A
Systems Analysis
& Design Reader

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Use Case Narratives

DEDICATION

First of all, I dedicate this course fulfillment that I have completed to my parents. I have truly strived hard and struggled to finish all my course requirements to be able to show them that I do not take my studies only for granted. This completed book that I was able to produce is the outcome of what I have worked hard throughout this term. I believe that through this, I will be able to make my parents be proud of me. In addition, this is also a way to repay them for all the wonderful things they have given me.

Furthermore, I dedicate this work to myself since I owe this book to nobody else but myself. I have undergone countless sleepless nights just to complete my Case Studies, Book Reviews, Use Cases and SAD paper. It is extremely rewarding and fulfilling to know that I was able to finish this book through the hard work that I have exerted. As a result, I can say that this work is something that I am truly proud of.

PREFACE

Prior to taking my Systems Analysis subject, I was not very knowledgeable on what this course is all about. On our first meeting with our professor, he informed us that at the end of the term, we will be able to produce our own book. We were tasked to do 32 Case Studies, 14 Book Reviews, 13 Use Case Narratives and our Systems Analysis and Design Paper.

In our SYSANAL subject, we have learned to produce various papers as a fulfillment of our course requirement. There were quite a number of paper works to be submitted to our professor every week. During our pre-finals, we were scheduled to defend our Systems Analysis and Design final paper. We presented our company proposal in front of our panelists. For the duration of the term, we were obligated to be responsible and hardworking students. I can say that in the activities that we have had in class, we were challenged to work beyond our limitations.

After taking my SYSANAL course, I was able to complete a compilation of Case Studies, Book Reviews, Use Case Narrative and our Systems Analysis and Design Paper. At the end of the term, I was not only able to create my own book but I have also learned a lot of things from this course. I now understand the way how systems analysts think. During the process of fulfilling the requirements of this course, I have learned to think critically and out-of-the-box. This subject certainly helped me develop my thinking skills and capabilities.

Book Review 1

Chapter 18: Designing User Interfaces

User Interface is the method wherein people get the chance to interact with the system. In addition, it stands as the representation of the system and the proficiency of a systems analyst. In this chapter, the needs for feedback, design of database queries, design of user workstations and a lot more were thoroughly explained. Moreover, the two main components of user interface were discussed. These two are the Presentation Language, a computer-to-human part of transaction, and the Action Language that characterizes to human-to-computer portion, which builds up the substance of user interface. A variety of different sort of interfaces was also covered in this chapter. Numerous attention-grabbing thoughts about how to develop an interface was tackled in here. This book provided an explanation regarding a few of the principles about data queries that may be used in Web searches.

"An effective interface goes a long way toward successfully involving users. Users ought to want to make use of the system. Providing feedback is very important for users to support and sustain their involvement so as to monitor and change behavior. Feedback is used in many ways."

In creating and designing user interfaces, we should be able to make the users make use of our system for the reason that workspaces greatly influence their willingness to make use of them. Once we were able to catch their attention, it could show us the way towards the right path of success. In everything we do, we always want to get the feedback of the people regarding the said matter, just like in an interface. As we receive different remarks and comments from our users, we become motivated by it in a way that we look for various ways to develop and implement the system to improve them even more.

Book Review 2

Chapter 15: Designing Effective Output

As defined in this chapter, output is any useful information or data delivered by the information system or decision support system to the user. Outputs can take virtually any form including microforms, audio, screen, print, electronic, CD-ROM and Web-based documents.

Relating Output Content to Output Method

It is said that the output content has to be interrelated to the output method. So in designing output, we have to think how function influences form and how intended purpose will influence output method.

Designing Screen Output

Certain guidelines in designing screen outputs were indicated in this chapter. First is to keep the screen simple so it will not look complicated to the users. Second is the need to keep the screen presentation consistent. Third is the need to facilitate user movement among screens. Last is to create an attractive screen to catch the user's attention.

Designing a Web Site

It is stated here that the term Web site replaced the words home page. Indicating that the collection of pages must be coordinated, organized, developed, designed and maintained in an orderly process. However, the guidelines from designing screens in designing Web sites may also be used. It says that planning a Web site is one of the most important steps to develop them. Therefore, it has to be planned and designed according to its text, structure, content, graphics, navigation, promotion and presentation.

"All output should have a purpose. It is not enough to make a report, screen, or Web pages available to users because it is technologically possible to do so. During the information requirements determination phase of analysis, the systems analyst finds out what purposes must be served. Output is then designed based on those purposes."

Basically, we know for a fact that all results must have its reasons. We won't be able to come up with an output if we can not identify the main reason why we are doing it in the first place. As a systems analyst's perspective, one must have the ability to discover the needs, problems, requirements of other people. As we get to analyze different problems, we are able to think of many possible solutions and answer keys. First, we have to know and analyze the problem and its purpose to be able to come up with a solution or output. So it is very essential to recognize first the purposes to be able to have its output.

Book Review 3

Chapter 1: Assuming the Role of the Systems Analyst

Managing Information as a Resource

The business must manage the information as carefully as other resources and should not be taken for granted. Managers must recognize it is related to the production, distribution, security, storage and retrieval of information.

Managing Computer-Generated Information

The availability of networked computers with the access of the Internet and the World Wide Web has created an information explosion throughout society. This chapter examines the fundamentals of different kinds of information systems, varied roles of systems analysts and phase in the systems development life cycle. It also introduces Computer-Aided Software Engineering (CASE) tools.

Types of Systems:

⇒ Transaction Processing Systems (TPS)
   Support large-volume, routine business transactions such as payroll   and inventory.
⇒ Office Automation Systems (OAS)
   Support data workers who use word processing, spreadsheets and also analyze, manipulate and transform data.
⇒ Knowledge Work Systems (KWS)
   Support professionals such as scientists and engineers who create new knowledge.
⇒ Management Information Systems (MIS)
   Computerized information systems that support a broader range of business functions than do transaction processing system.

⇒ Decision Support Systems (DSS)
   Information systems whose output is tailored to their users' needs and that help support decision makers in making semi structured decisions.

$\Rightarrow$ Executive Support Systems (ESS)

       Help executive organize their interactions with the external environment by providing graphics and communications support in accessible locations.

$\Rightarrow$ Group Decision Support Systems (GDSS) and Computer Supported Collaborative Work Systems (CSCWS)

       Bring together members in special electronic ways to help groups solve semi structured or unstructured problems.

Needs for Systems Analysis and Design

It analyzes data input or data flow systematically, data storage and processing or transmitting data. In addition, systems analysis and design is also used to analyze, design and implement information systems.

Roles of the Systems Analyst

They evaluate how businesses function through analyzing the input and process of a data. Their main roles are outside consultant to business, supporting expert within a business and agent of change in both internal and external situations.

"*Analysts possess a wide range of skills. First and foremost, the analyst is a problem solver, someone who enjoys the challenge of analyzing a problem and devising a workable solution. Systems analysts require communication skills that allow them to relate meaningfully to many different kinds of people on a daily basis, as well as computer skills. End-user involvement is critical to their success.*"

Systems analysts should have great awareness in his/her surroundings to what is happening in the environment. One must know how to solve and analyze different problems he faces to come up with a solution and answer to the dilemma. In addition, a systems analyst must love what his doing. He/she must be devoted and committed to the job. Skills must be enhanced for the reason that it is the vital ingredient to become an excellent systems analyst.

Book Review 4

Chapter 7: Observing Decision-maker Behavior and the Office Environment

Observing a Decision Maker's Behavior

Systems Analyst makes use of their observation skills in order to get information on the decision makers and its surroundings on how they gather, process, share and use the information to finish their works. In addition, it assists to verify or reverse what was found out through the interviews, questionnaires, and many more.

By means of observing the activities of decision makers, the analyst seek to get insight regarding what is really done and not only is what documented or explained. Also, through observing them, the analyst tries to see the relationship of the decision makers and its members in the organization.

Time and Event Sampling

As stated in this book, time sampling allows the analyst to set up scientific intervals at which to observe managers' activities. Some of the advantages are reducing on the bias that may go into observations and it allows for a representative view of activities that happen frequently.

