### PROJECTBOARD: A DOCUMENT MONITORING AND MANAGEMENT SYSTEM

A Capstone Project Presented to
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### INTRODUCTION

### **Background of the Study**

The history of document management has its origins in the late nineteenth century with the invention of the file cabinet. In 1898, Edwin Grenville Seibels devised the vertical file system, in which paper documents are organized in drawers contained in stacked cabinets. These cabinets would remain the main method of document storage in the business world for the greater portion of the twentieth century. However, there remain significant problems with this system. File cabinets take up lots of room, making them a cumbersome means of storage for businesses with limited office space. In addition, searching for specific documents among piles of paper requires a great deal of time and energy, as does manually filling out fields on paper. Searching for and modifying documents often takes employees, managers, and business owners away from other important responsibilities. To make matters worse, paper documents might be destroyed in disasters like fires and floods, or lost to theft. Most frequently, paper documents are simply misplaced (R. Dimmer, 2016).

Given the current situation with the COVID-19 pandemic, it seems quite difficult for most of us to continue doing what we normally do, especially when performing tasks that are related to work or education such as document-keeping. However, gone are the days of paper submissions. Electronic document management systems have emerged to provide alternatives to the previous method of using paper resources to make documents. The use of paper as a compliance for a requirement at school or for a task at work is slowly transitioning into a more digitized method with the use of several document storage platforms. More so, providing

feedback to a certain document or file can already be done instantly with the help of these softwares.

It can sometimes be difficult to pinpoint when a certain change or modification was done if there is a collaboration on a single file. Therefore, research proposals and other paperworks are usually submitted manually or with the need of actual interaction between the receiver and the submitter. However, late or incorrect submissions can happen anytime, that is a fact and is inevitable. Whether at school or at work, whenever there is a need to revise and redo documents, reprinting these files can result in wasting paper resources. Document Monitoring and Management System is essential in any organization as it is a reliable tool in managing documents to improve workflow. More so, as today's documents are mostly digitized, they stay around longer than they did during paper days.

On the other hand, google drive is one of the most common platforms for document storage nowadays. However, it falls short in other ways that make the use of a comprehensive document management system. According to Joe Byrne in his article entitled "Why Not Use Google Drive as a Document Management System", in spite the fact that Google Drive can allow users to store, archive synchronize files in one place, permits collaborations and provides a way to identify when a change is made, there are still several considerations why it cannot replace the need for a proper DMS. One is that it has limited document control. It simply means that if a folder is shared, anyone with the link or permission has access to that folder, too.

Moreover, if a collaborator can edit it, they can also delete it, move it around and share access to it as they please. Another thing is that it does nor have version control. It does not provide a way to control versioning of the document. Chances are users could work on a wrong or outdated document version.

The idea to develop a document monitoring and management system will allow users to submit their files online and deliver paperless compliances for work and school related tasks so that there will no longer be a need to use the manual approach in submitting and checking of documents. Mainly, it will focus on document versioning and monitoring which creates a historical record of all changes, with the date, time and indication of the user who made the change. In this way, users will be able to see if a document is improved or altered. It will also allow the users to have an organized placement for submissions so that they will not mix it up with other files. The electronic logbook will help in tracking user activities and a password security feature so that the files being sent are protected. Furthermore, it will also serve as a storage space for documents which is accessible through the web and mobile app.

### **Statement of the Problem**

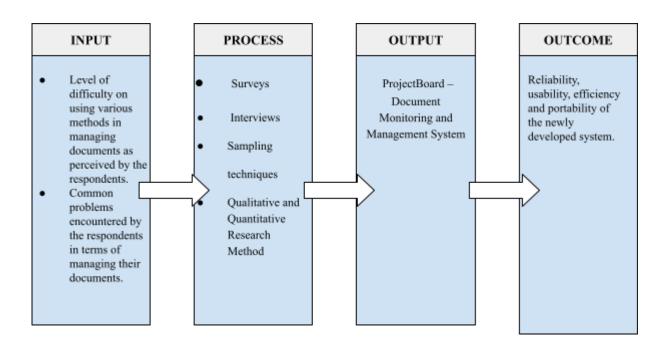
The purpose of this study was to analyze and determine the underlying issues regarding the current manual and paper-based process of document storage and submission. Specifically, it aims to answer the following questions:

