A Feasibility Study on Offering Bachelor of Arts in Information Technology (With Business Track on Business Processing Outsourcing)

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Abstract - This study aimed to determine the (1) respondents' profile, (2) the College's strength and weaknesses, (3) the demand and supply of ABIT graduates for the next five years, (4) the course's feasibility in Rinconada, and (5) the socio-economic benefits in offering the ladderized degree. Using descriptive survey method and random sampling, data were gathered from 1,578 graduating students from eight high schools in Nabua, Camarines Sur through questionnaire and informal interview. Statistical tools used are frequency count and percentage technique.

Findings showed that 63%of the respondents were female, 56% were 15-16 years old, and 33% were parents-dependent. The College is ISO – certified with academically conducive, state-of-the-arts facilities and capable faculty members but no resident instructors of outsourcing-related course. It is situated in a province with two BPO companies which require about 16, 000 employees by 2016 subject to yearly increase. But few graduates are hired due to lack of required competencies and no school offer ABIT with BPO specialization. Respondents considered the course attractive (60%) and highly employable locally and internationally (50%).

To conclude, offering ABIT with BPO specialization is feasible since the external and internal aspects are favorable, the needed facility and faculty are available and no other school in Camarines Sur offers it. The administration supports the new program as part of the College's mandates and as stipulated in its 2014-2018 Strategic Development Plan.

Keywords: ABIT, Ladderized Course, Feasibility Study

I. INTRODUCTION

Institutions of higher learning are considered the primary sources of quality manpower, technology and knowledge of any nation in its attempt to achieve the desired level of development. Education is the need of the present and the demand of the future. The world needs to offer educational programs that will prove to be beneficial for the society. Not only is it important to offer educational programs that meet the needs of today and also meet the predicted demands of tomorrow, but it is more important to ensure that the programs are of good quality.

The Department of Labor and Employment (DOLE) recently launched Project Jobs Fit: The DOLE 2020 Vision where it studies the most in-demand jobs and hard-to-fill jobs in the country.

The Labor Department wants to show that contrary to what most people believe, there are jobs available in the country. Here are the lists of jobs (per industry) that are waiting to be filled in: Agribusiness, Cyber services (Call Center Agent) Health, Wellness and Medical Tourism, Hotel and Restaurant Mining. In the report of DOLE (www.jobopenings.ph) the researcher notices that jobs in BPO are in no. five in the list which are considered in demand and need thousand of graduates on IT with BPO trainings.

In Camarines Sur, there are two international companies on Business Processing Outsourcing: The Sutherland Company and IBM Company. These companies require thousand of graduates who can fill up the vacant position every year to serve their worldwide clientele.

The offering of Bachelor of Arts in Information Technology with business track on BPO curriculum will response to the need of workers in the province of Camarines Sur alone.

The developed world knows the importance of accredited programs and recognized credentials. It is of paramount importance that educational programs that are offered should be recognized and the institutes should work towards getting these accredited since that consumes time and efforts. Furthermore, all educational institutes: schools, colleges and universities must make continuous improvements in the degree programs they already offer, accredited or not. It is also important that the overall delivery of education be improved from all aspects. The College of Information and Communication Technology comprises of four different courses offered; two (2) of which are degree programs and the other are non degree programs.

The College of Information and Communication Technology is a newly created department of the Camarines Sur Polytechnic Colleges. The legal basis for the creation of this department is through the Board Resolution No. 06-294, dated May 31, 2006 at the CHED Central Office, San Miguel Avenue, Ortigas Center, Pasig.

The IT Education in the country is very fast when it comes to development, almost every year the computer development particularly in software and the hardware changes very fast. The curriculum also requires revising / changing from time to time for the college to cope up with the needs of the market.

The present ladderized curriculum of the Two-Year Certificate in Computer Technician is one of the existing curricular offerings of the College of Information and Communication Technology. The present curriculum has a total of one hundred three (103) units including On-the-Job-Trainings.