Observing the Physical Environment

Through observing the physical environment, the analysts are able to understand how the decision maker's workplace affects the decision-making behavior.

The seven observable elements:

- Office Location
- Placement of the Decision Maker's Desk
- Stationary Office Equipment
- Props
- Trade Journals and Newspapers
- Office Lightning and Color
- Clothing Worn by Decision Makers

"The systems analyst subconsciously observes body language during the interviews and other interactions. Understanding body language enables analyst to understand better the information requirements of the decision maker by adding dimension to what is being said. Nevertheless, although it is important to observe decision makers' body language, precise interpretation of it, movement for movement, is immensely difficult and also varies across cultures."

Systems analyst has to be really skilled in observing his/her surroundings. Observing body language of decision makers is in fact not an easy thing to do because we all differ from our actions. A systems analyst should first study the decision makers' civilization and how that person uses his/her body language and be able to recognize the exact meaning of it. One of the systems analyst's tasks is to analyze, understand and interpret the decision makers' body language. It allows them to see the needs and requirements of the decision makers.

Book Review 5

Chapter 19- Designing Accurate Data-Entry Procedures

"*Making sure that data are into the system accurately is of utmost importance. It is by now axiomatic that the quality of data input determines the quality of information output.*"

Before a data is being inputted into the system, it has to be really precise and correct. This is very significant in order to have an accurate data. If we input an excellent data into a system, naturally the output would also be excellent. That is because it is said that the quality of data input determines the quality of its output.

Effective Coding

According to this book, one way to enter data accurately and efficiently is through the knowledgeable employment of various codes. Coding is the process of putting data into short digits and letters.

Purposes of coding:

1. Keep track of something - To identify a person, place or thing to keep track of it.
2. Classifying information - To be able to distinguish among classes of items.
3. Concealing information - To disguise information we do not want others to know.
4. Revealing information - To give information to people and make the data entry more meaningful.
5. Requesting appropriate action - To instruct the computer or the decision maker about what action to take.

General Guideline for Coding

- Be concise
- Keep the codes stable
- Ensure that codes are unique
- Allow codes to be sortable
- Avoid confusing codes
- Keep the codes uniform
- Allow for modification of codes
- Make codes meaningful
- Using codes

Ensuring Data Quality through Input Validation

Validating Input Transaction

Validating input transactions is done in software. Although it is the programmer's responsibility, the systems analyst must know the possible reasons that would make a transaction invalidated.

Validating Input Data

Input data should be valid to make the transaction valid. Tests may be included into software to make sure of its validity.

Accuracy, Codes, and the Graphical User Interface

As stated in this book, in systems that make use of graphical user interface, codes are often stored either as a function or as a separate table in the database. If the codes are stable and infrequently change, they may be stored as a database function. If the codes change frequently, they are stored on a table so that they will be easily updated.

Book Review 6

Chapter 5 - Interviewing

"The first questions should deal with subjects that respondents view as being important. This approach makes for an intriguing start to the questionnaire, and it is a technique to get people involved quickly."

As defined in this book, interviewing is a process that is done by systems analysts in collecting data on information requirements. Interviews are preplanned question-and-answer conversations between two people. Systems analysts pay attention for opinions, feelings, and goals of the interviewee. This is to study their place of work and collect data regarding information requirements to improve the organizational system. By means of interviewing, systems analysts are able to develop and build a good relationship with their clients.

Five steps in preplanning interviews:

1. Read background material
2. Establish interviewing objectives
3. Decide whom to interview
4. Prepare the interviewee
5. Decide on question types and structure

There are two types of questions, the open-ended question and the closed questions. Open-ended questions are those that leave all possible response options open to respondents. Closed questions are those that limit the response options available to the respondent.

Interviews may be prepared in three basic structures. First is the Pyramid Structure, which starts with a specific question and ends with a general question. Second is Funnel Structure, which begins with a general question and ends with a specific question. Third is the Diamond-Shaped Structure, which begins with a specific question then moves towards the general question and finally ends with a specific question.

Book Review 7

Chapter 6 - Using Questionnaires

"The biggest difference between the questions used for most interviews and those used on questionnaires is that interviewing permits interaction between the questions and their meanings."

As defined in this book, questionnaires are used to collect information technique that permits the systems analysts study the behaviors, beliefs, attitudes and characteristics of the people in the organization.

Questionnaires need to be understandable by the person being interviewed. The types of question that are usually used in questionnaires are open-ended questions and closed questions. It is significant that the responses of the interviewee have to be understood correctly by the person interviewing them.

As stated in this chapter, scaling is the process of assigning numbers or other symbols to an attribute or characteristic. Systems analysts use scales to measure the attitudes or characteristics of respondents. There are two measures of performance in constructing scales. These are validity and reliability. Validity is the degree to which the question measures what the analyst intends to measure. Reliability measures consistency because both external and internal consistency is important.

In designing questionnaire format, it is essential to have sufficient white space on the questionnaire, adequate space for responses, ask respondents to clearly mark their answers, use objectives to help determine format and lastly, be consistent in style. Consistent control of the questionnaire format and style can result in a better response rate.

Book Review 8

Chapter 14 - Writing and Presenting the Systems Proposal

"The written proposal serves as a summary of the systems analyst's work in the business up to that point, and as such it is essential that great care is given to writing and presenting it."

Systems analysts have three steps or guides that must to be followed in writing and presenting systems proposal which enables it to be successful. These are organizing proposal content effectively, writing proposal in an appropriate business style, and lastly, presenting informative systems proposal orally.

Figures such as tables and graphs are also being used in a proposal for tackling and discussing the fundamentals of a proposed system. The different types of graphs are the line graphs, column charts, Bar charts, and Pie charts. Line graphs are used to show the changes over time. Column charts compare different variables at a particular point in time. Bar charts show one or more variables within certain classes or categories during a specific time period. Pie charts are used to show how 100 percent of commodity is divided at a particular point in time.

Systems analysts must also understand their audiences on how to deliver oral presentations as organized as it should be. With the use of notebook computers, you will be able to present your proposed system. It must be presented with the use of Microsoft Powerpoint because it is one of the most exciting way to present it. It would be much better if you would make use of your creativity in presenting it.

In delivering the presentations, you must be audible enough in order to be heard by the audiences. Second is to maintain the eye contact. As you speak, you must look directly into the eyes of the people you are talking with. Third, visuals should be large enough so that everyone would get to see your presentation. Fourth is the gesture. Your gestures must be natural to your conversational style. Fifth is confidence. I think this is the most important one in delivering a presentation because if you have the confidence, the audiences would be able to see the assurance from your proposal.

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Chapter 21 - Successfully Implementing the Information System

"The primary role of an analyst in large systems projects is overseeing implementation by estimating the time needed and supervising installation of equipment for information system."

According to this book, implementation is the procedure in ensuring that the information system and networks are ready or prepared. The systems analyst has numerous approaches to implementation that should be considered as the changeover to the new system is being prepared. They include shifting more computer power to users through distributed processing, training users, converting from the old system, and evaluating the new one.

The two standard types of network are wide-area network (WAN) and local area network (LAN). Wide-area networks are capable of serving users over several miles or across continents while local area networks are standard for connecting local computers and terminals in a department or buildings of an organization.

Distributed systems networks have four types. These are hierarchical networks, star networks, ring networks and bus.

As stated here, the information system utility approach for assessing information systems can be a complete and productive method for measuring the success of a system. It can guide the analysts for developing new projects as well. The utilities of information are the possession utility, form utility, place utility, time utility, actualization utility and goal utility.

Possession utility: *who should be responsible for decision making?*
Form utility: *what kind of output is distributed to the decision maker?*
Place utility: *where is the information distributed?*
Time utility: *when is the information delivered?*
Actualization utility: *how is the information introduced and used by the decision maker?*
Goal utility: *why is the information distributed to the decision maker?*

Evaluating is the giving of feedbacks for improvements of a system. This is significant for the reason that through feedbacks and comments, they will be able to expand the program into a better one. Evaluating is also called for following system implementation.