- 1. What is the level of difficulty in using various methods in managing documents in terms of:
  - a. Submission of documents:
  - b. Revision of documents;
  - c. Version and monitoring control;
  - d. Document feedback and recommendations.
- 2. What are the common problems encountered by students, teachers and office workers in terms of:
  - a. Checking of documents sent through the document management system platform;

- b. Providing instant feedback and comments;
- c. Document monitoring and other improvements done through the system and;
- d. Version and approval control.
- 3. What is the level of acceptability and usability of the proposed system as perceived by the respondents?

### **Conceptual Framework**

This research is relevant to the case study of Oleh Dyah Puspitasari Srirahayu from the Library Technician Studies Program, Faculty of Vocational Program (2018) which was implemented at the Airlangga University in East Java, Indonesia. The case study entitled "Implementation of Electronic Document Management to Support World-class University: A Case Study in Airlangga University" concluded the importance of implementing Document Management System to support document monitoring and improve workflow in an organization.



### **Scope and Limitation**

This study is primarily focused on the assessment of using Document Management System for the advancement of education and work related activities and how it can be beneficial in terms of submitting, retrieving and monitoring electronic documents and how these functions can offer multiple key benefits to the organization. The study will be conducted in a public high school in the central part of Negros Occidental, located in Barangay Aranda, Hinigaran, namely: Negros Occidental National Agro Industrial School of Home Industries (NONAISHI).

The said research intends to discover the benefits of utilizing the Document Management System on the user's side not only in terms of document submission and storage but also in the aspect of document monitoring and versioning to achieve the ongoing process of document digitization. The DMS will allow easy upload of documents using various methods and supports major file formats such as MS Word, MS Excel and PDF. It will provide an upload file feature where documents can be attached and uploaded for easier access from anywhere and at any time. As the system requires storing of data on servers which can be accessed through the internet, it will utilize a free cloud-based storing solution which provides all the maintenance and software updates. More so, it will only require charges upon upgrade of storage capacity.

In order for the researchers to evaluate and understand more about the concept of the study, they will be gathering all the needed data by conducting interviews, surveys and trial tests. The researchers will have to gather 50 respondents from the students, teaching force and administrative staff of the said school before measuring the information on variable of interest, in this case - the implementation of document management system, in an established and systematic

fashion that enables them to answer all the stated research questions, determine hypotheses and assess conclusions. Moreover, the researchers will be conducting the said sampling in the limited period of schedule; the study must be completed on or before the End term of the second semester for school year 2020-2021.

### Significance of the Study

The following will benefit from the study:

**Students.** The study will greatly benefit them in terms of research and other school submissions by providing them a platform where they can have a close and secured access to their documents. The system will help them with their research by using the Document Management System web and mobile app and let them see if there are any comments or feedback given to improve their document submission.

**Teachers.** The study will be beneficial to our educators, who, even in the midst of pandemic, still hold classes and check student submissions at home. The use of the system will improve teachers' evaluation on students' submissions and at the same time, keep track of students' performance through their document activities or revisions.

Office Workers. While most of us are working from home given the current situation with the COVID-19 pandemic, office workers can still continue performing their duties hassle-free with the use of Document Management System. This will allow them to have a platform where they can send and retrieve files for their employers/managers, have a password-secured storage system for important documents and minimize the use of physical storage rooms for paper-based documents.

**LGU.** With the help of a document management system, this will improve the government offices' operations in managing and storing a large number of documents. Document Management System is a great solution to make the task a much easier one by applying version control where multiple versions of a document are maintained. The document security feature is also a great deal in terms of keeping important company files as secured as possible.

