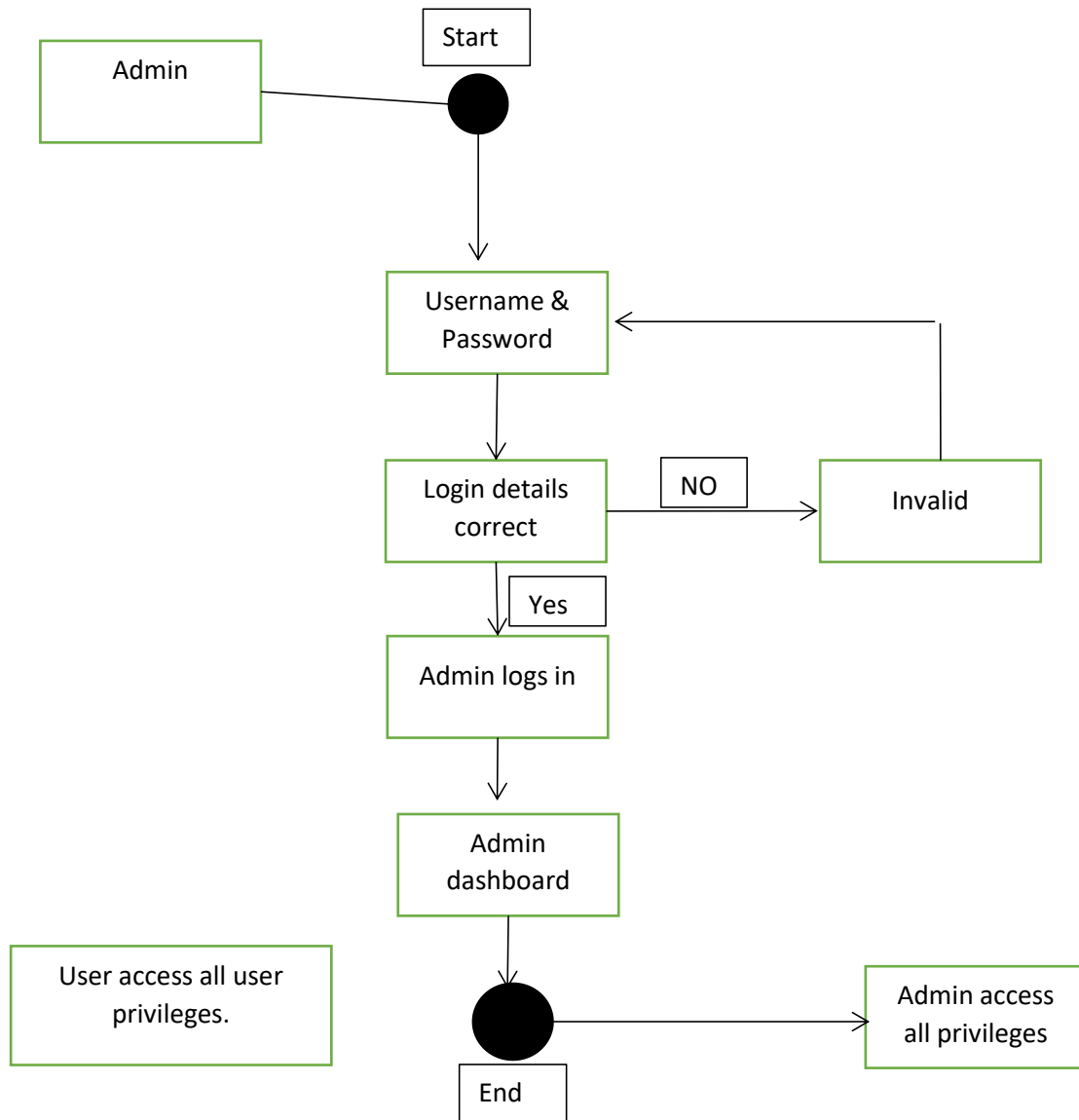
Sequence Diagrams

Sequence diagrams show the interaction between participating objects in a given use case. They are helpful to identify the missing objects that are not identified in the analysis object model. To see the interaction between objects, the following describe the sequence diagram of each identified use cases.
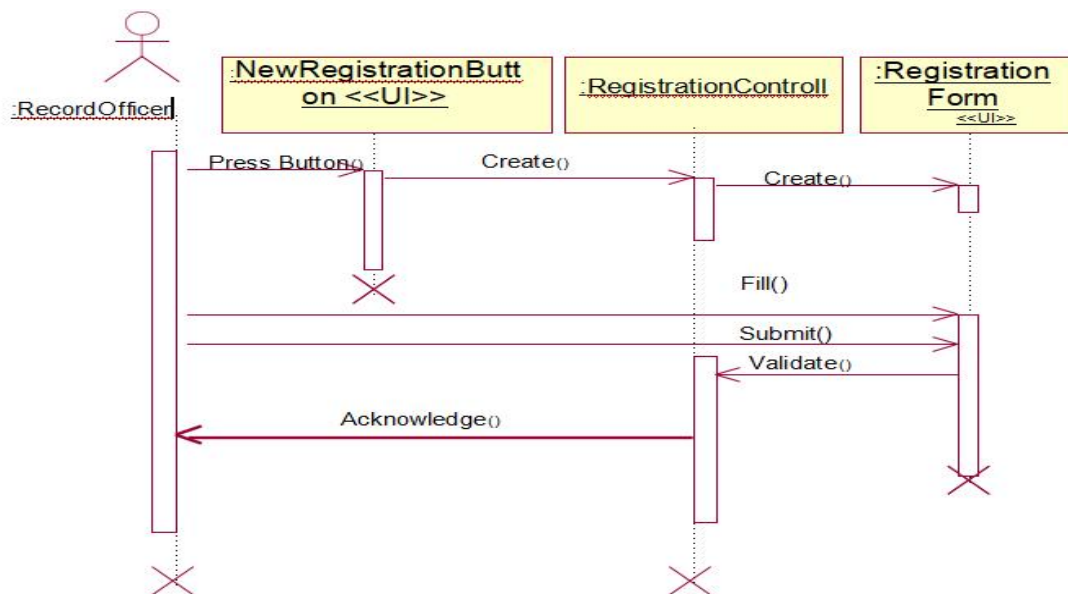
System Flow for Admin