Book Review 10

Chapter 13 - Preparing the Systems Proposal

"The rapid advance of technology dictates that the systems analyst research types of computers available at the particular time that the systems proposal is being written. Computer sizes range all the way from the smallest notebook computers to room-sized supercomputers. Each has different attributes that should be considered when deciding how to implement a computer system."

As described in this book, Systems Proposal is a distillation of all that the systems analyst has learned about the business and about what is needed to improve its performance. The role of the systems analyst is to develop the systems and make them better.

In preparing systems proposal, it is necessary to first, evaluate the computer hardware and software; second, identify and forecast costs and benefits; third, compare cost and benefit.

Systems Analysts are tasked to evaluate the computer hardware and software with the purpose of knowing the system's ability in managing the workloads effectively. The systems analysts and the users are the people who assess the performance of the systems hardware by knowing the time needed for average transactions, the quantity of the competence of the system, the idle time of the central processing unit, and lastly the size of the memory provided.

The proposed systems must base on its cost and benefits. They ought to be considered together all the time for the reason that they are unified and mutually dependent.

According to this book, the benefits and the costs of the system can either be tangible or intangible. Tangible benefits are the advantages measurable in dollars that accrue to the organizational through the use of the information system. Intangible benefits accrue to the organization from the use of the information system are difficult to measure but are important nonetheless. Tangible costs are

those that can be accurately projected by the systems analyst and the business' accounting personnel. Intangible costs are difficult to estimate and may not be known.

The methods in comparing the costs and benefits of a proposed system are the break-even analysts, payback, cash-flow analysis and present value analysis. Break-even analysis is used to verify the break-even capacity of the proposed information system. Payback is a simple way to evaluate whether a business should invest in a proposed information system. Cash-flow analysis examines the direction, size, and pattern of cash flow that is associated with the proposed information system. Present value analysis helps the system analyst to present to business decision makers the time value of the investment in the information system and funds flow.

Book Review 11

Chapter 2: Levels of Management

"Each of three levels of management holds different responsibilities and implications for developing management information systems."

Three levels of managerial control:
- Operation Management
- Middle Management
- Strategic Management

Operation Manager is the ones who make the decisions that influence the implementation of work schedules, inventory controls and shipping controls of processes in a production. In addition, they also supervise the operating details and make certain of the accomplishments of the works in due time. Operation Management provides information that helps in organizing operations. They are good at implementing analytical decisions.

Middle Manager is the ones who make immediate planning. They control decisions regarding how resources must be allocated to meet their organizational objectives. Middle Manager gets to the bottom of the problems of the employee's by estimating potential resource requirements. They make decisions that can be both operation and strategic.

Strategic Manager makes decisions only once. They plan, apply and assess every decision that enables an organization to attain its objectives. They are the decision makers that guide the operational and middle managers throughout the organization.

CASE STUDY 1
PayPal

The PayPal, a security company, was established by Max Levchin and Peter Thiel in December 1998. When Levchin was in stiil in his college days, he focused more on security rather than on payments. He came up with the decision to move to Silicon Valley to establish a company. While he was at the Silicon Valley, he was uncertain with regard to what he was going to do with his life. He went to a lecture at Stanford that was given by a man named Peter. Peter and Levchin had an appointment the next week and they tackled the issue about Levchin's suggestion on starting a company. Until Peter came up with the thought of letting Levchin start a business while having his hedge fund invest a small amount of money in it. Levchin agitated being without a CEO since no one was available. He phoned Peter and told him that he does not have somebody to run the company. So Peter volunteered to be his CEO. On January 1, 1999, both of them agreed that Peter would be the CEO along with Levchin as the CTO.

Levchin's original plan at that time was focused into developing software for handheld devices. When he was in college, he bought different kinds of cards. He reverse-engineered them and wrote an emulator for every single type of them for a Palm Pilot. He emulated the whole thing on a Palm Pilot so his friends were able to use it. When Levchin posted it on the Web, he got hundreds and then thousands of downloads from different people. Just then, he realized that it could be his business. In the beginning, he had a tough time into getting an implementation of a crypto graphic algorithm on a Palm Pilot since it has a very low power. Moreover, he was able to get it to the point where it was instantaneous on a Palm Pilot. They built crypto libraries that allow securing anything on handheld devices. Afterwards, they built the wallet application wherein they can store all of the private data on the handheld device. Thus, they began to store things that were of value. Finally, they came up with the idea of storing money in the handheld devices.

They had the famous Buck's Beaming. Their first round of financing was transferred to them through the use of the Palm Pilot. But about a week before the beaming, Levchin came into a realization that the code was not yet finished. So Levchin along with his two coders coded continuously for five days. They kept on trying and fixing all the bugs in it. They were troubled that the Palm Pilots might break down for the reason that it was awkwardly designed. On that day, various TV cameras and journalists came to interview him.

As soon as they got funding, they hired aggressively and it caused them good growth. As a result, they built a demo for the website where they could do everything there that they could do on a Palm Pilot. More and more people used the website for transactions than the handheld device. Consequently, they killed the handheld transaction because they peaked out at 12,000 users.

The year 2000 was the year of the fraud. They were losing a great amount of money every month. So Levchin decided to begin researching about it and figuring out

what would be done to resolve the dilemma. Therefore, they had joined with a company called the X.com. But there came a conflict because the man who ran X.com was into Windows while Levchin was keen on Unix. The man was pushing him towards accepting Windows to be the platform but he refused it because he was coding all his life for Unix. However, they could not switch to Windows because the important problem was the issue about fraud. That was the argument that caused the man to leave and Peter came back as the CEO.

Bob, who worked with Levchin, lend him a hand for him to be able to understand and fix the problem on fraud. They had these human investigators that would try to solve fraud cases. They tried to see where the money went and see if they could recover some of it before it left the system. They built different tools that would allow computers to foresee where expensive losses would be. These actions resulted to a decrease of the fraud and they got better on it. With the help of Sarah, manager of the fraud group, the fraud rapidly became managed and organized in about a year.

Levchin never imagined that PayPal was going to be a huge success. From 25 people, they eventually increased up to 1,000 people. This startup company became thriving because they dealt with the problems early enough with the help of its people. All of these became possible through the collaboration and teamwork of the people who are involved in the company.

CASE STUDY 2
Hotmail

Sabeer Bathia and Jack Smith became acquainted with one another at the Apple Computer. They were working on the same project building, the PowerBook portables. But they had an idea that Apple was not with grand stock options. As a result, both of them came up with a decision to leave Apple and join their former manager who left the company for a startup in the Valley called the FirePower Systems. After two years, the company was not performing very well as expected. The manager who appointed them left and went on his own. As a result, Bhatia was uncertain of what he was about to do with his life, whether he should enter a business school or take a look at other things. He developed a great interest on the internet and began spending more time on it. He was inspired by his two colleagues from Stanford who established Yahoo. He started playing around with it and came up with the thought to develop a simple-to-install database at the back end and use the browser as the front end. He created a business plan and shared it with Jack for the reason that he was a great software and hardware engineer. Thus, they started building the product and as an addition, started looking for funding and began appointing more people.

After installing a firewall around their corporate intranet that prohibited them from dialing out to their personal email accounts, they came into a realization that they can access any website in the world with the use of a web browser. To make available ubiquitous access to the email from any web browser from anyplace in the world was the killer idea. Tim Draper liked the thought so he agreed about the funding. They had an intense negotiation with them. The greatest challenge they encountered with Hotmail was actually the issue with regard to the funding. Hence, they were stuck with DFS for the reason that they impeded their ability to go to another VC. Steve Jurvetson was the one who introduced them to various of people. They got funded on February 14, 1996 and then finally at the fourth of July, they were able to launch the site. They had 100,000 subscribers in the first three months and they were growing really rapidly from then on. They received higher sign-ups on a daily basis. It all became vastly extended by word of mouth. They launched a massive PR campaign with a PR firm and started talking to different journalists. They had a press tour around the West Coast and East Coast and it just took off from then on.

