# Computerized financial mangement system

Technology, Computer

Chapter I Introduction Nowadays one of the major lending businesses that exist today ismoneylending. It has entered different institutions like banks, government, lending companies and even cooperatives which they offers the kind of business in order for them to gain more profit in an easy way and also to help client by giving loans for special purposes. As the world moves in a globally competitive electronic place, there's a lot of competition in a technological way but many infrastructure and establishments were still not upgrading their own computers to the latest modern features.

They just assure their clients satisfaction by giving a quality service and a friendlyenvironmentto every client which is not good enough. Majority of the lending companies nowadays are still using a manual transaction which were indeed a time consuming problem. More on these facts there is also a hard time in computing monthly dues, and balances that made the data not that accurate. This happens because of manual calculations in the computer. The proponent is very much concerned in conducting proper studies and implementation of better processes.

The proposed system is for Sifcor Lending incorporation by using an automated transaction solution for lending and financial management to improve the current existing method of manual operations. With the advancement of thetechnologymost of the tasks are done in an instant to be competitive nowadays we must experience what really the technology can do. 1. 2 Background of the Study The Sifcor Lending Inc. is a company who let out money for temporary use on condition of repayment with interest. Like other existing loan transaction process Sifcor is also manually operated.

They give loans to those who will comply to their requirements, one of these is that an applicant should have shown monthly pay slip and income for the past months or a proof of managing any business. Due to manual operations of the company they are having a hard time in recording and calculating the loans of their clients in a fastest way, but this can be lessen by the use of computer system which could facilitate any operations at faster and easy way. The company only uses their computers for documentation and client's record keeping purposes and not for their system.

Were in fact they are just using Microsoft Word and Microsoft Excel that are usually used Microsoft Office work today and not merely doing the exact specific task they wanted to happen, in this case using of their computer does not help to make their process faster and accurate. Manual calculations were indeed a burden and consume a lot of time on the part of the employees. By developing aFinanceManagement system the company will have more time in giving emphasis to their other works andresponsibilityin the company. 1. 3 Rationale

New technologies have become integral to lives of children and young people in the home, industry, business, leisure andcommunicationwithin a global society. The internet and other digital and information technologies are powerful tools, which open up new opportunities for everyone. As technology grow, so do the demands for better services. The primary reason why the proponent pursue this study is to provide financial management system that will provide the proponent the best chance to apply the knowledge they learn in their years of studying at AMA Computer College.

It also gives them opportunity to enhance and practice their ability and creativity. The proposed system will organize the process in which the school conducts its business. The main reason why the proponent came up to an idea of implementing Finance Management System for Sifcor Lending Inc. The proponent proposed a system which can develop a finance management system that will integrate it with the present technology to make transaction easier, faster and user friendly to the employees that will answer the needs of the locale. 1. 4 Information Technology innovation

System integration is the process of bringing together the different component subsystem into one system and ensuring that subsystem s function together as a system. In information technology, system integration is the process of linking together different computing systems and software application physically or functionally, to act as a coordinated while. In today's generation technology plays a vital role in our society. The computer technology changes the way we communicate. SIfcor Lending Inc. adapts a system that helps them in managing its company The proponent will be using different kinds of software to develop the proposed system.

The technologies used to develop the system are programming language such as Microsoft Visual Basic 6. 0 and My SQL for the database. The proponent will also use Adobe Photoshop CS5 in creating the graphics for the system. This software's will help the proponent to easily finish the proposed system with the help of their function. 1. 5 Statement of the Problem This section stated the problem being encountered in the existing system. 1. 5. 1 General Problem The general problem as seen by the proponent is to generate a Financial Management System for Sifcor Lending Inc. that will

provide an easier, faster and a useful way of lending. . 5. 2 Specific problem The purpose of the study is to generate a Financial Management System for Sifcor Lending Inc. that will provide an easier, faster and a useful way of lending. Specifically, this should be able to solve the following: 1. 5. 2. 1 How to develop a system that will computerized the payment process of SIFCOR Lending Inc. 1. 5. 2. 2 How to develop a system that will enhance security of client records/information? 1. 5. 2. 3 Computation of loans is time consuming and inaccurate due to the use of manual system in computing the loans of the clients using the calculator, paper, and pen. 1. 5. 2. Hard copies of client information are vulnerable to theft, alterations and misplace. 1. 6 Objectives of the Study 1. 6. 1 General Objective The general objective of the study is to develop a Financial Management System for SIFCOR Lending Inc. 1. 6. 2 Specific Objectives 1. 6. 2. 1 To develop a system that will computerized the payment process of SIFCOR Lending Inc. 1. 6. 2. 2 To develop a system that will enhance security of client records/information? 1. 6. 2. 3 The system will develop a quick and accurate computation of loans by making a system that will automatically compute the loans of the client. . 6. 2. 4 Securing client loans and information. * To develop a system that is secured and free from unauthorized person. 1. 7 Scope and Delimitation 1. 7. 1 Scope The focus of this study is mainly directed towards the design and development of Finance Management for Sifcor Lending Inc. which includes the following procedures1)automatic data calculations 2) loan management; 3)balance inquiry; 4)monthly dues notices; 5) list of clients with approved loans; 6) and a loan ledger for the customers payments and balances. 1. 7. Delimitation Transaction such as passing of requirements, loan application, signing of