For several years of existence of this course in this college, majority of graduates continue their studies to a degree course. For some students, they enroll in universities and colleges in

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the Rinconada area particularly those graduates who have the capability and ability to sustain their baccalaureate degree course, and of course with financial support from their parents. In some instances, during enrolment, some graduates of this course seek to shift to Engineering or ICT leading to a degree course.

ICT Programs are now in demand and at the same time the market is looking for qualified graduates who could work in Business Processing Outsourcing (BPO) companies and we need several degree programs to address the demand of the market particularly the Business Processing Outsourcing Companies worldwide.

Therefore, we believe that there is a need for expansion in offering Bachelor in Arts in Information Technology program with Business Track on BPO – Business Processing Outsourcing (CHED Memorandum No. 34, 2012).

Thus, this research was conducted to identify the need for modification of the existing 2 – Year Certificate in Computer Technician course to Bachelor of Arts in Information Technology, a four - year ladderized course.

Education has been the focus of many research papers and many authors have studied different aspects of business education or in other fields. Most studies about higher education have been done in other countries and few in America. Lenington (2002) stated that there is a war going on between profit and not for profit schools or nontraditional versus traditional schools of business and education. Leclair et al (2000) argued that educators teaching international business courses need to have knowledge about the main business functions of international economics, management, marketing, accounting, and finance. They stressed on the importance of ethics in business education. Andrew (2003) suggested that for students entering in the field their perceptions of the banking and finance profession revolve around questions of overall interest, relationships of persons working within the profession, the manner in which the profession deals with problems and tasks, and the nature of these problems. Broekemier (2000) studied the College choice criteria between students and their parents and they presented differences between male and female students. Their study indicated that female high school students are more concerned with academic or education-specific issues than are their male counterparts. The male students stated that that some non-academic factors, namely social life and athletic programs, are more important to them than they are to females. So college recruiters should also incorporate some non-academic issues more prominently into their communications with college-bound males. Females also showed concerns for safety issues.

Alberto (2008) conducted a research and focused her study on offering a new program at the Aklan Catholic Colleges entitled "Bachelor of Arts in Broadcasting: A Research -based industry Demand Analysis." The result of the study is feasible since the university has enough human resources, technology and other needed resources. The marketability of the proposed curriculum was analyzed from three perspectives: 1) Target Enrollees; 2) Broadcast Media Managers; and 3) other employment firms for the employability of the graduates.

Doctolero (2005) conducted a research study on offering a Bachelor of Arts in Marketing Communication in the same university. She found out in her study that offering this course is feasible because based on the result of the data gathered and analyzed there is no school in the Visayas region offering this course. Majority of the respondents want this program to be opened for the reason that to those who are inclined to this course may not go to Manila anymore just to enroll or finish this course.

Rañeses (2006) conducted a research study on offering a Bachelor of Arts in Performing Arts in the university. She found out in her study that offering this course is feasible because based on the result of the data gathered and analyzed there is no school in Aklan or in the region offering this course. Majority of the respondents want this program to be opened so that those who are inclined to this course may not go to Manila anymore just to enroll or finish this course.

The result of the research study conducted by De Leon, et. al. to offer Bachelor of Arts in Applied Philosophy at Bicol University was also feasible. One of the cited reasons by group respondents is that there is no similar program offered in the Bicol Region and students who wish to enroll in this program no longer need to go to Manila to enroll in this course.

Nepomuceno (2005) conducted a research and focused her study on offering a new program at the Bicol University entitled "Bachelor of Arts in Broadcasting: A Research -based industry Demand Analysis." The result of the study is feasible since the university has enough human resources, technology and other needed resources. The marketability of the proposed curriculum was analyzed from three perspectives: 1) Target Enrollees; 2) Broadcast Media Managers; and 3) other employment firms for the employability of the graduates.

In view of the mentioned literature and studies, the researcher found out that this feasibility study is also feasible since the college has enough human resources, technology and other needed resources. The researchers believe that the college can offer, sustain, and maintain the proposed program.