While they were already on their way of achieving triumph, Tim claimed the thought of the web-based email and so he got numbers of interviews because of that. However, all of them realized that devoid of Tim, the thought would not have taken place at all. Their whole concept was developed with the help of advertisements and promotions.

The talk with regard to Microsoft started after their first anniversary, which was on July 1997. As a result, they started the discussion about a partnership deal and that is how it all started. Bhatia knew that Hotmail was going to be flourishing and thriving one day. It grew up in just an extent of 20 months to be this booming and successful.

CASE STUDY 3
Apple Computer

Steve Wozniak, who started out personal computers, was also the cofounder of Apple Computer in 1976. While Wozniak was still in high school, he badly wanted to have his own computer someday. It was his dream. He just studied on his computer manuals as well as the chip manuals since they did not have any computer in high school. He did not learn anything on designing computers in college. However, he had ideas of the parts involved in parsing a computer language. Thus, he knew that he was good at creating things with few parts and it all began with his dedication. So he figured out himself how to build computers.

Wozniak first worked at Hewlett-Packard designing scientific calculators. He designed one of his own Pong, which is an arcade game. Steve Jobs also worked in that company as his part-time job and he was the one who brought Wozniak to be in that company.

There was this instance wherein he wanted to have a teletype but he could not afford to buy one so he needed to design his own terminal. Then all of a sudden, he discovered microprocessors. He analyzed them and he discovered it was just like the minicomputers he used to design. But there was no language yet for his microprocessor so he decided to write a computer language for it. He was excited because he got to write the first language for his processor. He studied the commands in the Basic and he started creating syntax table which showed the grammar of that language. Designing great things was the only way for him to be noticed by people. He was able to build Basic and admitted that it was the hardest project he did. He handwrote it on the left side of the program and translated it into ones and zeros on the other side. At the first meeting of the Homebrew Computer Club, that was where he realized that he was going to have the computer that he wanted his whole life. So he studied the microprocessor.

Steve Jobs came up with the idea of starting a company. It was also his idea of naming the company Apple. Wozniak immediately agreed to name their company Apple. So they started seeking money to build the Apple. In the beginning, they did not think that the company would be growing to a real market. So they left Hewlett-Packard and started the company. Mike Scott, became their President from the day they started Apple as a real corporation to the day they went public. Wozniak was in charge of engineering on hardware and software while Steve Jobs was responsible talking to dealers, negotiation, ordering parts and ads for magazines.

Almost everyone who saw Apple II wanted to have their own because it is the best product they have ever seen. The Apple II became the largest selling computer in 1980 to 1983. As a result, the company eventually became a huge success and it continued to just grow and grow. So that was the history of the Apple Computer.

Things I have learned:

After reading the history of Apple Computer, I came into a realization that we are all capable of training ourselves. Motivation to gain knowledge will pursue us in learning. As a result of their determination and their cleverness, they were able to become good engineers, great negotiators and excellent managers. It is also important to listen to different opinions coming from different people about startup companies to acquire ideas in how to build a company successfully. It also shows that in this world we live in, everything is actually possible. All you need to do is to work for it as hard as you can to achieve all your goals and ambitions in life.

CASE STUDY 4
Excite

Joe Kraus started the Excite in 1993 with his five Stanford classmates. They first decided to start a company together. They were so dedicated to the idea of starting something together even though they did not know at first what it will be. Joe and his high school friend planned to start a T-shirt company together over the summer and they earned money. He also worked for Domino's Pizza in college to earn.

Joe wanted to figure out how to do something in tech even though his was not technical. He convinced his friend, Graham Spencer, and four other friends to start their own company. They did the search engine in Joe's garage. Then InfoWorld became interested to them.

Excite became the fourth largest website in the world. Cost per thousand impression-based advertising was how they made money in search. When they started getting into the web search business, they were very much worried about their big competitors such as Yahoo, Lycos, and Infoseek.

Microsoft made a buyout offer for Excite in late 1995. They offered Excite $70 million but the Excite did not accept it because they wanted it to be $100 million. So the Microsoft decided not to buy the Excite anymore.

Netscape wanted more downloads of it client that would help them sell more servers and client licenses. So they put the two buttons up for bid and there were three bidders such as the Excite, the Infoseek and the MCI. So Excite decided to bid $3 million and unfortunately they lost. But then, MCI was not able to deliver its service to Netscape on time so they came back to Excite and took their $3 million instead. That was what helped launch the company until it became really successful.

What I have learned:

In this story, Kraus has said that if they have given up, they never would have gotten the deal back. So I learned that in everything we do, we should not give up too easily. We should not loose hope. If we have positive outlook in life, we will be able to reach our goals. In addition to that, business is indeed taking risk. We will not be able to startup our own companies without taking any risk. In my own point of view, the key to success is simply by striving hard.

CASE STUDY 5
Software Arts

Dan Bricklin and Bob Frankston founded Software Arts in 1979. He met Bob when he was a freshman. The first job he was given was to make modifications and finish the work of Bob Frankston. Bob's thesis was a project called Limited Service System. It was a way to throttle your usage so that nobody would use more than a certain amount, so they could just give it away for free and know that nobody would hog more than a certain percentage.

Dan and Bob wanted to do a business together. They looked for years for something to go into business together and they knew that it will be in computers. They went through very little money to begin with. They borrowed money from their relatives and the bank to be able to buy a Prime minicomputer.

The spreadsheet came from the idea of the word processing and computerized typesetting world, together with the calculating world, to the needs of business. So he had prototyped it and then Bob program it. He then applied typesetting world and the word processing world to the spreadsheet. They used decimal arithmetic so it would act just like a calculator. He wanted to make it easy to use.

At first, they did not think that it would be as big as it is now. January 2, 1979 was the day they have incorporated the business and then negotiated the deal with Personal Software who renamed themselves as VisiCorp. Some of the people who saw it was really amazed especially those who were very much into computers. Those who needed it, got it.

October 20, 1979 was when Bricklin got his own copy. But unluckily, they had to sell their company to Lotus because they did an asset deal. So Lotus bought the assets of the company and Bricklin was out. Despite of that, the Software Arts was a successful one and it soon became the Microsoft Excel which we use nowadays.

Things I have learned:

Entrepreneurs and business people must have their interests on anything they do. It is also very important to want what you are doing. Optimism brings you to all possibilities. We know for a fact that not all businesses turn out to be a great success. The risk is always there and businesses also fail. Therefore, you do not have the assurance that a startup company will be successful in the future. I learned that we have to believe in our abilities and be broad minded. I believe that to attain success, one must go through the stepping stones to be able to get better and better as time goes by.

CASE STUDY 6
Lotus Development

Mitch Kapor and Jonathan Sachs founded Lotus Development in the year 1982.

Kapor became obsessed with personal computers so he bought an Apple II. At first, he did not know what he wanted to do. He started generating some consulting incomes and writing programs. They started an Apple II user group called New England Apple Tree. One of them was Eric Rosenfeld, a graduate student from MIT. Kapor helped him write a statistics routine that ran on Apple II that he could use in analyzing data in study. Then they soon realized that it could be useful to people if they build a statistics and graphics product on Apple II and they named it Tiny Troll.

At that time, Dan Bricklin and Bob Frankston developed VisiCalc and it was very inventive. So it started generating sales on Apple II. The publisher wanted Kapor to take Tiny Troll and rewrite it so they could bring it out as companion product to VisiCalc. So he thought that he would make money and that was it.

Kapor did not have any background in computer science and he was self-taught. He then left school to finish the product. He wanted to be the product manager because he realized that the big economic opportunity was in the startup. Tiny troll eventually was named VisiPlot. He was moved aside when the VCs brought more senior management which he did not like.

He had finished the product in 6 months and it came out in 1981. There were no hard drives before so Kapor thought of several ways to make the procedure manageable but nobody was interested with it.

Then they decided to do something for the IBM PC which was the reason why they had become successful. Because IBM used a 16-bit microprocessor, it permitted people to build bigger spreadsheets. Sachs was the one who programmed it. He wrote all of the code of the original version. They did a bigger and faster spreadsheet in IBM.