System Flow for Alumni
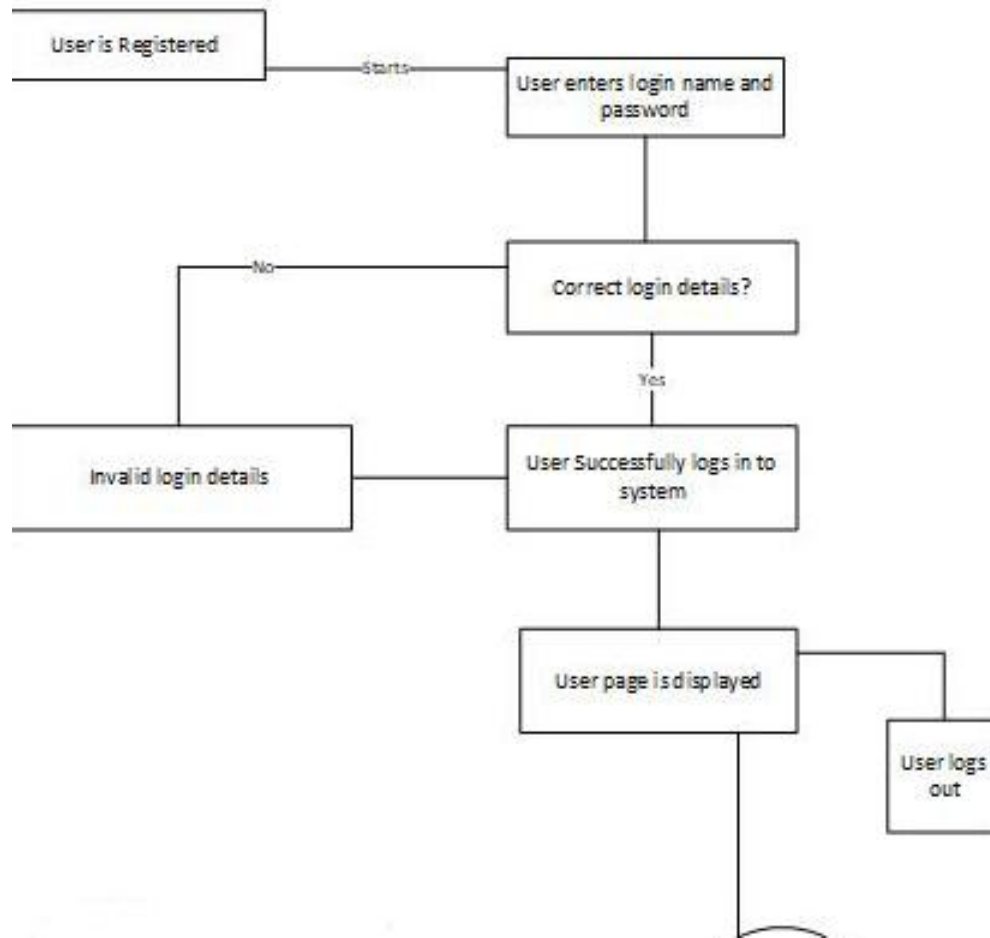
Design Goals

Design goals describe the qualities of the system that developers should optimize. Such goals are normally derived from the non-functional requirements of the system.

Design goals are grouped into five categories. These are

- Performance
- Dependability
- Maintenance
- End User Criteria

Performance Criteria

The part of the system to be used for the record office should have a fast response time (real time) with maximum throughput. Furthermore, the system should not be taking up too much space in memory. The admin officer has chosen fast response time over throughput and hence the system should try to be more interactive.

Dependability

The school needs the system to be highly dependable as it is expected to be used by non- IT professionals. The system should be robust and fault tolerant. Furthermore, as the system is handling sensitive data of the school, high emphasis should be given with regards to security, as there are subsystems to be accessed through web.

Maintenance

The system should be easily extensible to add new functionalities at a later stage. It should also be easily modifiable to make changes to the features and functionalities.

End User Criteria

Usability: Usability is the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. From the end users' perspective the system should be designed in such a way that it is easy to learn and use, efficient and having few errors if any.

Trade-off is inevitable in trying to achieve a particular design goal. One best case is the issue of security versus response time. Checking User-Id and Password before a member can enter to the system creates response time problem/overhead. The other case is the issue of response time versus quality.

Hardware/Software Mapping

One of the major tasks in system design deals with hardware/software mapping which deals with which components would be part in which hardware and so on. The Alumni tracer is a broad system that performs many functions as described in chapter 3. It consists of web based system used by homeroom alumni to view information. The web based system also assists alumni and officials to get or view status and report on graduates' achievement and progress.

So the web based part is expected to run on a networked environment on different Operating System platforms. The client/server architecture of the system enables different clients to connect to the server remotely through Internet connection.