II. OBJECTIVES OF THE STUDY

The objectives of the study was focused on gathering and analyzing data to prepare a feasibility of offering a four-year ladderized course in Bachelor of Arts in Information Technology with Business Track on Business Processing Outsourcing at Camarines Sur Polytechnic Colleges, Nabua, Camarines Sur. Specific objectives: To identify the Strength and Weakness in terms of External and Internal factors and To determine whether the proposed curricular program is feasible.

III. MATERIALS AND METHODS

This study employed the descriptive method utilizing questionnaire. Checklist and documentary analysis were the main data gathering instruments. This method was used since it the intention of this study to describe analytically an existing situation regarding the operation of a secondary as basis for the preparation of a preliminary plan for the offering of new programs / courses in the College (Sevilla et al., 1992).

Respondents

The respondents of this study consisted of eight High Schools in Nabua, Camarines Sur and the nearby school. These schools were considered feeder schools of the College. The total graduating student- population is One Thousand Five Hundred Seventy-Eight (1578) from the said schools. Table 1 presents the respondents of the study.

Table 1. The Respondents of the Study

Name of School	No. of Graduating Students	Percent Share	Sample Units
Malawag High School	129	8.2%	26
Lourdes Provincial High School	75	9.5%	30
Nabua National High School	987	62.5%	199
San Vicente High School	48	3.0%	10
La Purisima High School	40	2.5%	8
Tandaay Provincial High School	109	6.9%	22
Victor Bernal High School	40	2.5%	8
Bato National High School	150	9.5%	30
Total	**1578**	**100%**	**319**

Data Gathering Tools

Several Tools were employed in gathering the needed information in this research, namely, questionnaire-checklist, interview and documentary analysis.

Preparation of the questionnaire. The researcher considered some reading materials, such as books, magazines, journals, theses and the internet.

Validation of the questionnaire. To facilitate first draft of the questionnaire was validated by school principals and some students in Bula National High School, the purpose of which is to determine the clarity and understanding of the questionnaire, and find out which item or items needs to be modified, deleted or changed. Items which were vague or needed improvement were revised. The questionnaire was then reproduced for the final distribution.

Administration of the questionnaire. The researcher personally distributed the questionnaires to the target respondents and retrieved after a few days. Only verbal permit was secured from the head of schools. The data were then tabulated, analyzed and interpreted.

A personal interview was conducted to by the researcher to cross-examine the responses in the questionnaire.

The table shown the distribution of students who participated in the conduct of study. Majority of the students who participated in the study were coming from Nabua National High School. It was noted that this school situated in the center of Municipality of Nabua has the biggest population since even students from the nearby provinces and town were

studying in this school for strategic location. One school in the nearby town of Nabua was considered to be part of the feeder school since the distance of school is just less than 2 kilometers away. The smallest schools which participated were Victor Bernal High School and La Purisima High School. These schools with small population are situated in the remote area of Nabua, Camarines Sur.

Interview

The interview was employed as a technique in gathering data and information needed in this study. The researcher interviewed HRD Managers of BPO industries and Camarines Sur and Albay Provinces to get the first hand information regarding the needed workers in the BPO Industry and other concerns on this research.

Documentary Analysis

Since the study aimed to study the feasibility of offering AB in Information Technology in the College, a need for the documentary analysis was considered necessary. The important documents which were subjected to analysis were the papers pertinent to mission and goals, academic programs, faculty, and the data presented in the website, HRM office, record section and property office of the College. Almost all the important data and information of the College were retrieved for further investigation.

Statistical Treatment of the Data

The following statistical tools were used in this study.

The **Slovin Formula** was used to determine the sample size of the population.

Percentage. The statistical technique was used to determine the sample units of the population per participating school.

IV. RESULTS AND DISCUSSIONS

SWOT Analysis

Some important documents such as records, data and files from the College were utilized by the researcher for SWOT Analysis. Personnel who keep important documents were involved for the strength, weaknesses, opportunities and threats (SWOT) Analysis.

The Strengths and weaknesses of in term of:

Internal Aspect

Vision: CSPC as a regional center of excellence in Polytechnic education.