Kapor was passionate about the applications which helped people to be more productive. That was what he was concerned most. Moreover, he did it for financial needs. He basically wanted to become a software designer and did not expected to be able to build a big company such as that.

The market expanded noticeably and they did not expect it would actually happen. It was 1983 when Lotus went public. And Kapor became the CEO of the company.

What I have learned:

As I was reading the history of Lotus Development, I was inspired by how Mitch Kapor dealt with the problems on the people who did not believe in his capabilities. The good thing about him was he did not let those people under estimate him and put him down. But instead, he was able to find ways to prove them they were definitely wrong. I came to a conclusion that entrepreneurs have to be passionate, dedicated and should believe in themselves.

CASE STUDY 7
Iris Associates
Groove Networks

Ozzie and his company first started Groove in the fall of 1997. His brother Jack, Eric Patey, Brian Lambert and him worked out at Ozzie's place. Then after some weeks, they moved to at the Cummings Center in Beverly, Massachusetts.

They first coded a primitive version of synchronization algorithm. The ideas were not based on technology but rather the need they saw for users or potential customers for the product. He wanted to be one of the people who believe he can accomplish anything in software. It was in year 1982 when he wrote the specs for it. He based it on a system named Plato, a large-scale interactive system where people learned and did interactive games on. Groove made them understand that the nature of work was changing. Technology had been useful to helping people work together. Due to the aggravation of their customers, they came to the conclusion that they needed to build a system that works right away.

Lotus Notes became a comprehensive piece of software. It had email and it was used for collaborative workspaces for people to do vibrant work together. They used it as content management system, as an application server. It was meant to fulfill collaborative workspaces piece. They focused on the people's need of assembling virtual environment, sharing documents and thoughts to get their works finish.

They got a big open office and they also recruited a team of people for Iris and Groove. After 3 to 4 months, they have been confident enough to build what they wanted. They needed it to work within several clicks without any person supporting them so they had a lot of work using C++. In both Notes and Groove, there were both technological and market uncertainty. In the late 2000, things were starting to get serious so they decided to focus on the productivity. Microsoft was their prime competitor.

Ozzie had known in his heart that he was going to change the world. He even admitted that getting the product built when he was still 27 was his greatest experience. His good leadership made it possible for him to start his own company and it led him to achieve his ambition.

What I have learned:

On starting businesses, uncertainty and risk are always there. Instead of being discouraged about it, we must rather be eager on it. People who believe in something they are trying to accomplish are usually people who become successful in life. We need to know how to respect and appreciate our skills. We must also be comfortable and we should love what we do. Just think of accomplishing each task and goals that is given to us in order to succeed in it.

CASE STUDY 8
Pyra Labs (Blogger.com)

In 1999, Evan Williams was the one who confounded the Pyra Labs. He was a good entrepreneur and he had already started a couple of companies. It was in year 1998 when he decided to create Pyra.

Williams was already working on the internet for about 5 years. He learned by his own and started his company. But unfortunately, it did not become a successful one. However, he was very determined to start all over again. So he dropped out from college thinking that he does not have to finish any degree. They moved to California to take a job with O'Reilly. He worked for 3 months even though he did not really want to work for anybody. He also became a web developer for more than a year in companies like Intel and HP.

Eventually he made the decision of starting up another company. The idea for Pyra was the personal and project information management systems that build projects for clients and help them organize their work and personal information.

They started the company in January 1999. Meg Hourihan, his friend, helped him to start it over. They had a contract with HP and that is how they started. They took the script Williams had written to publish his site. They had the internal blog which they called "Stuff" where they put things in there. That was when he acquired the thought for Blogger.

They had launched Pyra and it got good responses. In early 2000, they started to raise money and O'Rielly invested in them. It was a long time before Blog was taken seriously. He started receptiveness towards Blogger in 1999. Williams had came to a conclusion that blogging was going to have a big impact on the web because it gives power to everybody's personal thoughts and their right to be heard. They had focused on building more features to it and getting more users.

As time passed by, the service grew and grew and it was really doing well. Then in the year 2002, they had merged with Google and from then on, blogger.com continued to grow and eventually it became a success.

What I have learned:

I have learned that optimism plays a significant role in starting up a company. We can make everything possible if we are confident enough about it. Thus, it will be much easier for us to be able to accomplish it. We just have to believe in ourselves. Decision making is also necessary in every business. One must be clever and certain to each decisions and choices he make. And of course, we have to be prepared to all its consequences whether it will be good or bad.

CASE STUDY 9
Yahoo

1994 was the year when Yahoo had started as a collection of links to research papers by Jerry Yang and David Filo. On the same year, Filo and Yang considered to establish it so they asked some help from Tim Brady to do the planning for them. At that time, Brady was already looking forward on graduating but because of Yahoo, he then decided to be yahoo's first worker.

Brady and Yang met up each other at Stanford since they were both electrical engineering students. In the long run, they had become good friends all the way through college. They frequently share their ambitions and dreams with each other when they were still both undergraduates.

Their aim was to get each and everyone on the Internet. Jerry and Dave started adding up categories and lists they had wanted on the network and rapidly added websites on it. They received plenty of phone calls from different companies. So Brady wrote the business plan for it. He left business school and moved to California.

They were able to have a place of work at Mountain View by means of funding. They had spent 6 months looking for a CEO who would help out run the business. Netscape gave Yahoo the link for the reason that they thought Yahoo was the most excellent company back then. They also employed sales firm who helped them begin promoting Yahoo. They sold five packages to big companies including MasterCard. It was all prior to the coming of Tim Koogle in the company, the one who suited to be Yahoo's CEO.

They had put graphics and publicity on Yahoo. They hired and created an organization even if they did not have a CEO with them. The internet started in July 1995. Their biggest competitors at that time were hycos, WebCrawler and AOL.

Even though there was this moment wherein Brady became really distress, he did not come to the point of giving up. He was determined of what he really wanted to do.

What I have learned:

After reading this story, I have understood how Yahoo has started from being a small company until it rapidly developed and grew. And as of today, this company still exists and in fact it is one of the biggest companies we have nowadays. It continuously expands and grows. The Yahoo team is definitely awesome.

I have observed that all these startup companies actually started from nothing. Their determination and motivation truly helped them much. They always put their passion to what they do.

I think that all of these startup people had their own different reasons and motives about why they started up with the idea of starting a company. It is indeed a matter of choice. Each one of us can do that too. If we just strive really hard for it. Who knows, we might be one of the successful business leaders in the coming future.

CASE STUDY 10
Research In Motion

1984 when Mike Lazaridis and his friend Doug Fregin founded Research In Moton also known as RIM. It was one of the companies who had wireless networks.

Lazaridis and Fregin knew each other on grade school years. But they began working together in high school. He even studied and understood a manual on how to use oscilloscope, signal generator, computer trainer and advance equipments. They learned about computers on their own perseverance.

They started using the internet and made use of email in submitting their home works in school. Simultaneously, they worked with the computer network as well. They had their own research program which was called Watlan (Waterloo Local Area Network Project) and soon they realize that the program was great and it was really an advance technology. As a result, they began working with the different features of the different programs and research projects. He then worked with computer programming.

Finally, Lazaridis decided to start his own company even without graduating yet. They hired people who would help them run the business and because he became really busy in it, he had to absent himself from school. He was in his fourth year when he began with RIM. They also produced a program with a local area network and developed the LAN.

In year 1987, during the conference that had talked about the wireless data systems in Coca-Cola, they happen to know about the wireless data technology. Until the president of Cantel went up to Lazaridis to ask help in making Mobitex work. Mobitex is actually a wireless data system. Cantel looked for somebody who would write software for them and they chose Lazaridis to do that for them. They got an agreement and began writing software to make it work. They wrote their first wireless protocol software which is the application programming interface (API). Lazaridis admitted it was where it had begun.