**Environment.** Majority of the world's environmental problems are caused by deforestation. As the results are getting more evident, protecting the environment should be a worldwide priority by now. By doing our day to day transactions in a digital and paperless manner, people are not only helping themselves in terms of managing their tasks but are also helping the environment by reducing the use of paper as a means of documentation. If mankind will minimize cutting trees to make paper, this will eventually decrease the number of calamities experienced globally.

### **Definition of Terms**

In this section, the researchers define the terminologies in both conceptual and operational manner for better understanding.

**Document Management System -** Document management systems commonly provide storage, versioning, metadata, security, as well as indexing and retrieval capabilities of documents. (Document Management System, Wikipedia). Operationally, it is a tool one uses for storing, managing, and tracking electronic documents.

**Document Versioning -** The process of tracking and managing different versions (or drafts) of a document so you know which is the current iteration of a file. (How To Do

Document Version Control, Elizabeth Harrin). Operationally, it is when you reopen your saved document and see the changes that have been made including the date and time of modification.

Archive - A collection of documents created or gathered by one person or institution and selected for long-term preservation as evidence of their activities. (Introduction to Archives, Kings College, Cambridge website). Operationally, it is when you place or store some important files, records or documents in a folder or hard drive.

Sampling - A process used in statistical analysis in which a predetermined number of observations are taken from a larger population. The methodology used to sample from a larger population depends on the type of analysis being performed, but it may include simple random sampling or systematic sampling. (Alicia Tuovila, 2019 Sampling Technique, Investopedia). Operationally, it is the process when researchers select individuals or groups of individuals as respondents in a statistical survey in which the results estimate the characteristics of the whole population.

**Storage** - Storage is frequently used to describe the devices and data connected to the computer through input/output (I/O) operations, including hard disks, flash devices, tape systems and other media types. (Computer Storage, Garry Kranz). In operational definition, storing is when you put something that is not being used in a place where it is accessible and can be kept safely.

**Digitization -** Refers to the conversion of analog to digital and also the internal optimization of processes, for example, work automation and paper minimization, it will result in cost reductions (Colleen Chapco-Wade, Oct. 2018). Operationally, it is the method of creating a

digital representation of physical objects or attributes. For instance, we scan a paper document and save it as a digital document such as PDF.

### **Review of Related Literature**

The review includes the conceptual and research literature which are related to the research study. The research reviews the topic that is available and significant to the study. This section is composed of articles, write-ups which are properly cited related to the study providing the means to connect between past researchers.

### **Document Management and Exchange System – Supporting Education Process**

(Emil Egredzija, Bozidar Kovacic, 2017) Development and implementation of new technologies are very important in education. One of the most challenging tasks in the education process is to build efficient and cost-friendly systems for content management and exchange.

The system has to be reliable, easy manageable and open. Centralized storage, secured access, and ubiquitous client technologies have emerged as best-practice solutions in engineering that kind of services. Users can easily publish or exchange documents and not need to worry about their distribution, storage or technical skills required for efficient document management. The system that will be presented is built on open source technologies and is deployable on all today's popular web software platforms. The web server, the programming language and operating system that are used to build and deploy such a system are all non-proprietary and completely open because our mission was to build systems that can be easily extended and not limited by its corporate license. The system uses security mechanisms such as user group access policy, operating system level security (file system) and secured data storage in the database.

Because of the growing need for document management in the education process we believe that this project will find its place in practice.

## Main Concepts of the Document Management System Required for its Implementation in Enterprises

(Vasila Soltanaga Abbasova, 2020) This study is intended to study the system of electronic document circulation, its importance in the organization of documents. The main stages of the document lifecycle include creation, management/storage, access, retrieval, administration, reassignment, collaboration, distribution, preservation, disposal, storage.

Definitions are given to such terms as "document", "electronic document", "control systems of documents" and "electronic document management systems".

Document management and project management are closely linked in an information-in-tensive project. The result of a project is usually a set of documents that describe the developed product, recycled process, or product to be delivered. If an organization can identify the documents that generate the output and those that are needed at various intermediate stages, it can track the progress of the project using the document management system. The concept of information manipulation will be explored by discussing the principles of document management systems. Document management systems have been established to receive, process and transmit information.