Mission: CSPC shall take the lead in providing highly technical and quality professional education through ladderized curricula in fisheries, trades and technology, arts and sciences; generating technology and undertaking sustainable community development in accord with the College mandate, thrust and directions of higher education and national development goals.

Goals and Objectives

Specifically, the College is strongly committed to:

1. Provide quality instruction, learning environment and other support services to produce graduates who are morally upright, service-oriented, technologically and professionally competitive and innovative;
2. Conduct research and development to generate new scientific knowledge and advanced technology through appropriate utilization and conservation of natural resources for sustainable development;
3. Implement viable production and income generating projects;
4. Undertake responsive and relevant extension and community development services; and
5. Strive to be self-sufficient, self-sustaining higher education institution.

THE SWOT ANALYSIS

Strengths. In the recent years, the College has overcome several weaknesses during the decade operation. Based on the assessments made the following are strengths. First it is now an International Standard Organization certified by TUV SUD Philippines. Second, the classrooms are conducive for learning, the Laboratory Facilities and equipment are state-of the arts with latest software/ hardware technology. The College is equipped with internet facilities. Third, the Faculty of the College is almost master's degree holder and the administrative personnel are educationally prepared with appropriate experience. Fourth, transaction in the College is highly systematized with the aid of Computer. The Bachelor of arts in Information Technology with business track in BPO is in demand in the nation due to global competitiveness. Almost all of the advanced countries in the world are communicating through the computer or internet. In Camarines Sur alone there are two giant Business Processing Outsourcing Companies that need thousands of Call Center Agents to address the demand of the world on this business. Lastly, in the Philippines, from the report of the BPO industries, they are hiring almost thousand but due to mismatch only few fit the job.

Weaknesses. The College is still offering in demand computer courses in the Camarines Sur and soon will offer the BA in Information Technology. Most of computer science or Information technology graduates landed a job after graduation. But graduates of this course did not apply in the BPO industries. Based on the data gathered from the BPO industries, few graduates from the College are connected with them because they lack of training as Call Center Agents. And lastly, Instructors in the College who handle the English Proficiency are from the Camarines Sur Trade and Investment Center under the Office of the Governor. Instructors in the College who teach this course stayed only for only a year or so, then they work abroad.

Opportunities. The College is International Standard Organization certified . It is noted that based on the Registrar files, it shows that students are coming from Albay and the whole Camarines Sur Province. Another opportunity that the students, faculty and staff of College availed is exposures to the latest computer software's and hardwires like networking system and internet.

The Threats. Big number of students relies on scholarship given by the politician, Now that the controversial PDAF is on hold, there will be a lot of students who will not enroll in the College because of the financial aspect of the parents or siblings who support their schooling.

Faculty Members Needed In This Curricular Program.

The AB in Information Technology shall have the following faculty complement which are presently available in the College. The College has twelve (12) ICT faculty members with plantilla positions to handle / teach ABIT subjects. Other faculty members assigned in this department will handle / teach general subjects and other required subjects.

Laboratory & Facilities
a. Facilities Development

Plant location/structure/layout description

The Four -Year degree (Ladderized Program) in AB Information Technology will be housed at the Duran Hall Building where the CICT is situated. Duran hall has 6 classrooms. On Building Facilities/Equipment, the following facilities and equipment are available in the College of Information and Communication Technology: a) Libraries. The General Library is housed in the College with collection of books, references, journals, publications, etc., b) Internet Room. Internet service is available to all students and faculty members of the College; c) Two (2) ICT Laboratories with a total of 70 computer sets with complete peripherals; d) Amphi-theater which serves as a center for cultural presentation, meetings, etc; e) Speech Laboratory available to all students who are studying Speech Communication; f) Electronics Laboratory and the Electronics Communication Laboratories with available peripherals and gadgets.