contract, issuance and printing of receipts are no longer included in the system. These are done manually and they need physical appearances of the borrowers. 1. 8 Significance of the study The significance of the study is to give the lending company owner and employees a knowledge and awareness about the new and smart way of using computerized system in their financial management which until at present they are still using manual method.

This study will simplify the employee's workload by automatic calculations of their client's loans and will minimize their time spent. Doing this automation they could able to finish their other important task timely. 1. 8. 1 Educational The proposed study will serve as a basis of learning for all Information Technology students, this will give an understanding to the Financial Management for Lending Companies and will inspire students to develop and make research with the same concept. This will also serve as a reference or related study for future researchers. 1. 8. 2 Social

The proposed system is socially significant in a way that it is user friendly and is convenient to use. The completion of this research gave the proponent the opportunity to develop his own confidence as he was able to express himself and his ability as an Information Technology student with numerous people who submitted themselves for aninterview. 1. 8. 3 Economical The use of the proposed system will help Sifcor Lending Inc. to reduce paper based system like using many ledger cards and to lessen administrative works because the system will automatically compute the clients loan and balances on the expected date of payment. . 8. 4 Technological The proposed system is technologically significant to the proponent and also to the user it's because with the use of new improvised

system in the computer. The proposed system will help the user to update their knowledge about computer and system use for the benefit of their financial management in Lending to be fast and easy. 1. 9 Definition of terms These terms are defined and included in this chapter for the readers to understand the whole documentation easily. Lending. Disposing of money or property with the expectation that the same thing (or an equivalent) will be returned. Financial.

A branch of economics concerned with resource location as well as resource management, acquisition and investment. Simply, finance deals with matters related to money and the markets. To raise money through the issuance and sale of debt and/or equity. Client. Customer of a professional service provider, or the principal of an agent or contractor. Chapter II REVIEW OF RELATED LITERATURES AND STUDIES This section contains materials, summary and excerpts of researches and related literatures about the proof of the current study about the proposed solution the proponent deems relevant to the conceptualization of the whole researches. . 1. 1 Foreign Literature According to the thesis of Kristine Mae Mallari, Carissa Garcia the development of development of technology through the years has enabled us to do more with less effort. (Ralph M. Stair; 1999) As the technology continues to advance, computer is becoming more part of our lives. Computers are everywhere at work, at school, and at home. Many daily activities now may involve the use of computer maybe because computers are used in almost every field and profession likeeducationand office works to perform large number of computer application.

According to the thesis of Kristine Mae Mallari, Carissa Garcia the database system makes faster for every institution. For the mere fact that instead of doing things manually, with the use of computer technology everything is done faster (Dan Gurewich; 1999) Database management system (DBMS) consist of a collection of interrelated and set of function to access data. DBMS provides an environment that is both convenient and efficient to use in retrieving and storing information. It is also consist of programs for storing, retrieving and manipulating large amount of data.

With this article the proponent decided to use a database in storing thee large amount of information taken from the clients profile. It can also enhance manual way of record keeping by having a database. An article found to be linked at http://www. nos. org/htm/sad1. htm, stated that System is created to solves problems. One can think of the systems approach as an organized way of dealing with a problem. In this dynamic world, the subject system analysis and design mainly deals with the software development activities. System life cycle is an organizational process of developing and maintaining systems.

It helps in establishing a system project plan, because it gives overall list of processes and sub-processes required developing a system. 2. 1. 2 Local Literature With the development of the computers, almost half of the business establishments, commercial companies, schools and computer center in the Philippines are completely automated – airlines, hotels, supermarkets and department stores are computers to provide instantaneous and accurate data. And it seems that companies are now

taking notice of society's changing lifestyle. Computers are being compared with the human brains.