The system has two nodes such as the **Web server** and **Clients.** These nodes are shown as UML Deployment diagrams in Figure 5.4. The nodes can represent specific instances (workstations) or a class of computers (web server), which is a virtual machine. The applications of the system will run on the web server connected to the database server by ado.net.
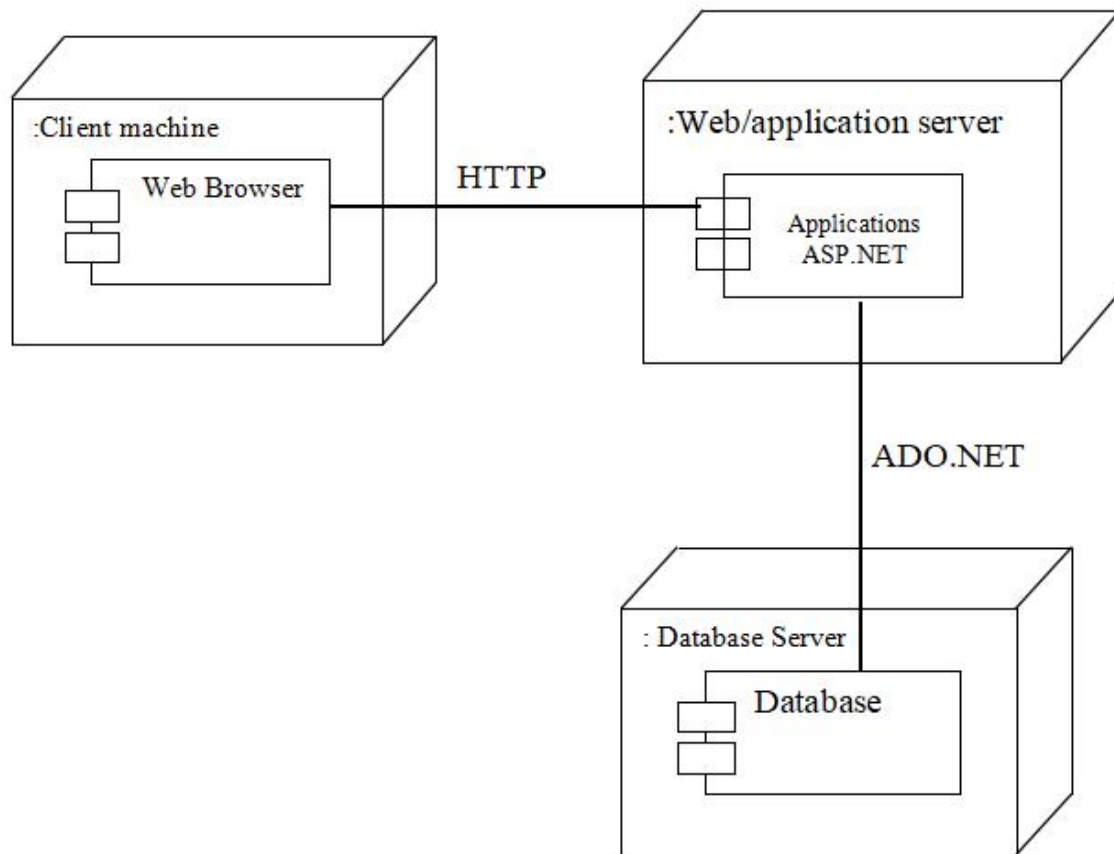

The Alumni Tracer Prototype

Here, the implemented system is described. How the user interacts with the system and some of the results of interaction with the system along with the screen shots are described.

When a user starts the application, a login screen is displayed as shown in Figure below to authenticate the user. If the user has typed the correct user id and password to the login screen,

the system displays the main menus of the system as shown in Figure below. The main window displays menus and sub menus based on the role of the user that has logged in.
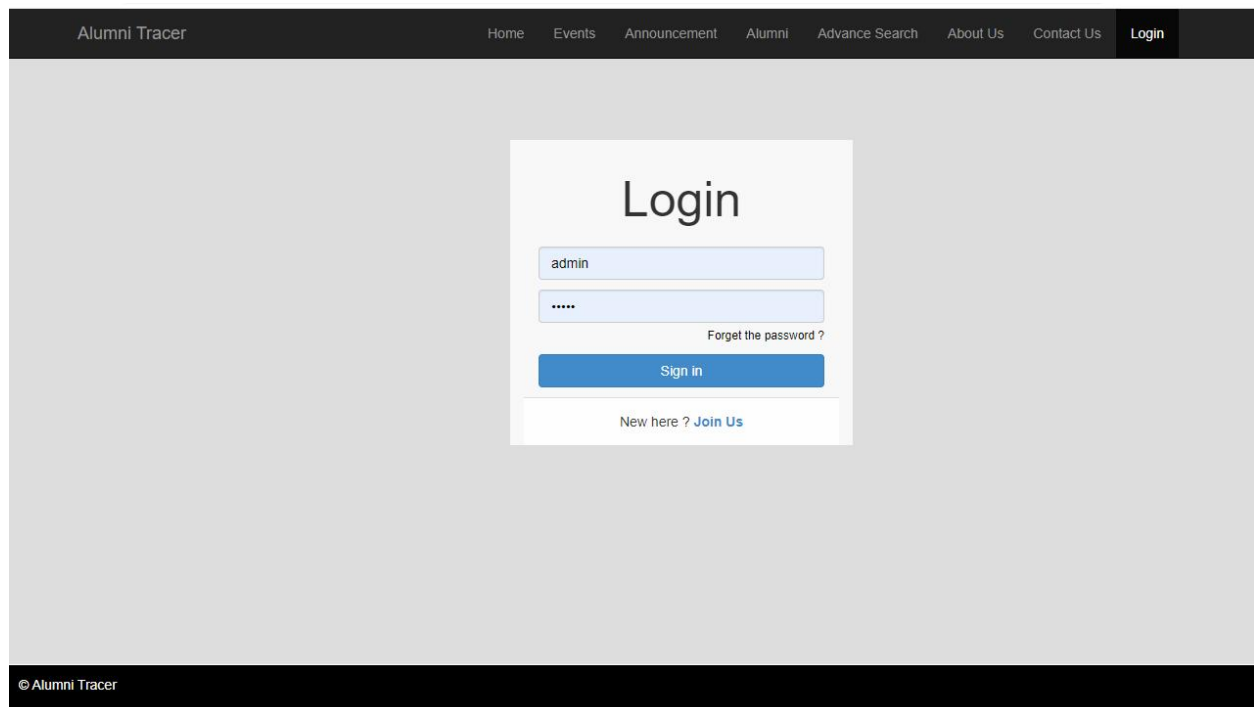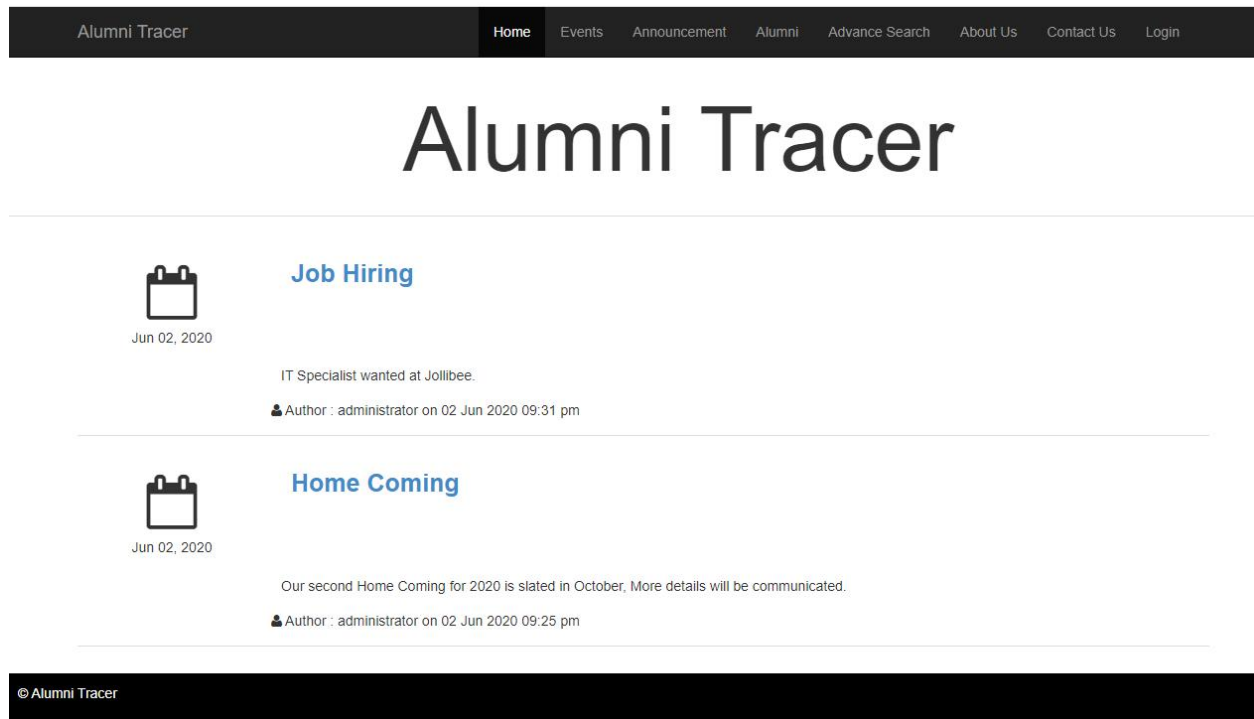
TECHNOLOGY USED