In year 1997, they thought of building a highly developed pager. He created BlackBerry which is an interactive pager. He made improvements to the wireless data networks and offered consistent experience to its users which allow them to send and receive messages. BlackBerry ended up to be one of the most well-known brands world-wide.

Lazaridis even gave up his childhood dream which was to build some kind of space-based technology for continuing to build wireless data products. He had his visualization and conviction for the company and it caused him to have the determination to pursue it.

What I have learned:

I came to a realization that it is possible to startup your own company even at an early age. It is not necessary to have a degree first before starting a company of your own. Anyone can start their own company provided that the person has the will and perseverance for it. Just like what Lazaridis did.

After reading this, I now know the story behind Lazaridis' success. He believed in what he was doing and he had the vision of achieving triumph through his hard work. In the end, he was able to accomplish it.

CASE STUDY 11
Marimba

Arthur van Hoff was the cofounder of the Marimba Company, a software distribution corporation. He left Java Development team at Sun Microsystems in 1996 intended for Marimba.

With him were Sami Shaio and Jonathan Payne, who were part of the Java team and Kim Polese, a project manager of Java. They left Sun Microsystems to do a startup. They were really strong-willed to start their own company. At the start, they did not have any plan on what they are going to build.

They started funding by collecting $25,000 in each one of them. So the VCs began contacting them. Van Hoff started Strangeberry after Marimba. He and Jonathan did not have any preparation for it. They just wanted to construct a user interface builder. They had spent months on the user interface. They needed to focus on software distribution so what they did was they came up with the idea for subscription-based Software. In here, you can subscribe to software even without buying it.

All of a sudden, PointCast had come out and they had some similarities with them. Marimba had more and more people in it. Kim was replaced by John Olsen to become their new CEO. John Olsen was unlike others and he had already experienced running big companies.

During their first year, they were able to release the software. They also hired some executives and great people. Marimba went from being a consumer software distribution to an enterprise software distribution company.

What I have learned:

Now I know how Marimba Company had started and who its cofounder was. Arthur van Hoff has the capability of starting a company from scratch because he was brilliant.

I think in startup, one must believe in his skills as well as his team whom he works with. He should also have the ability to form a team that is composed of intellectual people. In addition, one must also know how to listen to different advices that are given to him and learn how to make right decisions. And the most important for me is to love and put passion in any work you have. In my point of view, these are the characteristics one must possess to become a successful business man just like Arthur van Hoff.

CASE STUDY 12
Gmail

1996 was the year when Buchheit started working on the email software. He wanted to make a web-based email wherein he would be able to check email anywhere. But during that time, he was not sure of what he was doing so nothing happened with his idea.

Before Buchheit went to Google, he first worked at the Intel Company. When he felt unhappy at Intel, he looked for a job that would suit him. He sent Google his resumé through email. The company directly called Buchheit and gave him a job so he accepted it right away.

Buchheit then entered Google and he worked on Google Groups. There was a time when the Google Groups asked Buchheit if he wanted to build any product he wants. So they came up with the idea for email. At first, they thought that the idea of working on email was really weird. Most of them were hesitant about it. So Buchheit decided to work on it alone and he was able to do Gmail's first version. Buchheit showed the Googlers his work and they told Buchheit to keep on developing it.

Buchheit's visualization was to produce an improved email program and he also wanted to build something that would let him search and at the same time check his email. They also thought of putting together the chat and email in order to make it possible for its users to chat while checking their emails.

Before Buchheit entered Google, he did not know a thing in relation to building large systems. Most of the people on the company were very clever. These people helped them in figuring answers and solutions to the problems they have encountered.

Google's principle which is "Don't be evil" was Buchheit's idea. He thought that it was humorous and very extraordinary so they decided it to be the company's principle. They started writing it on whiteboards and all over the building so they were recognized by the people.

As the company got big, they continued to hire many people. Every time they encounter problems, they immediately find solutions to resolve it. Buchheit admitted that the biggest reason why he had joined Google was because he was interested explore new things.

What I have learned:

       I came to a realization the importance of knowing what our interests are. Like Buchheit, he left Intel because it wasn't his interest so instead he entered Google. In my personal point of view, to be capable of bringing out the best in us, we must first love what we do. I think that we won't be able to attain success if we do not have interest in it.

       I also learned that in a startup, we must know how to push ourselves in pursuing something. We must be strong enough to not give up right away and have an open mind.

CASE STUDY 13
WebTV

Perlman was a liberal arts student but his pastime was more on computers. He was interested to make the people able to see things they like on a television. In short, he wanted to create an interactive television.

Perlman worked at a company called General Magic. He worked around the clock on a video stuff because the company wanted to have it. Perlman attempted to create a Magic TV which is an interactive system but they decided to discontinue building the Magic TV due to the company's financial problems.

After that, Perlman invented the Catapult Entertainment in the month of September. They reverse-engineered video games like NBA Jam, Mortal Kombat, hockey games, etc. and they also had online games. They developed it in just 6 months.

Perlman also took the image from a computer screen and made it work on a television. He showed it to Bruce Leak and he was amazed by him. They came up with the idea of starting their company so they immediately thought of the company's name and they called it WebTV.

They got their funding with the help of Marvin Davis who is a wealthy financier in Hollywood. They were able to get a workplace where they started building WebTV. Additionally, they looked for people who would help them make the company grow.

There was a moment wherein no one had wanted to invest on their company. But still, they did not loose hope because they knew that their company will be a huge thing someday. One day, Philips went to them and said that he wanted to do a deal with WebTV so they had it.

Spencer Tall, the company's consultant, was the person who helped them get the deal with Sony. He made Sony go to WebTV to ask for a demo. They only had 2 and ½ hours to bring together what they have built for the past few months. The CTO of Sony came to them and he wanted to see the prototype so they brought it to him and luckily it ran flawlessly. The CTO was impressed so they brought engineering teams to WebTV and saw the product WebTV was working with. They gave the demo to the president of Sony himself and it worked magnificently. They soon got the deal with both Sony and Philips.

What I have learned:

Now I know how Steve Perlman worked in order to build his own company. Even though at first no one was interested with his work, he did not give up right away. Instead, he continued with it and eventually the people began to notice him.

It only shows that in just a matter of hard work, we will be able to achieve anything we want. We just have to believe in it just like how Perlman did.

I also learned that in doing a startup company, we must find people who have similar goals and dreams with us. To whom we can share our every idea with so that we will be able to work well with them.

CASE STUDY 14
TiVo

It was in year 1997 when Mike Ramsay and Jim Barton founded TiVo. They were the one who thought of the idea of creating a home server network.

Ramsay had worked for HP so he moved to the United States. But he left HP Company in the early '80s. He transferred to Convergent Technologies, which is a startup company. The idea of Convergent technologies was to build workstations.

Ramsay was then employed at SGI wherein he met Mark Perry, Dick Kramlich and Jim Clark. He was amazed by these people and so he decided to join with them. But they were placed on different departments so they did not have the chance to work together.

Jim Clark, his friend, had worked on a video-on-demand system. They created the first video-on-demand system which they called Full Service Network. But Jim decided to leave SGI to start a company of his own.

One day, Jim and Ramsay met up and had lunch together. They talked about their idea of working together which was with regard to doing a startup. Their main idea was to create a home server network thing.

Ramsay became interested in using computing technologies to create something that would entertain the people. So they began on using computing technologies in home entertainments. They allowed the people see their works but most of them rejected it. Yet, they still continued to develop it and after 6 months, they were able to have several people who helped them make the company successful.

They launched TiVo on the last day of March in year 1999. The company was able to grow because they knew it from the beginning that their company will be able to survive and someday it will become a successful one and so it happened.

What I have learned:

  Now I know who founded TiVo Company and it was Mikey Ramsay. From his story, I saw how important it is to be optimistic in your work. Even though he was rejected a couple of times, he did not give up. He pursued himself more because it was his dream. He did not stop from achieving his goals. For me, that is how a founder should be. I have learned that in doing a startup, one should know how to take risk and one must know how to accept consequences.

CASE STUDY 15
Viaweb

Viaweb was started by Paul Graham and Robert Morris in 1995. They were friends for 10 years.