## Concept of Electronic Document Management System (EDMS) as an Efficient Tool for Storing Document

(Ade Tutty Rokhayati Rosa et al, 2019) For storing and organizing various types of documents a software system is considered as an electronic document management system (EDMS). This sort of framework is an increasingly specific sort of document management

system, a progressively broad kind of storage system that encourages clients to arrange and store paper or computerized reports. EDMS alludes all the more explicitly to a product framework that handles digital documents, as opposed to paper records, in spite of the fact that in certain examples, these frameworks may likewise deal with computerized examined variants of original documents on paper.

Electronic document management gives an approach to halfway store a huge volume of advanced records. Huge numbers of these frameworks likewise incorporate highlights for proficient documents recovery. Nonetheless, electronic document management is considerably more than just examining and sparing: it is a thorough framework that empowers information laborers to effectively arrange and disperse records over the association for better, coordinated use inside day by day tasks.

### Design and Implementation of an Electronic Document Management System

(Arkan Ismael, Ibrahim Okumus, 2017) Nowadays most of the developing countries use a traditional paper documents management system (DMS), but also the electronic form of the documentation has increased including e-mails, web pages, and database packages, which have been stored in workstations and servers. For integrated data gathering in an institution or organization, electronic document management system (EDMS) often becomes one of the most required tools for management. However, this requirement should be implemented carefully depending on the institution or organization's needs. Therefore, an organization should have an EDMS for creating, keeping and organizing data in the organization and handle all synchronization processes.

In this research, system requirements for an organization is analyzed, software design and identifying available resources is determined and successfully implemented. Distinguishing this EDMS from other management systems is that this EDMS uses digital signature for securing document transportation. The aim of this paper was to develop a PC based application that should work as an electronic document management system and provide features such as search, reliability, increased document security using digital signature and cost and time savings.

## Optimization of Electronic Document Management Systems by Means of Encoding and Visualization of Stored Data in the Integrated Development Environment

(Poskonin Mikhail V. et al, 2018) The article considers the issue of storage, cataloging and transfer of documentation within the electronic document management system (EDMS). Modern document management solutions can be considered as the intersection of traditional and digital technologies, in particular, the storage of software code on paper. The very storage of program code in paper version implies a large archive for data storage, which includes modifications when versions of the program code are updated. Graphical ways of storing large amounts of data have been known for a long time, but they usually use a long procedure for restoring the original information and exclude recovery from paper or are significantly limited in the amount of stored data. As one of the elements of the composite electronic document management system it is proposed to use the method of graphical encoding of information (QR-code generation technology), which will increase the resistance to unauthorized modification of the program code, simplify the procedure for storing, identifying and verifying information. As an elementary block of information, it is intended to use a separate software module responsible for one of the subprograms in the RTOS environment. The proposed algorithm for storing and transferring information implies its compression by software,

encryption and transmission. The article compares various compression algorithms and their efficiency. The presence of a cataloguer in each graphic element allows for quick search, comparison and verification of blocks.

### **Synthesis**

According to (Ade Tutty Rokhayati Rosa et al, 2019), "Electronic document management gives an approach to halfway store a huge volume of advanced records. Huge numbers of these frameworks likewise incorporate highlights for proficient documents recovery." Based on the text, we believe that document management and monitoring system plays a major role in maintaining one's workflow, not just in education but in other fields as well. As what (Vasila Soltanaga Abbasova, 2020) also mentioned, "The main advantage of the electronic document management system is document flow automation". The rapidly increasing demands for an automated and reliable document management platform require systems with powerful and integrated functions. Development and implementation of new technologies also plays a vital role in the field of education. Arkan Ismael, Ibrahim Okumus, (2017) indicates that "For integrated data gathering in an institution or organization, electronic document management system (EDMS) often becomes one of the most required tools for management. However, this requirement should be implemented carefully depending on the institution or organization's needs. Therefore, the organization should have an EDMS for creating, keeping and organizing data in the organization and handle all synchronization processes." However, as technology evolves rapidly, several tools have also emerged as best-practice solutions in providing that kind of services. With the use of a document management system, students and teachers can now

easily publish or exchange documents in a paperless manner and not need to worry about their distribution and storage required for efficient document management.