1.6 .net Framework

The .NET Framework is Microsoft's Managed Code programming model for building applications on Windows clients, servers, and mobile. Microsoft's .NET Framework is a software technology that is available with several Microsoft Windows operating systems. In the following section it describes, the basics of Microsoft .Net Frame work Technology and its related programming models.

1.7 HTML

HTML is a hypertext mark-up language which is in reality a backbone of any website. Every website can't be structured without the knowledge of HTML. If we make our web page only with the help of HTML, than we can't add many of the effective features in a web page, for making a web page more effective we use various platforms such as CSS. So here we are using this language to make our web pages more effective as well as efficient. And to make our web pages dynamic we are using Java script.

1.8 CSS

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. The basic purpose of CSS is to separate the content of a web document (written

in any markup language) from its presentation (that is written using Cascading Style Sheets). There are lots of benefits that one can extract through CSS like improved content accessibility, better flexibility and moreover, CSS gives a level of control over various presentation characteristics of the document. It also helps in reducing the complexity and helps in saving overall presentation time. CSS gives the option of selecting various style schemes and rules according to the requirements and it also allows the same HTML document to be presented in more than one varying style.

1.9 SQL

SQL stands for Structured Query Language. SQL lets us access and manipulate databases. SQL is an ANSI (American National Standards Institute) standard. SQL

can execute queries against a database ,retrieve data from a database, insert records in a database, update records in a database, delete records from a database, create new databases , create new tables in a database , create stored procedures in a database, create views in a database, set permissions on tables.

1.10 *PHP*

PHP is a general-purpose scripting language that is especially suited to server-side web development, in which case PHP generally runs on a web server. Any PHP code in a requested file is executed by the PHP run time, usually to create dynamic web page content or dynamic images used on websites or elsewhere. It can also be used for command-line scripting and client-side graphical user interface (GUI) applications. PHP can be deployed on most web servers, many operating systems and platforms, and can be used with many relational database management systems (RDBMS).

Originally designed to create dynamic web pages, PHP now focuses mainly on server-side scripting, and it is similar to other server-side scripting languages that provide dynamic content from a web server to a client, such as Microsoft's ASP.NET, Sun Microsystems' Java Server Pag and mod_Perl.

Chapter 4

A TRACER STUDY ON THE EMPLOYMENT STATUS OF PHILIPPINE CHRISTIAN UNIVERSITY COLLEGE OF BUSINESS AND TECHNOLOGY BS INFORMATION TECHNOLOGY.

This chapter presents the Demographic Profile of the BS IT Graduates Batches 2010-2018, which includes the age, gender, civil status, and highest educational attainment of the graduates. The Employment Profile of the BS IT graduates Batches 2010-2018.
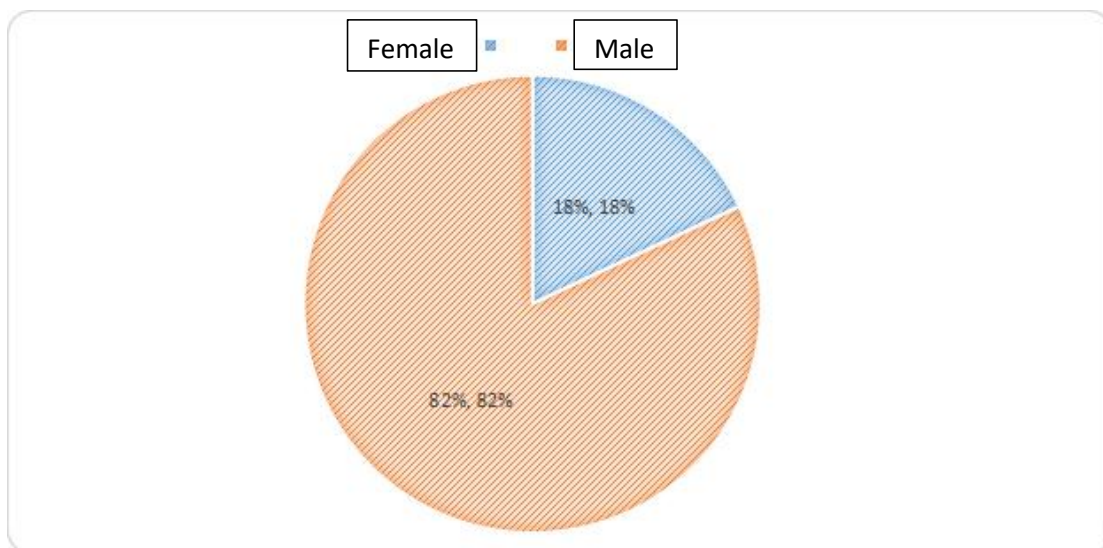
Demographic Profile of the BS IT Graduates

Figure 1

Gender Percentage of the BS IT Graduates 2010-2018

Of the 67 respondents, 55 graduates or eighty-two percent (82%) are male while 12 respondents or eighteen percent (18%) are female. The graph shows that the population of the male graduates of the BS IT program is higher compared to female graduates.