Before they started with Viaweb, they tried a startup which they called Artix. But they were not actually able to build it because the art galleries did not want to put them online. So they thought of something that the people would want and they came up with the idea of creating an online store.

Paul Graham and Robert Morris wrote the first version of Viaweb during summer on Morri's apartment. They named it Viaweb because it was a web-based application. They got their funding from Julian who gave them $10,000. At the beginning they did not know anything about business but they were undeniably good programmers.

There was a time when Robert had rebelled so Graham needed to hire more programmers. This was when they got Trevor, who was the smartest computer science student back then.

It was in July 1995 when they were able to build an online store where people can order from it. That was when they started with Viaweb and had the first demo on the month of August. They wrote more software and so their online store became better and better. They first showed the demo to potential investors and by the month of December they started to have users. The reason why users wanted Viaweb is because it was easy to use and it was a good-looking site as well.

After they lauched, a big company immediately called them and wanting to buy them. But they failed to sell the company to them because the negotiator they sent was unsuccessful.

Robert Moriis left them one summer for his work that was based on California. He got a job at a company called DEC SRC. After he left, there came Fred Egan. He became their COO and was in charged on business stuff. He dealt well with the investors and they raised more money. He was indeed a very big help to them.

There was a time when he almost quitted because the investors told them they were going to refinance the company. But Fred Egan stopped him from doing that. Fred talked to the investors

Afterwards, they got a deal with Yahoo. Viaweb was bought by Yahoo and it made a lot of money to them. According to them, their success was the moment they were bought by Yahoo.

What I have learned:

After reading the story, I realized that in startups, you have to find out the user's needs and wants. And with it, you must be able to analyze it and create something that will fulfill their necessities. From there, you will be able to create a startup. Just like how Paul Graham did it. But in his case, he did it for his need. And it soon became the people's need as well.

CASE STUDY 16
del.icio.us

Joshua Schachter was the founder of del.icio.us, a bookmarking site, in 2003.

He first created Memepool way back 1998. It is a website wherein he could put anything on it and update it. Schachter would write down and post the emails that are sent to him by people. In 2001, he had 20,000 links in his text file so he put tags on it. Later on, he built another text file which he called Muxway. He found out that about 10,000 people were subscribing to his bookmark and they were reading them.

In 2003, he began working on del.icio.us. He developed Memepool and Muxway which soon became del.icio.us. He was able to release it in December 2003. He started to have lots of users and in year 2004, he already had 30,000 users.

Schachter's VCs were the Union Square and Amazon. He became quite known when he was placed on the USA Today in late 90's for Memepool. From then, he was able to have a great deal of the press.

According to Schachter, they succeeded because it was not a venture for him, but rather he was building it as a project. In addition, Schachter learned many things from his coworkers which he did not know before. They were the ones who contributed a lot of knowledge to him.

What I have learned:

I have learned from this story the importance of working with educated people for the reason that you learn a lot from them. I think that in startups, the most important component is the people in it. Especially when they are all composed of genius people working together to form one great team. They contribute diverse ideas in making improvements. In addition, working well with others is a must. Cooperation in every team is very necessary to achieve its common goal.

CASE STUDY 17
Bloglines

Mark Fletcher created ONElist which soon became eGroups and was sold to Yahoo.

After Fletcher took a break and traveled to different places, he started to create an anti-spam company called Trustic. But he did not continue with in because the users did not want it. Instead, he created Bloglines for his self. Suddenly, he felt that the people would surely be interested in Blogline.

At that time, nobody had any idea about blogs. It was June 2003 when he decided to construct it. He immediately contacted his friends to help him out in improving Blogline.

Basically his reason for creating ONElist is to have a mailing list for his parents. He then put up a team that was composed of a great marketing person, a great PR person, a UI person and of course a programmer. They worked on their startup company at Fletcher's den. The official name of the company was Trustic because the company he used in it was for the anti-spam.

Fletcher was able to self-fund their startup because he was able to afford it. In June 2003, they put themselves online and had press coverage. The company started to be converted into a big company.

What I have learned:

After reading the story, I became aware that in starting a company, it is necessary to know the right time when to sell it and when to put it on public. Timing is in fact needed in every business.

Another thing I have learned is that we must learn to listen to feedbacks and comments from the users. They will be the ones who will inform you whether your startup is good or needs some improvements. If you meet the user's expectations, then they will become regular users of your site.

Lastly, I realized that working with people whom you are comfortable with will help you a lot in developing your company. You will be able to brainstorm different ideas with your people.

CASE STUDY 18
Craigslist

Craig Network was the founder of Craigslist. At first, it was an email list.

In year 1994, Newmark was working with computer security at Charles Schwab. In 1995, he began sending cool events to his friends. They were events in relation to arts and technology.

Sooner or later, people wanted themselves to be added on the list and they called it "Craig's List". They suggested to add jobs and for sale on it. Over time, Craig Newmark started to think of an official name for his startup company. The people suggested to calling it Craig's List for an indication that it was personal and very original.

Jim Buckmaster, their CEO, who helped the company a lot.

By the end of 1997, Newmark was move towards running the Craigslist. But it did not happen because Newmark knew that it will go to be unsuccessful. He refused to do another startup because he wanted to center his attention on Craigslist. Newmark was the one who funded Craigslist.

Newmark actually learned a lot from his friends and business people whom he had worked with. Especially from Ed Wes who was his principal corporate lawyer. They added more and more features on Craigslist and it continuously grew. Now they are already in 170 cities and they were getting 5 billion page views every month.

What I have learned:

Newmark was able to do a startup because he listened to what the users wanted. He followed the people's suggestions and added more features to what people were asking for. It is important to make people want your startup. We just have to know the user's wants and from there, we will be able to create your own startup company.

Next thing I have learned from this story is the importance of following your own instincts. We should not depend on other people's decisions or ideas. We have to discover how to do it our way and have the originality.

CASE STUDY 19
Flickr

Caterina Fake, Stewart Butterfield and Jason Classon developed a -photo-sharing community site which they called Flickr.

Caterina Fake and her husband Stewart Butterfield did a web development together and fell in love with each other. But Caterina lived in San Francisco while Stewart was in Canada so they had a long-distance relationship. Caterina finally moved to Vancouver and they got married there. After two days, they both started Ludicorp. They built a multiplayer online game which they called Game Neverending. In here, you are able to form groups and send messages to each other.

Caterina and Stewart were good at web designing and developing. Caterina also worked in online communities. Fake worked on animation game at Internal Research.

Stewart and Jason started a company together in year 1999. When Jason came back from Boston, the three of them began working on games. Caterina worked on the game design, Stewart did the interaction design and Jason was in charged on PHP that was for the prototype. They soon added Eric Costello who is an extraordinary web developer. He really contributed a lot to their team.

Flickr was just a side project because during that time, they were working on Game Neverending. While they were waiting for the back end to catch up, they built an instant messenger application wherein people can form small communities and it enables you to share objects. They eventually added something in it that would allow the people to share photos. It also allows you to drag and drop photos onto people's desktops. They were able to build it in a small period of time. They had the idea about Flickr in the month of December and built it February. They presented it at the O'Reilly Emerging Tech Conference.

They tried to work on both Flickr and Game Neverending. It was difficult for them because they were few. But they were forced to stop developing Game Neverending because Flickr was already fast growing at that time. Although it was hard for them to do that, they were able to focus more on Flickr.

They were inexperienced on building this thing but they were very much positive on it. Fake thinks that what made the whole thing possible is their innocence. They received a lot of calls from different VCs. They expected that they would work on games

but it's the other way around. They ended up doing a photo-sharing site which is the Flickr.

What I have learned:

I have learned that in a startup, you can't predict what will happen to your company in the future. So it would be much better to expect what is unexpected. Just like other startup companies before who were able to be successful with their startups even if they did not expect anything to happen.

In addition, I came to realize that in startup, you must put your heart and soul into it. For the reason that you will become more determined in doing it.