Like the Brain the advised if, the computer can take data and process it, it can store the data either in raw form or in processing result and can deliver the raw processed data to the outside world demand. Computer works in a very fast way that you can ever imagine. It involves almost everything especially in work like business or school or we can just say a very large population of people. Our country here in the Philippines we can say that we can compete because new technology from other countries has flowed to us. Imagine running a school with large population of students and how will you handle it.

Also it affects the kind of environment we have. Here in our country not all business people can provide the needs of their companies. But still with the help of other technology we create a strategy on how will we go on with this kind of problem. People create a system that supports either big or small company. It will be reasonable because these systems meets the requirements of the company and best solutions are suited both environment and networked environment. 2. 2 1 Foreign Studies According to the thesis of Gascon, Arcely M. , Pamintuan, Joseph Carlo C. In an Advance Data System Corporation entitled information and Billing System supports medical Billing Systems, 2011 stated that " Medical Billing System allows the practice to manage all patient billing and accounting seamlessly and efficiently. It is fully integrated with the EMR, appointment system and charge capture. Taking advantage of the information flow, it allows quick and easy billing while ensuring a high degree of accuracy and traceability. The

system interfaces with leading electronic clearinghouses for electronic claim submission and tracking.

With a comprehensive set of reports, it presents all practice management information in an effective manner for analysis and tracking. According to the thesis of Franco, George Ferman M. , Mariano Jr, Romeo C. , Yambao, Mary Grace M. , Automation of the system prove that it generates aped and accuracy, lessen the errors done by manual means and eliminate wasted time that will result for a better service that will cater the company and the employee as well. According to the thesis of Grona, Rusell, manlapaz, Joana Marie M. Business use data processing for such tasks as payroll preparation, accounting, record keeping, inventory control sales analysis, and the processing of bank and credit card account statements. Engineers and scientist use data processing for a wide variety of application, including the processing of seismic data for oil and mineral exploration, the of new product designs, the processing of satellite imagery, and the analysis of data from scientific experiments. Data processing is divided into two kinds of processing: database processing and transaction processing.

A database is a collection of common records that can be searched, accessed, and modified, such as bank account records, school transcripts, and income tax data. 2. 2. 2 Local Studies According to the thesis of Elsie Punsalan, Criz Angel Garcia, stated that " to maximize the usefulness of information, business must manage it correctly, just as it managed other resources manages need to understand that costs are associated with the production, distribution security, storage and retrieval of all information. Although information is all amount us; it is not be taken for granted.

In the unpublished thesis entitled manila central cooperative accounting System with Decision Support System by Bautista Catherine and Dela Cruz Juliet A. , Septerber 1996 stated that: " Computerized Accounting System ffor MMC. Intended to replace the existing manual system in order to make a accounting office work more efficient and beneficial to the members of the employees as well as to the cooperative". In the unpublished thesis entitled Billing System for Castro Maternity and General Hospital by Maglonzo and Cruzon, 2005 stated that: The system is a major leap forward in computing. It makes computation easier and more fun to use with many user interface and performance enhancement. It will get more work in less time. Professional in every field is discovering knowledge to meet thus change". Chapter3 3. 1 Theoretical Framework of the Study The Theoretical framework of the study is used to show how the existing and proposed system works. It also illustrates how the proposed system evolved from the existing system. 3. 2 Conceptual Framework of the Study Figure 3. 2 illustrate how the system flows.

Conceptual framework is a group of concept that are broadly defined and systematically organized to provide a focus, a rationale, and a tool for the integration and interpretation of information. 3. 3 Research Setting The proponent conduct a research in SIFCOR LENDING INVESTOR INC. who are also the intended beneficiaries of the proposed system. SIFCOR Lending Investor Inc. is located at Sindalan, City of San Fernando. 3. 4 Research Population The Research Population composed of the company's employee who gives information that helped the proponent in developing their system.

Respondents answered question which expressed their perspectives about the current and proposed system that helped the proponent to further analyze the flow of the system. The Research Population of the proponent composed of the employees and as well the consumers, who are the intended beneficiary of the proposed system. 3. 5 Research design the proponent aim is to satisfy the needs of the users of the study by providing the users with the reliable information which could be a great help. It also discusses the methods uses by the proponent to come up with he procedures on how to identify existing problems in the current system and the procedures on how to develop the proposed system. 3. 5. 1 Descriptive Method This method of research is a fact-finding technique with sufficient meaning. It can help the proponent understand how the current system is supposed to work and determine the comparison and analysis of the existing and the proposed system. It is a way of gathering information to complete the study. This shows the activities that will observe for the development of the existing system.