Age of BS IT Graduates 2010-2018

 N=67

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
19	-	-	-	-	-	-	-	-	-	-
20	-		1	-	-	1	-	-	-	2
21	-			1	-	4	6		4	15
22	1	-		-	1		5	6	8	21
23	-	4		-	6	7	-	-	3	20
24	-	-	3	-	-	-	4	-	-	7
25	-	-	1	-	-	-	-	1	-	2
TOTAL	1	4	5	1	7	12	15	7	15	67

The table shows that the respondents are mostly at the age of 22 and 23 because as to retrieval of the questionnaires, most of the respondents were from the academic year 2018. Of the 67 respondents, these respondents with the age of 20-22 were already permanent in their jobs because of the fact that they are still fresh in college, mostly they are in the batch of 2016-2018 and they are usually in the field of IT. In the age of 23 where in the total respondents are in this age bracket are mostly in the batch of 2014-2018. They already have an experience in terms of job but usually they are not in the field of IT because most of them are in the field of customer service or working in the office. In the age bracket of 24-25, the respondents in this age are all in the batch of 2012.
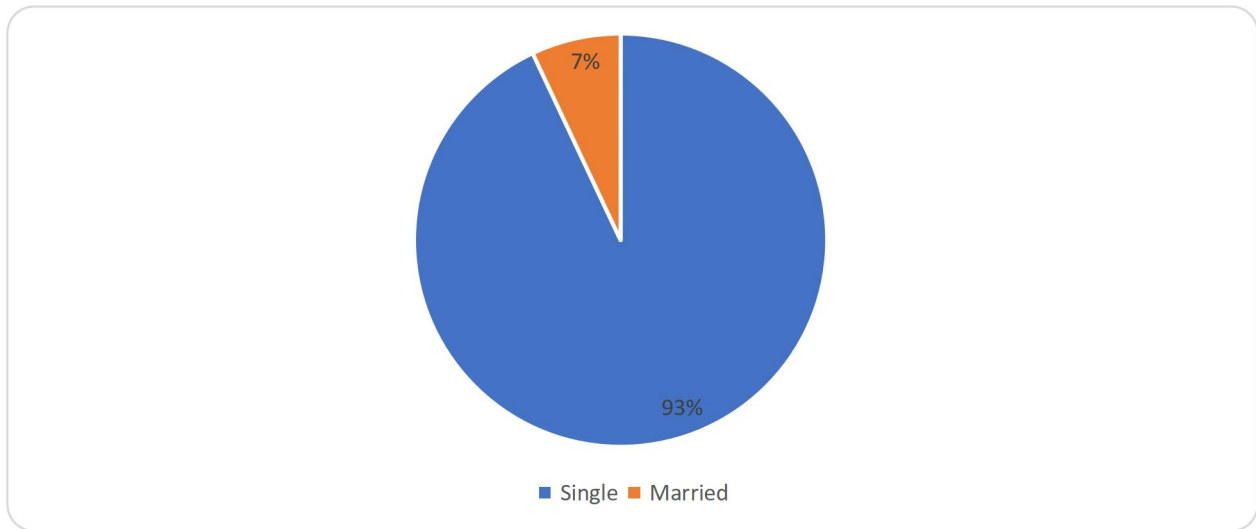
Civil Status of the BS IT Graduates 2010-2018

Figure 2

Civil Status Percentage of the BS IT Graduates 2010-2018

Out the sixty-seven (67) BS IT graduates, sixty-two (62) respondents or ninety-three percent (93%) are single while 5 respondents or seven percent (7%) are married and surveyed no widow. The graph shows the percentage of the respondents' civil status.

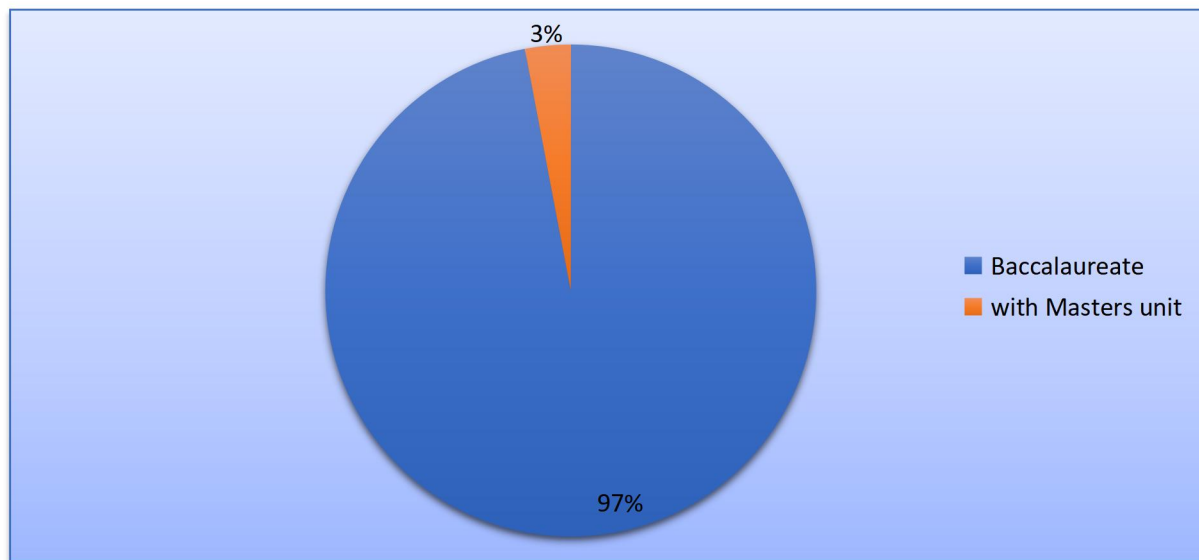**Highest Educational Attainment of the BS IT Graduates 2010-2018**