### **METHODS**

### **Research Design**

The primary objective of the study is to collect and analyze the variety of challenges experienced by the users in terms of document management, for example, submission and version control. In view of the nature of the study, the researchers used the Descriptive and Development Design.

Will Kenton (2020), Research and Development (R&D) includes activities that companies undertake to innovate and introduce new products and services. It is often the first stage in the development process. The goal is typically to take new products and services to market and add to the company's bottom line. R&D is separate from most operational activities performed by a corporation. The research and/or development is typically not performed with the expectation of immediate profit. Instead, it is expected to contribute to the long-term profitability of a company.

This study employs two (2) methods - the qualitative and quantitative approaches. The researchers will make use of self-made surveys and interviews for data collection. For the qualitative research, it will use the Participatory Action Research (PAR). According to the Institute of Development Studies website, "PAR involves researchers and participants working together to understand a problematic situation and change it for the better". On the other hand, a quantitative approach will also be used in the study by gathering quantifiable data through

self-made surveys and performing statistical or computational techniques to establish systematic analysis of the problems.

For the Developmental Method, the researchers will use the Waterfall Method. Although it is a traditional and old-school method, the researchers think that it is the ideal and best practice for starters. Its sequential way of executing steps and plan-driven approach provides flexibility and understandability of the project's demands and scopes before any phase begins.

### **Respondents**

The researchers will disseminate survey questionnaire to students, teaching force, administrative and office staff of Negros Occidental Agro Industrial School of Home Industries, to know their insights, challenges experiences and expected functionalities to be included in the system.

Fifty (50) respondents is the target population for the survey. Purposive and cluster sampling will be used in selecting the respondents. On the other hand, interviews will be on selection basis. Futhermore, the researchers will be conducting the said data gathering in the limited period of time, in accordance with the schedule; preferably on or before the end term for school year 2020-2021.

Given the present situation with the pandemic, the interviews and conducting of surveys will be conducted mostly online, including but not limited to zoom or google meet virtual interviews and google form surveys to the participants of NONAISHI.

### **Instruments**

In addition to conducting interviews as part of the qualitative approach, the researchers used a self-made survey questionnaire in gathering data which falls under the quantitative method. The survey includes questions that are related to the present problems encountered by respondents in terms of managing their documents. The researchers will use a 5-point Likert Scale to rate the survey questionnaire.

The questionnaire consists of Part 1 (Current Problems), Part 2 (Perceptions of Students, Teachers and Office Staff in Implementing the System) and Part 3 (Level of Acceptability and Usability of the Proposed System as Perceived by the Respondents). Part 1 will be rated according to the problem's difficulty level where 5 is most difficult and 1 is least difficult. Part 2 and 3 will be rated according to the system's acceptability and usability where 5 is the highest and 1 is the lowest.

Expert evaluators in the field of education were invited to evaluate and determine the validity of the questionnaire. They used Good and Scates criteria to evaluate the validity of the survey form. As for the reliability test, the evaluators used Cronbach's Alpha to evaluate the questionnaire.

### **Data Gathering Procedure**

A permission letter addressed to the school principal was prepared prior to conducting surveys and interviews. After the approval, the next step is the construction of a self-made questionnaire which needs to be validated and reliability of outcomes will be verified. In the survey questionnaire, there is a brief introduction about the study before the questions.

The analysis part of this study started with deciding what kind of survey must be used to assess the findings on the use of DMS in schools and offices. The researchers used both qualitative and quantitative methods in gathering data.

To assess the validity of the survey questions, the researchers needed to invite expert evaluators to assess the self-made questionnaire using the Good and Scates criteria while Cronbach's Alpha will be utilized in testing its level of consistency and reliability. Afterwards, the actual survey to target participants will be conducted and lastly, collection and interpretation of data will be done for the purpose of answering the research questions and justify the research conclusion.