Descriptive Research, also known as statistical research, describe data and characteristics about the population or phhenominon being studied. Descriptive research answer the question who, what, where, when, and how. Although the data description is factual, accurate and systematic, the research canno9t describe what caused a situation. Thus, Description research cannot be used to create a casual relationship, where one variable affect another. In other words, descriptive research can be said to have a low requirements for internal validity. The description is used for frequencies, averages and other statistical calculations.

Often the best approach, prior to writing descriptive research, is to conduct a survey investigation. Qualitative research often has the aim of description and researchers may follow-up with examinations of why the observations exist and what the implications of the finding are 3. 6 Methods of Research Used This type of research, as the definition implies, will helps the proponent to collect all the necessary information needed for the implementation of the project. To provide an accurate, fast, efficient and a more convenient way for applying loans is the objective of this project. . 6. 1 Creative Method This research method implies the stylistic approach and aesthetic concept of human experiences that the proponent must acquire in order to develop the proposed system. The proponents used this method in such a way that they made sure that the system would look enticing to its users yet serve the same expected funntionality. 3. 6. 2 Library Method 3. 6. 3 Internet Research Method 3. 7 Data Gathering Techniques and Instrument 3. 7. 1Observation. The observation of current operating procedures is another fact-finding technique.

Seeing the system in action gives the proponents an additional perspective and a better understanding of the system procedures. A personal observation also allow them to verify the statements made in the interviews and determine whether procedures really operate as they are describe. Through observation, they discover that neither the system documentation nor the interview statements are accurate. It provide important advantages as the development process continues. 3. 7. 2 Interview. The proponent personally interviewed some of the respondents.

Personal interview is usually the most expensive fact-finding technique because it is a costly time consuming process. An interview is more familiar and personal than a questionnaire. Respondents who are unwilling to put critical or controversial comments in writing might talk more freely in person. 3. 7. 3 Questionnaires. The proponent used this method because it gives the respondents an opportunity to provide inputs and suggestion. This methods helps distinguish the viewpoint of the respondents who are mainly concern in collecting valuable information about the existing system.

Questionnaire construction is critical to the success of a survey. 3. 7. 4 Evaluation These are forms with criteria that evaluate the performance of the existing study. These forms are given to the users that will evaluate the existing system withrespectto their efficiency, reliability and effectiveness. With the help of evaluation form, the proponent were able to analyze the feasibility of the proposed system based from the ratings given by respondents. 3. 8 Analytical tools 3. 8. 1 Ishikawa Diagram 3. 8. 2 Data Flow Diagram Is a graphical representation of the " flow" of data through an information system.

DFD's were introduced and popularized for structured analysis and design. DFD's show the flow of data from external entities into the system, showed how the data move from one process to another, as well as its logical storage. The proponents considered the following: In creating the DFD, where does the data that passes through the system come from and where does it go, what delays occur between the inputs and outputs. Using DFD, the proponents can easily analyze the flow of the system that will enable to

describe what part of the processing needs to be prioritized. 3. 8. 3 Visual Table of Content

It is a pictorial means of preventing data. It helps the proponents to display the information needed. It illustrates present systems and describes a proposed system to the user, programmer or operations. 3. 8. 4 Input – Process – Output IPO Model is a functional model and conceptual schema of a general system. An IPO chart identifies a program's inputs, its outputs, and the processing steps required to transform the inputs into the outputs. Along with a definition, many times you will be asked to draw a diagram to show the stages. It is essential that you learn the diagram below, along with the direction of information flows.

You need to be able to reproduce it exactly. 3. 8. 5 Flow Chart 3. 8. 5. 1 Program Flow Chart A program flowchart is a diagrammatic representation that will illustrates the sequence of operations to be performed to get the solution of a problem. The flowchart is a means of visually presenting the flow of data through an information processing systems, the operations performed within the system and the sequence in which they are performed. In this lesson, we shall concern ourselves with the program flow chart, which describes what operations are required to solve a given problem.

The program flow chart can be likened to the blueprint of a building. As we know a designer draws a blueprint before starting construction on a building. Similarly, a programmer prefers to draw a flow chart prior to writing a computer program. 3. 9 Method Used in Developing the System 3. 9. 1 System Planning. To create a project basic thing to do is to create a plan. The system analyst determines and identifies the planning phase. Identify

meaning, to identify the projectgoalsand needs of the system. 3. 9. 2 System analysis. This phase refines project goals into defined functions and operation of the intended application.

It analyzes end-user information needs. This is used by the proponent in integrating the lending system to understand and document in detail the business needs and the processing of requirements of the proposed system. 3. 9. 3 System Design. A sample structure of the entire study is created in the phase and all necessary data are gathered. It describes the describe features and operations in detail, including screen layouts, business rules, process diagrams and other documentation. The output of this stage will describe the new system as a collection of modules or subsystems.