Figure 3

Highest Educational Attainment Percentage of the BS IT Graduates 2010-2018

The graph shows that of the retrieved 67 questionnaires, 65 respondents or 97 percent of the total respondents have attained a Bachelors degree. Only 2 respondents or a total 3 percent pursued their study and gained units in a Masters degree.
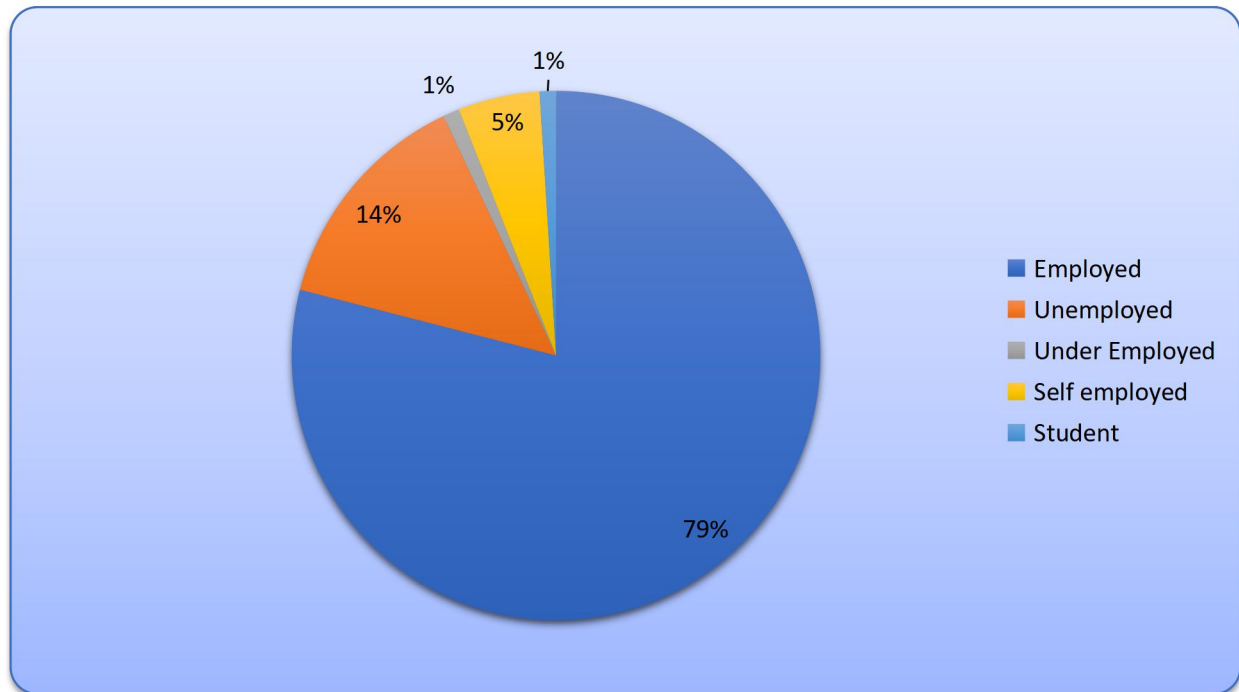
Employment Profile of the BS IT Graduates

Figure 4

Employment Status Percentage of the BS IT Graduates 2010-2018

The figure above shows that of the 67 respondents of the study, fifty-three (53) respondents or seventy-nine percent (79%) are employed, nine (9) respondents or fourteen percent (14%) are unemployed, three (3) respondents or five percent (5%) are self-employed and only one percent (1%) is underemployed. Under Self-employed, graduates have their own business, some of them are engaged in online content writing and some deal with their own professional practice and some are service oriented. Lastly, only one percent (1%) or only one respondent is a full-time student and pursuing graduate studies.
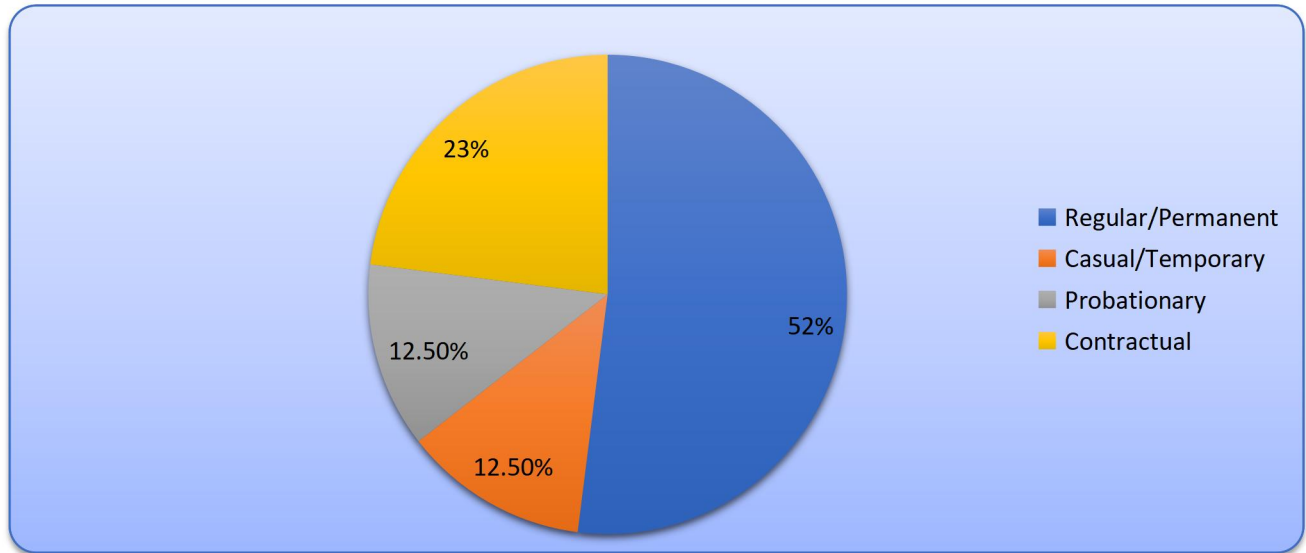
Type of Present Employment of the BS IT Graduates 2010-2018

Out of the 67 respondents, fifty-two percent (52%) or twenty-seven (27) of the respondents are in a regular status of employment. Most of the respondents in a regular basis were employed in private companies because of high salaries. Moreover, the twenty-three percent (23%) of the graduates are contractual while the Casual/Temporary and Probationary both have the same percentage of twelve point five percent (12.5%).

This figure presents that most of the respondents are in a regular basis. Wherein they engaged to perform activities which is usually necessary or desirable in the usual business or

trade of the employer.4 They are usually entered first in a casual basis before they are promoted as a regular employee.