External Aspect

BPO Industries / Markets

In Camarines Sur alone there are two Giant Business Processing Outsourcing Industries. Sutherland is located at Pili Camarines Sur and the IBM is located at the heart of Naga city. While in the province of Albay, there are three Business Processing Outsourcing Industries like the Sutherland located at Embarcadero, Innodata BPO located at the southern part of Legazpi City and the Southern Luzon BPO situated at the center of Legazpi City. These mentioned industries need thousand of BPO workforces (agents and technical supports) to supply the demand of the market.

The Business Process Outsourcing (BPO) industry continues to post robust growth, exceeding its targets last year. Data from the Information Technology and Business Process Association of the Philippines (IBPAP), formerly Business Processing Association of the Philippines, showed that

revenues rose 18% to $13 billion in 2012 from $11 billion in 2011. The number of workers also rose 21.8% to 780 ,000 in 2012 from 640,000 in 2011. This year, the number of workers is expected to rise to 926,000. Under the BPO roadmap, the government targets $25 billion in revenues and a workforce of 1.3 million by 2016. The call center segment is expected to corner $14.7 billion of the BPO revenues, and 816,000 of total jobs to be created by 2016. (Manila Bulletin – April 11, 2013).

Financial Feasibility

On Financial Requirements for the Five -year period, based on the conducted research, the College is financially stable and can sustained and maintain the operation of this proposed ABIT.

The Demand and Supply of graduates in ABIT

Market Feasibility

On Demand for The AB in Information Technology And Related Skills In The Current Job Market

The marketability of the proposed modification of Computer Technician to Bachelor of Arts in Information Technology was analyzed from the three perspectives: 1) target enrollees; 2) ICT companies & local shops in Camarines Sur; and 3) other employment firms.

The Demand And Supply Of Graduates In The Bachelor Of Arts In Information Technology For The Next Five (5) Years

The employment opportunity of the graduates of the course was determined through interviews with 7 HRD managers, Asst. Managers and Marketing Supervisor who manage the establishment/ company in Camarines Sur Area. The interview revealed interesting findings wherein these groups in the business sectors affirmed the demands for graduates along the field of AB Information Technology as they envision expansion of future business operation.

From the result of the interview, it was found out that business industries in Camarines Sur to name a few, Sutherland Global Services, IBM Company, SM Department Store, Smart Communication, Globe telecom, Bayantel and Sun Cellular are really in dire need of graduates who possess the necessary technical knowledge and competencies for the work requirement of the job as information technology analyst, Network administrator, business process analyst, network administrator, chief technician, sales manager, supervisor, BPO worker, etc., It also revealed in the informal interview that most of their employees are graduate of other fields such as commerce, education, business administration, criminology, computer secretarial or office administration which are not related to the nature of information technology with track in BPO system.

Is The Course Feasible To Rinconada Area?
Result of the Interview.

Based from the interview conducted, hereunder is the excerpt of the results as opined by the respondents, which showed favorable support the offering of Bachelor of Arts in Information Technology.

On attractiveness of the course:

Twelve (12) or 60 percent of the respondents answered Yes. Meaning they are saying that the course will attract students to take the course. " *In implementation of programs, projects and activities, information dissemination is a must and should form part and parcel of the entire system. A curriculum should be designed in which all the needed competencies needed by graduates are built in. Training Regulations must be followed religiously and carefully. Information System or ICT men in Rinconada area are outnumbered by other sectors thus; there is a need to produce more qualified graduates".*

On industry employability:

Ten (10) or 50 % answer that: "*The graduates of AB in Information Technology will be highly employable not only in their own field but also in other firms, as well as in the provinces, regions, country and even around the world. As a graduate of the course they are expected to possess a wide array of skills and knowledge in Information and Computer technology. As graduates with enough competencies acquired, they could land in any work and in any company or establishment be it as system analyst, network administrator, business process analyst, data quality specialist, system auditor, supervisor, manager, senior technician, sales manager, marketing officer and trainers in the local, national and even international companies".*

Suggestions /recommendations to improve the proposal of AB in Information Technology

