



COLUMBAN COLLEGE

Olongapo City

College of Computer Studies



Chapter 1

BACKGROUND INFORMATION

Robert Iger says "The heart and soul of the company is creativity and innovation." Simply, it means that there are no perfect solutions to any problem that the company and organization are dealing and facing with but through modernization, and introduction of new ideas, methods and strategies all can be put into right place. These problems are the cause why some of the organization today suffers from loss or bankruptcy. Moreover, the market are so stagnant or the people behind the organization have their own and variety of socio political and cultural problem but they are trying to solve existing problems. It end up like a cycle of problems and solutions. It's a never ending problem solving scenario. So why some organization still suffers from that kind of situation?

Thus, innovation plays an important role to them; it serves as the backbone and core operation of the company. It is more likely the heart that pumps the blood and distribute it to all organs to make it more functional and gives its essence. The mind that leads the direction where they were leading. Consequently, innovation is the heart and mind of organization that leads them to success and triumph.

Organizations need to move forward in a fast pacing world of technology is both highly competitive and rewarding. Technology can be the tool to make this all happen and to make innovation possible. With the help of technological advancement, each and every organization will become more flexible and manageable in the long term run. It can be claimed that innovation is the key idea that shapes organization's life and purpose. It also provides an edge in being able to enter new markets faster and deeper. Innovative organizations recognizes that failure is an important step in the process of success. They understand that with each failure, the organization moves one step closer to success through formulation of bright solutions. In this way, failure was seen with a positive value.

In this study, the file system repository allows access to files which have been uploaded into designated folders on the server, Likewise a file system repository may be available site



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wide for everyone or within an individual course (set up by admin) or for an individual administrator regarding course and individual repository configuration. This must be done by a systems admin who has write permissions to the server directories. Once a repository has been created and files uploaded to it, the files can be stored and made available to them.



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Current System

Columban College Incorporated is a Catholic Institution dedicated to provide the educational needs of the City of Olongapo and the surrounding provinces of Zambales and Bataan for more than 58 years guided by the motto. "We are Christ's and not our own." The main campus is located at Barangay New Asinan and the satellite campuses are in Barrio Baretto and Barangay Navlo, Sta. Cruz Zambales. Rev. Msgr. Crisostomo A. Cacho, VG,CA,MA, is the present College President and was being appointed in the year 2006. The school offers quality education from Basic Education, Undergraduate to Graduate Courses and Special Education Program. It is composed of (6) six Colleges which offer undergraduate courses, one of which is the College of Computer Studies (CCS), a college that is inspired by the institution's vision which is to be a leading Christ-centered provider of Information Technology (IT) professionals.

As of today, College of Computer Studies, Columban College have its own way to innovation practices. It assures that the implementation of each and every Information System will be beneficial to the organization. However, the current system or the current process which takes place in an organization helps them to move step further which it is on their way now. So as a proponent, this study, researches and design a system to make it possible. Eventually or as it continues it leads them to the edge of information technology.

In definition of a file repository as a central place in which an aggregation of data is kept and maintained in an organized way, usually the computer storage was used by the organization in different approach and structure. It is just like a cabinet where in all your files and important documents were being kept accordingly. College of use shared folder as their system to manage faculty and student's information using network drive from server, each and every of them has its own accessibility permission to access.

For a long period of time, the CCS office has been using computers to do paper works, documentations and other day-to-day office tasks. Indeed, a functional and useful technology is being utilized yet the manual efforts being exerted and time consumed were neither dramatically lessened nor decreased.



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The primary operations of the college were non-stop, starting from pre-enrolment up to post-graduation affairs. Out of these many activities (2) two main concerns were raised by the CCS office upon the interviews conducted by the proponent.

The first concern was the preparations of the following, done before the beginning of classes. (1) Students Master list (2) Instructors account (3) Laboratory Activities.

1. Student Master List. As the network administrator generate or activate students' account. This is done by giving each student their username, password and lastly the user level based on their accessibility requirements. Once the student have successfully accessed, they could be able to manage their own network drive provided by the server.
2. Professors/Instructors. At this phase, as the network administrator of the organization assigned network accounts to the CCS professors corresponding to their subjects. This is done by creating username and password for each professor. This is completed once all the subjects are assigned to their corresponding professors.
3. Laboratory Activities. At the very start and as the class is ongoing, each student will have the privilege to manage their network drive according to subjects with the availability of laboratory unit. Furthermore, if the instructors or professors prepares exercises and activities for students, the file is being place in the network drive wherein the students can have access through share
4. Folder. In short, students can only have their assigned exercises and activities by getting it in the same network drive being used by the instructors or professors. Likewise, the students will save their accomplished works on the same network drive which will be checked by the instructors or professors thus, will be recorded afterwards.



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Disadvantages of the Current System

The organization used network for their laboratory computers wherein each and every students and faculty can access their network drive. They used network shared drive. The primary function of this is to store and manage all necessary files across the network that will be available to use by the students and faculty. This kind of technology allows them to manage their own files according to their network account provided by the network administrator of the organization. The following are the disadvantages of the current system that the proponent found out.