Fig 5

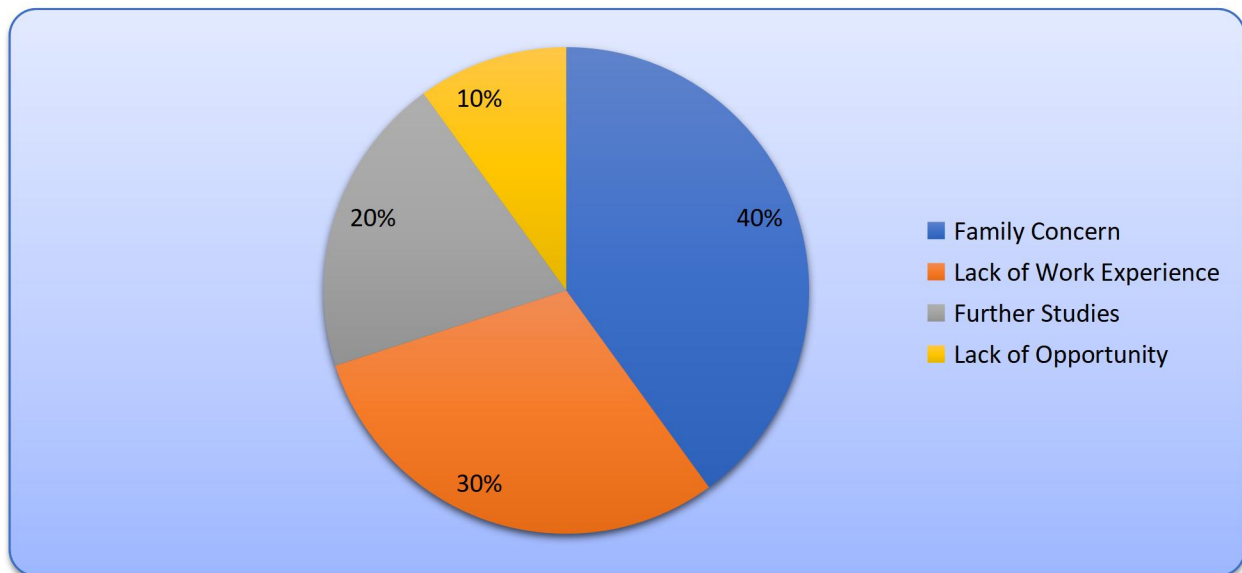**Reasons of Unemployment of the BS IT Graduates 2010-2018**

Figure 6

Reasons of Unemployment as to Percentage of the BS IT Graduates 2010-2018

Out of all the reasons of unemployment, Family Concern is the most common reason with 40% of the graduates. This is their reason because some of the graduates are married that is why they are being attached into household work as a parent and let their partners do the job for their living. Some of the graduates are legally responsible to take care of their parents and some of them are physically sick or there are some family problems.

Thirty percent of the respondents 30% said that their lack of work experience hindered them from getting employed. Three (3) out of the twenty-six (26) graduates of the batch 2016 mentioned this reason because as fresh graduates they are finding it difficult to look for a job that are suitable for them because of the required work experience as a primary qualification. Moreover, some of them do not have enough training experience during their college years.

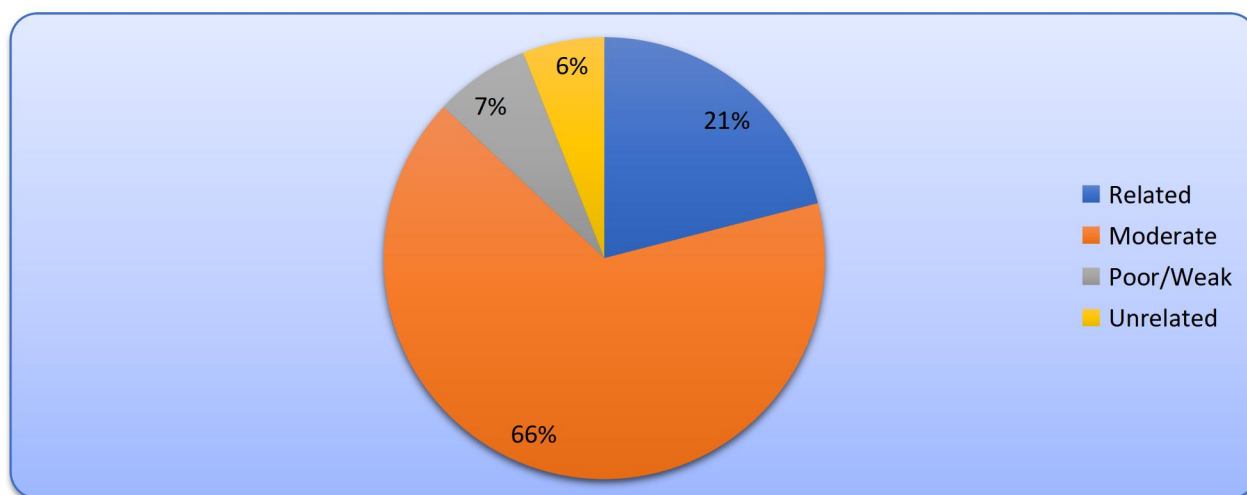**Relevance of the Course of BS IT Graduates 2010-2018**

Figure 7

Relevance of the Course to Job Rate of BS IT Graduates 2010-2018

Thirty-seven (37) respondents or sixty-six percent (66%) said that their job's rate is moderate, it includes; writing skills, advertising, copy reading and broadcasting as the top four (4) relevant skills used in their current job, twelve (12) or twenty-one percent (21%) is related to the current job as perceive in their skills used in the employment. In connection to the skills relevant in their course to current job, most of the respondents were able practice writing skills in their current job. Wherein public relation has the least skills used in their work.