### **Statistical Treatment**

For the statistical treatment, the data was encoded and quantified using excel spreadsheet.

The researchers made use of the descriptive statistics such as percentage and central tendencies wherein mean will be used to analyze and interpret the gathered data.

The researchers will use a survey questionnaire to gather data from respondents. The said survey, which falls under a quantitative method will be measured thru numerical values using formulas. The questionnaires comprises three (3) parts: the current problems experienced and the acceptability and usability level of the proposed system.

To ensure the validity and reliability of the questionnaire, the instrument will be evaluated by a panel of experts which is composed of IT professors. They used Good and Scates criteria to evaluate the validity of the survey form. As for the reliability test, the evaluators used Cronbach's Alpha to evaluate the questionnaire.

### **Ethical Considerations**

The researchers ensured that every individual participating in the research study is guaranteed with privacy and confidentiality. The researchers made sure that those participating were well-informed about the study. Respondents will be given the utmost autonomy in terms of making his or her decision with what to do and what to agree to. Participants are also given the liberty to participate or not. Anonymity of individuals participating in the research also has to be ensured. Any forms of deceptions and exaggerations about the main objective of the study will also be eliminated to form honesty and transparency between the researchers and participants. Moreover, control over the respondent's survey answers from any individual, may it be from the researchers or from the school's staff, is strictly prohibited.

## Appendix A

## Sample Survey Questionnaire

Kindly rate the level of difficulty in terms of the following:

4 - Difficult

5 – Very difficult

Proble	em 1: Submission of documents to your teachers/employers/ bosses/officemates
•	Submission of documents using manual or face to face method.
	1 – Not difficult
	2 – Less difficult
	3 – Average
	4 – Difficult
	5 – Very difficult
•	Submission of documents using email.
	1 – Not difficult
	2 – Less difficult
	3 – Average
	4 – Difficult
	5 – Very difficult
•	Submission of documents using social media platforms (ex: Facebook)
	1 – Not difficult
	2 – Less difficult
	3 – Average

• Submission of documents using other web platforms (ex: Google Drive)
1 – Not difficult
2 – Less difficult
3 – Average
4 – Difficult
5 – Very difficult
Problem 2: Document revising and editing
• Editing of documents using manual method (ex: paper-based rewriting)
1 – Not difficult
2 – Less difficult
3 – Average
4 – Difficult
5 – Very difficult
• Editing of documents using computer-based platforms (ex: MS Word, Google Docs,
etc.)
1 – Not difficult
2 – Less difficult
3 – Average
4 – Difficult
5 – Very difficult

## Problem 3: Document versioning and monitoring

• Looking for the previous versions of your document (original or edited) from you
computer.
1 – Not difficult
2 – Less difficult
3 – Average
4 – Difficult
5 – Very difficult
<ul> <li>Monitor the changes made in your document.</li> </ul>
1 – Not difficult
2 – Less difficult
3 – Average
4 – Difficult
5 – Very difficult
Problem 4: Requesting and/or providing feedback and recommendations.
• Asking for feedback regarding your submitted document (ex: research paper, letter
articles, etc.)
1 – Not difficult
2 – Less difficult
3 – Average
4 – Difficult
5 – Very difficult

- Providing feedback regarding the received document (ex: research paper, letter, articles, etc.)
   1 Not difficult
   2 Less difficult
  - 3 Average
  - 4-Difficult
  - 5 Very difficult

# **Appendix B**Document Guideline Checklist

Group	name:	Group	7

Proponents:

1 Lim, Ron Benson

2 Yap, Angelo

3 Zayco, Lancey May

	Student Document Self Assessment	Teacher Counter Checking
Paper		
Paper Heavy white bond paper (substance 20) of standard size (8 ½ x 11 inches or 22 x 28 cm) be used. Each paper must be the same size.	□ Done	□ Done
Spacing		
A 4 line spacing is required between the major heading and the first line of the first paragraph. A 2 line spacing is required throughout most of the paper, however single spacing can be used for tables, headings, figures, captions, references but 2 spacing is used between references and long quotations.	<b>✓ Done</b>	□ Done
Margins		
One inch margin is observed on all sides except the left margin which is 1.5 inches. Right margin is ragged or not justified	✓ Done	□ Done