This is used by the proponent to design the proposed system based on the requirements defined and decisions made during the analysis. 3. 9. 4 System Implementation. Modular and subsystem programming code will be accomplished in this phase. Unit testing and module testing are done in the phase by the proponent. This phase is intermingled with the next in that individual modules will need testing before integration to the main project. It is used by the proponent to build, test, and install a reliable system with trained ready to benefit as expected from use of the system. 3. 9. 5 System operation and support. . 10 Justification of Method Used. 3. 11 Method for Product Evaluation. 3. 11. 1 Technical Feasibility. Determines the verification and proving of system accessibility and availability in the local market of the system requirement peripherals such as software and hardware. 3. 11. 2 Operational feasibility. This method determines if the proposed system gives the satisfactory result and output for its target users and market, whether

there will be problems in applying and implementing the system in its operational environment in determining the operational feasibility. 3. 11. 2. 1 Efficiency.

The ability to complete the result without wasted energy and effort. 3. 11. 2. 2 Reliability Refers to the dependability of the system in performing its intended functions and giving satisfactory results. 3. 11. 2. 3 Effectiveness The degree to achieve the usability of the system and its ability to solve problems encountered of the locale's current system. The Likert's was applied to the qualitative data collected because its appropriate in evaluating the feedback obtained from respondents. A Likert's scale measures the extent to which a person agrees or disagrees with the question. Scale| Range of Mean| Verbal Interpretation(VI)| 5| 4. 1-5. 00| excellent| 4| 3. 41-4. 20| Very Satisfactory| 3| 2. 61-3. 40| Satisfactory| 2| 1. 81-2. 60| Fair| 1| 1. 00-1. 80| Poor| Table 3. 1 Likert's Scale 1. Mean. This was used to determine the average rating of each criteria that was set in the proposed system that the respondent evaluated. The formula for getting the mean is as follows: M= f(X1+X2+X3+...Xn) N Where: F= refers to the frequency (f) or the number of times that a given number (x) was chosen by the respondents. (X1 + x2 + x3 + ....... Xn) or any of the numerical ratings (5, 4, 3, 2, 1) representing the evaluator's rating n= represents the sample size of the total number of respondents. . Weighted Mean. The weighted mean was used to describe the perception of the respondents concerning the proposed software. To determine the weighted mean, the proponent used the following formula: E f (X1+X2+X3+...Xn) N Where: Ef(X1+X2+X3+ ...Xn) = summation of means of all criterion. N= Total number of

respondents 3. 12 Statistical treatment of Data This study is essential in order to make used of data in right form by computing them mathematically. The proponent used z-test, this is use by the proponent to make comparative studies between two samples. (See to Appendix M) 1. Formula for Frequency Mean (FM): (X1 + X2 +X3 + … Xn)

FM = f _____ n Where: f = product of the frequency and a particular numeric rating for a given criteria. n = sample size represented by the total number of respondents (X1 + X2 +X3 + … Xn) = any numeric rating 1, 2, 3, 4 and 5 representing the evaluators rating option for each given criteria. 2. Formula for Weighted Mean (WM): ? f(X1 + X2 +X3 + … Xn) WM = _____ N Where: ? f (X1 + X2 +X3 + … Xn) = the summation of all frequency mean N = total number of criteria 3. T-Test Computation __ __ t =

X1 - X2 n1-1(S1)2+ (n2-1)(S2)2n1+ n2-2 1n1+1n2 3. 13 System Development Cost The following formulas are used in computing the total cost in developing the proposed system. Salvage value = (Total Hardware Cost/Life Expentancy)*(Development Period) Months per year Annual Depreciation Cost = (Total Hardware Cost-Salvage Value) Life Expentancy Monthly Depreciation Cost = (Annual Depreciation Cost) Months per year Hardware Development Cost = (Monthly Depreciation Cost * Development Period) Software Development Cost = (Monthly Depreciation Cost * Development Period) Labor Cost = (Developer's Fee per Month * Development Period)

KWh used by Computer = (number of watts * number of hours per month) 1000w KWh used by Electric Fan = (number of watts * number of hours per

month) 1000w KWh used by Light = (number of watts * number of hours per month) 1000w Total Monthly Power Consumption = KWh used by Computer + KWh used by Electric Fan + KWh used by Light Total Basic Charge = Generation Change + Transmission Change + System Loss Change + Distribution Change + Supply Change Total Development Cost = Hardware Cost + Software Cost + Labor Cost + Miscellaneous Cost + Total Overhead Cost