Relevance of the Job of BS Graduates 2010-2018

The figure presented shows that a total of seventy percent (70%) or that thirty-nine (39) respondents employment status or job is related to the BS IT Degree. Hence, thirty percent (30%) or seventeen (17) of the respondents' current job were not related to their graduated course. This implies that most of the graduates of IT batches 2010-2018 are in line with the IT

industry or in the field of Technology. Some of the respondents use their computer skills in their jobs like writing and encoding.
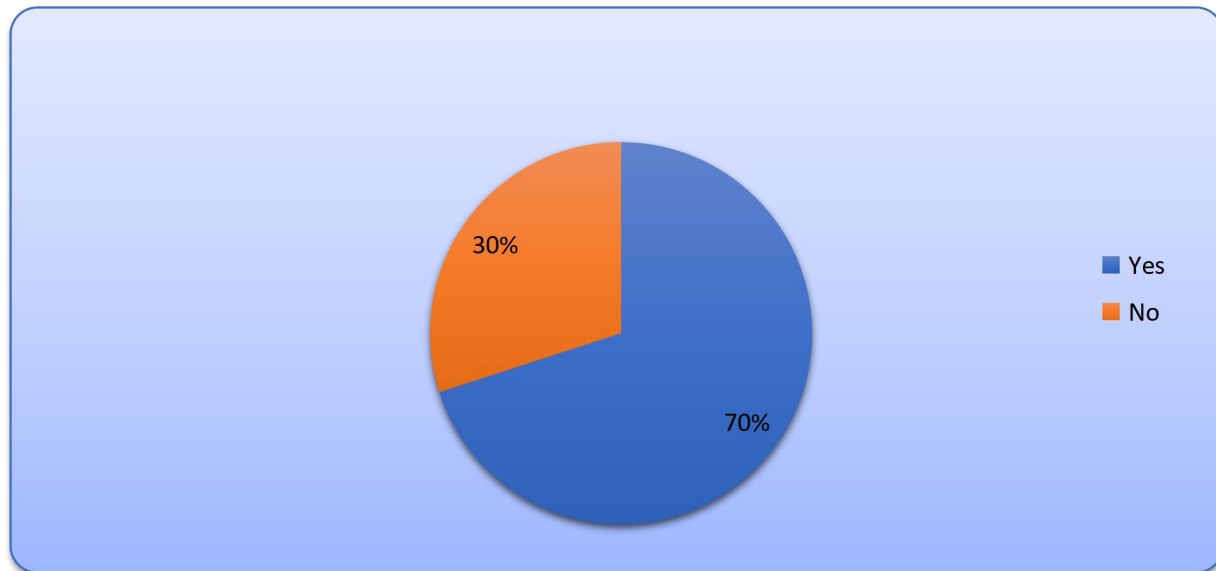
CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions and recommendations of this study.

Findings

This study presented the employment status of the BS IT graduates from batches 2010-2018. This research is the primary method to distinguish the employment status of the graduates and identifying whether the skills gained in the college is used or not. With this matter, it will help the researchers to modify the subjects and other activities that were least relevant to the field of work; and continue to improve the subjects, school activities or seminars that are significant to their job.

A sample size of 67 respondents was taken from BS IT graduates from batches 2010-2018. The following are the vital findings of the study:

Demographic Profile of BS IT Graduates

a) As to the age range of the 67 respondents, 23 respondents are 22 years old, 20 respondents are 23 years old, 13 respondents are 21 years old, 7 respondents are 24 years old, 2 respondents are 20 years old and also 2 respondents are 25 years old.

b) For the gender, out of 67 respondents, 82 percent are female while 18 percent male.

c) For the civil status of the respondents, 93 percent are single while 7 percent are married.

d) Of the total numbers of respondents, 97 percent have earned a Baccalaureate degree while 3 percent pursued master's unit.

Employment Profile of the BS IT Graduates Batches 2010-2018

e) In terms of industry that they belong in, of the 67 respondents, 77 percent of the respondents are working in private offices, organizations or businesses, 18 percent are employed in the government offices and agencies, and only 5 percent are having their own business.

f) As of the Employment Status of the BS IT Graduates, out of 67 respondents 79 percent are employed, 14 percent are unemployed, 5 percent are self-employed, 1 percent is underemployed and also 1 percent is still a student.

As of the Types of Present Employment of the AB Journalism graduates, out of the 67 respondents 52 percent are in a regular status of employment. 23 percent of the graduates are contractual. And lastly, 12.5 percent of graduates are casual/temporary and probationary.

In terms of Reasons of Unemployment of BS IT Graduates, out of 67 respondents 40 percent are family concern is the most common reasoning, 30 percent are lack of work experience, 20 percent are further studies and the remaining 10 percent are lack of opportunities.

Database

The researchers made use of Microsoft Excel to sort and categorize the list of graduates into the following: Family Name, Given Name, Middle Name, Gender, Permanent Address, Present Employment Status, Contact Numbers and Name of Company. Through this database, the College of Business and Technology will be able to populate its alumni directory and thus, easily access information and contact the BS IT graduates.

Conclusion:

The following are the conclusions drawn from the study.

In the demographic profile of the BS IT graduates from Batches 2010 − 2018, majority of the

respondents are aged 22, single, female and earned a baccalaureate degree. In terms of the respondent's employment profile, it can be concluded that a high number of the respondents at 79% are employed with an added 5% who considered themselves as self-employed. 39 of them use this skill in their professions and considered it as the most relevant. Lastly, the database generated from the respondents will provide sufficient information to easily contact these BS IT graduates and serve as reference for the department and the college's alumni directory.

Recommendations:

The following are the recommendations suggested by the researchers and respondents of this study.

1. Continue conducting tracer studies and develop a database system to be able to have a regular update on the alumni of the college.
2. Expose the BS IT graduates to experience the real work in a IT field.
3. Reinforce teaching methods and activities that would further improve the writing/ editing skills of students, and to promote their critical thinking the way they analyze and see situations, very important.
4. Seminars, conferences, and workshops with credible IT Specialist would also be nice so that familiarity between the practitioners and students will take place. Public relation and/or employment "know-who's" will certainly open a huge opportunity to the BS IT students to land a spot in Technology fields given such setting.
5. Suggest elective subject in the curriculum of BS IT program.
6. Suggest that IT graduates should take unit in a master's degree to strive for the higher position or a regular position for a higher salary.
7. Provide adequate facilities in IT labs to enable the students to experience and enhance the skills on programming, encoding and the likes.
8. Have some compiled clips on the submitted articles and projects of the students to be able for them to present applications their accomplished outputs.
9. To further improve this tracer study by covering more batches and graduates from the BS IT program.
10. Recommend other courses to continue tracer study especially to the CASTE department in the college.
11. Pursue higher education that will give graduates more opportunity when it comes to employment.
12. Enhance the curriculum time to time to be use by the students in practicing the skills that they have learned in college.

Notes

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