Page Number		
Number all pages except preliminaries. The page number should appear at least 1 inch from the right hand edge of the page, in the space between the top edge of the paper and the first line of the text.  Preliminary pages (small letters)  Body of the paper (in Hindu Arabic)  Appendices and other (in Hindu Arabic)	<b>▶ Done</b>	□ Done
Indention		
Indent the first line of every paragraph. For consistency, use the tab key which should be set five to seven spaces or ½ inch. 3	<b>∨</b> Done	□ Done
<b>Major Sections</b>		
Major sections begin on a new page centered, labeled and capitalized. All major sections contain an introductory sentence.	✓ Done	□ Done
Title Page		
Follows the standard Title Cover	✓ Done	☐ Done
Introduction		
Background of the Study		

Provides a background/scenario which leads to the present investigation Cites existing literature that requires, supports, or promotes importance of the topic Mentions some related studies and briefly discuss their findings Discusses how the existing problem has been addressed so far and how it can be further explored Expresses the desire to have a deeper and clearer understanding of a situation, circumstance, or phenomenon May express the gap or limitations in literature to justify the conduct of the study(Swales, 1990 cited in Magbanua, 2011) Links All this to the aim of the study	<b>▼ Done</b>	Done
Statement of the Problem		
States the main goal of the study Lists down the specific objectives/problems	✓ Done	□ Done
Operational Framework		
Follows the IPOO and explain the diagram	✓ Done	☐ Done

Scope and Limitations		
States the locale of the study, the population from which the respondents/participants/subje cts and data will be selected/collected and the period of the study Discusses the limitations or constraints of the study	<b>✓ Done</b>	□ Done
Significance of the Study		
Discusses the relevance of the study Discusses how the paper could best benefit related groups of people in the organization and other sectors of society	<b>✓ Done</b>	□ Done
<b>Definition of Terms</b>		
Identifies the salient terms in the study Provides both the conceptual meaning (with cited reference) and the operational meaning for each term	✓ Done	□ Done
Review of Related Literature		
According to Kwan (2009), "literature review, whether it is written for a thesis, a proposal, or a research article is an extensive survey of empirical and theoretical literature" (p.5). It is an interpretation and synthesis of published research. (Merriam, 1998, p.6 cited in Murray, 2010)  Provides related concepts and studies and discusses their	<b>✓ Done</b>	□ Done

findings. May express the gap in literature to justify the conduct of the study(Swales, 1990 cited in Magbanua, 2011) Employs The THEMATIC APPROACH  Synthesis		
Correlate the current study and the RRL, state the connection	✓ Done	□ Done
Methods/Materials and Methods (depending on discipline)		
Research Design		
Identifies the population, sample size, and sampling technique Mentions the groupings that need to be categorized States the time/period during which they were involved in the study and the place where the study was conducted	<b>✓ Done</b>	□ Done
Instrument		
Describes the instrument(s) used Explains what the instrument includes and how it was used to gather data Discusses how the instrument was tested for validity and reliability Discusses how the data from the administered instrument were analyzed and interpreted	<b>✓ Done</b>	□ Done

<b>Data-Gathering Procedure</b>		
States the steps in gathering data in paragraph form	✓ Done	☐ Done
Statistical Treatment (if applicable)		
States the statistical method(s) used in treating each problem Statesthe statistical software used in processing the data	✓ Done	□ Done
Ethical Considerations (if applicable)		
States the principles related to research ethics that are followed by the researcher(s) in conducting the study	✓ Done	□ Done
Appendix		
Sample Survey Questionnaire/Sample Interview Questions	✓ Done	□ Done
C. References		
Gives an alphabetical listing of sources used and cited in the paper Follows the prescribed format (APA7)in the discipline	<b>∨</b> Done	□ Done

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