1. **File Management** - Every student have the authority to manage their own files. The example of these files is the laboratory activities, documents, references, research, or even personal files that needs in their respective subjects. They are free to do it accordingly; it means there are no preferences for structuring their folder that leads to inconsistency.
2. **File Security and Control** - Every account of student and faculty have secured username and password across the network. But the main concern is that, the file is limited to security and control. Moreover, the network administrator doesn't have control over student and faculty files in granular level.
3. **File Duplication** - In this situation, student and faculty have complete control of their files as a result, duplication are possible which may lead to store of more spaces in the network drive.
4. **File Distribution** - During the process of laboratory activities, instructors or professors distribute and disseminate files to their students by means of shared folder of their network drive. So the student can access that simultaneously. The main problem is that, the instructors or professors don't have a notification informing them that their files are being distributed to them. In addition, the students don't know the files are already shared unless being instructed by the professor or instructor. It is very difficult to facilitate their files from single source to multiple channels.



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5. **File Recovery** - It is a retrieval of a missing files or deleted files. Using network shared drive, the student and faculty can manage their files but can no longer recover the missing or loss files. Accidents happen all the time especially in network drives.
6. **File Audit** - The network administrator doesn't have the capability to monitor every change in files of students and faculty. So that safety and security is no longer ensured in a network environment. Moreover, all the files being stored remains unsafe and of the rogue accounts or users.



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Proposed System

Since innovation serves as an important key in an organization as it leads them to the edge of information technology. The proponent developed the proposed "File Repository Management System of College of Computer Studies" in which the main beneficiary is the College of Computer Studies (CCS). This proposed study will help the college to manage the entire files of students, instructors or professors as well as the faculty members in functional and secured environment with the use of web-based platform information system. It also helps to obtain the functionality of optimization and management of files and documents accordingly. Furthermore, in order to provide a solution to the problems being identified, the objectives for developing this project are as follows:

- To have a standard and organized folder structure to be implemented and controlled by system administrator;
- To ensure security of files to be controlled and maintained by the system administrator in granular level;
- To create a detailed level of security of files that will be based on the policy that will set by system administrator along with faculty especially during their laboratory activities;
- To create a function that will filter the file by version, type and sizes;
- To increase the speed & accuracy in the process of student and faculty activities;
- To have a file recovery and backup function automatically this will be the primary requirement of any system.
- To create an audit trail function by means of event logs that will monitor by the system administrator.

To present the proposed system in a more detailed manner, discussion on the different parts of the system were provided below.

There will be three (3) different accounts provided namely: System Administrator, Faculty & Students. All of these accounts entitle to perform file management functions.



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- **System Administrator** - This account is super user or allowed to perform all admin activities.
- **Faculty** - This account is second to the system administrator wherein, it perform the level of security of their folder for student to access it especially laboratory files or reference files that needs by each student during their activities.
- **Student** - This account perform the basic file management functions like create new directory, add or upload new files, edit or move existing files, removing or deleting of unnecessary files, and lastly automatic creation of file version.

Authentication was also considered in the proposed system to prevent unauthorized access. This is security feature in order to verify the type of user or account.



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Significance of the Study

As the proponent conducted a study to this organization. It is a beneficial in both faculty and students or in college as a whole in terms of innovation, flexibility, optimization and better performance of file organization and management. It will impose all the files to become more organized, properly secured and controlled by the system itself. The available technology and the network used in organization will be maximizing its speed and performance. And lastly for the future researcher, this will be their guide and references as they continue this study in more innovative way.



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Scope and Limitation

The proposed study covers only the following:

1. **System Security** - authentication of account based on their user credentials and type;

2. **File Management**

- creation of new directory;
- uploading or adding of new files based on the type of files only;
- editing or moving of files from one directory to another;
- deleting or removing of files;
- file sharing and permission;
- file index searching and sorting;
- file optimizing and filtering by type, size, date and version;

3. **File Security**

- level access control of file directory;
- event log monitoring and security for audit trail function;

4. **File Backup**

- restoration of lost and missing files;
- automatic file backup and recovery as part risk management policy;



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Definition of Terms

1. **File** – A collection of related record, a complete collection of data treated by a computer as a unit especially for purposes of input and output.
2. **Innovation** - It involves deliberate application of information, imagination and initiative in deriving greater or different values from resources, and includes all processes by which new ideas are generated and converted into useful products.
3. **Creativity** - Mental characteristic that allows a person to think outside of the box, which results in innovative or different approaches to a particular task
4. **Repository** - Storage for indefinite or permanent placement. In comparison, a depository is in which something is placed to be taken out later.
5. **Metadata** - Data that serves to provide context or additional information about other data. For example, information about the title, subject, author, typeface, enhancements, and size of the data file of a document constitute metadata about that document.
6. **Optimization** - Finding an alternative with the most cost effective or highest achievable performance under the given constraints, by maximizing desired factors and minimizing
7. **System** - is a set of components that interact with one another and serve for a common purpose and goal.