Fourteen (14) or 70 % or respondents answer that*: "With the foremost reason of the need to professionalize the information technology graduates with specialization on BPO or AB Information Technology graduates, there is a need to incorporate in the curriculum in- depth theoretical inputs on the observance of professional ethics and laws governing ICT technology, science and technology based instructions and all the required competencies as stated in the Training Regulation promulgated by TESDA. The college should do something to expose students in actual field / companies in highly urbanized places in Luzon. Also, the students should improve on English language proficiency and develop good personal relationships with other people".*

The Viability Of Offering The Program
On Enrollees:

To offer the AB Information Technology course is very vital based on the result of the survey conducted to the feeder schools of the college. Majority of the respondents are willing to enroll in the said course. Majority of the present enrollees of the first year Computer Technician are willing to continue with the degree and enroll in the new program. Majority of the parents give support to the new program, which was revealed and confirmed during the College's Parent-Teacher Association meeting.

On Facilities and Equipment:

There are enough facilities and equipment available in the college. These facilities and equipment are the existing facilities and equipment used by the existing program namely, Information Technology and Computer Technician program. On classroom, CICT is utilizing the Duran Hall which has six classrooms plus the two classrooms at Shop Building 2 which were converted into lecture and laboratory rooms for CT students.

On Instructors:

There are strong and qualified five (12) ICT faculty members; eight (8) of whom are already graduate of Master in Information Technology and the other four (4) is enrolled on the thesis writing or project study in Aemilianum College in Sorsogon, Ateneo De Naga University in Naga City and Polytechnic University of the Philippine in Metro Manila. There are also two plantilla positions which are vacant for ICT faculty applicants. There are two potential Language faculty Members who have trainings on English Proficiency Program conducted by the Provincial Government of Camarines Sur who could handle subjects / course on BPO tracks.

On Market/ Industries:

Majority of the respondents affirm that the graduates of this course are in demand particularly that mostly of the transactions are done through the ICT media or technology.

The Socio – Economic benefits in offering a four – year ladderized course in Bachelor of Arts in Information Technology.

From the conducted interview to concerned officials and residents of the Rinconada area, it shows that offering this program is feasible for the following reasons: There is no school in the area which offers a ladderized AB Information Technology with field of specialization on BPO which is a unique program; there are very few Information system analyst, business process analyst, system auditor or Information technologists to maintain the computerized system of the businesses in the area; majority of the employees of businesses who are using ICT technology or computerized electronics equipment or apparatuses are not in line with this field; and majority of the technician or IS technologist do not possess the required competencies and knowledge needed by the sector. Further, businesses in the area need to call up technicians from Metro Manila when their clienteles complain of trouble or malfunction of ICT equipment or software trouble or program thus, restoration is delayed. And in Camarines Sur Business Processing Outsourcing Workers are in demand. With the establishment of the two multi-national companies in Naga City, alone the Sutherland and IBM Companies needs about 16,000 employees by 2016 and beyond and these would be multiplied due to the increasing demand of the BPO workers in the world.

V. CONCLUSIONS AND RECOMMENDATIONS

The study revealed that offering an additional course like the Bachelor of Arts in Information Technology with track in Business Processing Outsourcing is feasible. The external aspect and internal aspect are favorable to the College since based on the presented data gathered, the needed tools, equipment and human resources to be part of the program are available. Based on the vision, mission, goals and objectives of the College, the proposed new curricular offering is part of the mandated courses of the College. The College can continually and sustains the operation of this new program. On Administration, the College is very supportive in offering new program as stipulated in the Strategic Development Plan of the College 2014-2018. On schools offering this course, no schools within the province of Camarines Sur offer this unique course to answer the expanding demand of BPO workers in the region

It is hereby recommended that the College vision , mission goals and objectives may be reviewed and modified from time to time to come up with the changing demands and needs of the present time. The College's strong and weak points along areas of evaluation should be strengthened and sustained. Efforts may be done to improve the weak points of the College. Quality not quantity along the areas of evaluation should be one of the concerns of the College. Faculty Development program should be developed and be implemented particularly on EPP instructors. Offer this course by SY 2014-2015 to address the demand of call center agents in the region and the world.

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