Fake said that, "the less money you have, the fewer people and resources you have, the more creative you have to become." Personally, I definitely agree to what she has said on her interview. If you do not have enough money, resources and people, you will be forced to strive harder and just do it on your own. Which I think is in fact a good thing.

CASE STUDY 20
WAIS, Internet Archive, Alexa Internet

Brewster Kahle was the founder of WAIS, Internet Archive and Alexa Internet. Bruce Gilliat was his cofounder of the Alexa Internet.

Before I read this case study, I hadn't heard of WAIS as one of the earliest forms of Internet search software. It was in some ways replaced to web search engines.

Basically, Brewster Kahle's idea for WAIS was to make network services. It was to use remote machines to answer questions.

It came before Gopher and before the Web. It was the first system that was trying to answer questions over the Net. It also had a search system for finding servers. They did it as a project of Thinking Machines. Everybody loved it.

The use of freeware and shareware was actually a new idea. They were the first one who thought of the Internet as a distribution system of software: to give something away or to sell it.

The difficulty they have faced was when things were just using the computer networks at the time. The internet hadn't quite become easy in any real sense in 1989. It was challenging for them catching up to Dow Jones through X.25 networks and ISDN.

Alexa was for profit and Internet Archive was nonprofit. Alexa Internet was a navigation system for the Internet. The idea for Alexa was to guide people around the Net which came to be called collaborative filtering. The people wanted it because it informs them where they were and where they might want to go next.

What I have learned:

After reading the case study, I learned that if you want to do a startup, you have to work very hard for it. It other words, you must place a big effort into it. I also realized that not all places in this world are good for doing a startup. It actually depends on its environment.

Another thing I learned from this story is to search for a place where no one would think that you crazy. Next thing I realized is to learn your lessons. Learn from your mistakes and avoid doing it again.

CASE STUDY 21
Adobe Systems

Charles Geschke and Warnock started Adobe to produce a successor of Interpress called PostScript which allows a computer to talk to a printer.

They were both in their early 40s when they did the startup. Charles Geschke said that he was never scared of dong the startup.

While they were just starting their company, a lot of people including Steve Jobs thought that they were crazy. They developed a laser printer for Apple. Soon Apple bought 20 percent of their company. The LaserWriter was completed in 1984.

Steve introduced the device to a lot of people and most of them loved it and at the same time, the LaserWriter was introduced to the public as well. It was launched and the outcome was good. But when they begin on tracking the sales, the product started to drop off. Eventually they all became really worried about the dilemma. Suddenly a guy named John Scull came up with the idea of combining Apple, Aldus and Adobe and put together a marketing campaign called "desktop publishing". It really affected the publishing industry because the idea was indeed new by that time. Desktop publishing soon became very well known and it opened up a bunch of new businesses. The graphic artists and the designers began to learn how computer works. Surprisingly, the entire industry began to progress. Even the printing and publishing industry went over to the digital world.

What I have learned:

After reading this case study, I came to realize what Charles Geschke has said, *"you can't be a one product company".* I realized that if you start your own company, you can't just focus to only one product because there will always be changes in the technological landscape and competitive landscape. If these changes will occur, there is a huge tendency that your company will fail. So it is very significant to not let your products be left behind due to the fast changes in our growing technology today.

CASE STUDY 22
Open Systems, Hummer Winblad

Ann Winblad cofounded Open Systems in year 1976. She was also the one who cofounded Hummer Winblad in 1989.

Open Systems is an accounting software company. Hummer Winblad is the first venture firm who focused exclusively on software.

Before I didn't know that Ann Winblad was one of the first generation of entrepreneurs who figured out by trial and error what a software startup was. She was the only second woman in the whole Federal Reserve banking system that had a Masters Degree. In fact, she is now the most powerful woman in venture capital.

They were chosen under a Request for Proposal bid to build a student accounting system for a vocational school. They started building accounting systems and first applied it to a minicomputer. They did not worry for competitors at that time because there was none.

What I have learned:

After reading this case study, I came to realize that without competency, there will be a great possibility that you will fail. A startup founder has to be very flexible in all things in particular to building your own company. In addition, one must have the courage to do his/her job outstandingly. They should have the ability to lead people in business and must have a good strategic planning.

CASE STUDY 23
37signals

Jason Fried founded 37signals as a web design shop in 1999. david Heinemeier Hansson was a part of its management team.

They created Basecamp because they speculated what would happen if they applied the blogging idea to project management. But when they showed it to colleagues in the industry, they immediately realized that there was not a lot of software available for small companies to manage projects. So they started to think how they could make 37signals's product.

The feedback they got from the people was good. They all wanted to have it. People were impressed by all the stuff Basecamp didn't have. People loved it because it was very easy to use. The features in it were exactly what the people needed. They used Basecamp for all kinds of projects like managing weddings, home improvement project, and student collaboration.

Their first mistake was when they pushed back the launch by almost a month. One of the mistakes they did was when they did not consider time zones. So the people in other places would get their milestones one day late.

What I have learned:

After reading the case study, I learned that if you are a startup founder, you must have a strong vision on it. Because it will enable you to create a mental picture and foresee what your startup is going to be after you develop and program it. That is what David Heinemeier Hansson had. He was able to visualize what he wanted to create so he did it. He created 37signals.

CASE STUDY 24
ArsDigita

In 1997, Philip Greenspun founded ArsDigita which is a consulting company. ArsDigita is recognized as the personification of a new model for software consulting.

It all started when Greenspun wanted to work on Internet Applications. Eventually in 1980s, he began building them. Greenspun with his other friends determined to have a startup together. They built a company for support and services.

Greenspun created a question and answer forum on his server and in the end it became an online community. He developed his software and made it easy to run. He even created a site wherein people could exchange information to one another. They named it ArsDigita Community System.

ArsDigita's first turning point was when they got Levi Strauss as their customer. He was indeed a huge customer and it helped them raise capital to put up anything they wanted to create. Second turning point was the moment Greenspun published the Database Backed Web Sites.

What I have learned:

After reading this case study, I have learned that a startup founder needs to pay attention to what your customer wants. For the reason that the users have their personal thoughts about how to make your startup more interesting to them. Their suggestions will actually help a lot for the improvements of your software.

Next thing I learned is that as a startup founder, in order to call yourself a good engineer, you must first create something that the users would surely want. The technique here is basically to know first what the users needs and then build it.

CASE STUDY 25
Fog Creek Software

Joel Spolsky and Michael Pryor founded Fog Creek Software in 2000.

Spolsky's key inspiration was Philip Greenspun of ArtsDigita. They started to build a consulting company. They employed smart people in it. But the consulting company vanished and they soon became a software company.

Their company team was determined to create a software company wherein they would enjoy working with. Spolsky's objective was basically to build a company that would allow him to come up with different great ideas.

Spolsky wrote Joel on Software because he wanted to share to others what he knows about software development, management, business and Internet.

One of the products they built was FogBugz. FogBugz was easily sold which made them earned $5000 to $10000 in just within a month. Eventually, FogBugz was developed.

At the beginning, they did not have any idea on what to anticipate from their product. They did not expect that sooner or later it would be a huge one. Despite that, the thought of closing the company never came to their minds maybe because they knew that there was no reason for them to do that. The good thing is that they did not give up.

According to Spolsky, one of the greatest mistake they made was when they thought they didn't understand sales and marketing because they were all programmers. Due to that, they were scared to go to the market.

Now I know that throughout everything, they never took any investments to help them build their company. They did it on their own. The growth of the ratings was what gave them the confidence to pursue it.

What I have learned:

        After reading this case study, I learned that improving your product is needed to maintain the development of your system. Listen to the customers and then create an improved version of it and sell it to people.

        I also realized from this case study what Spolsky has said in his interview, *"Don't start a company unless you can convince one other person to go along with you"*. What I learned from what he said is the importance of a cofounder. A startup founder needs someone who would go along with him to share his ideas with and help him build a company together. Just like how the saying goes, two brains are better than one.

CASE STUDY 26
TipAdvisor

TripAdvisor was born in year 2000 and was cofounded by Steve Kaufer, Langley Steinert, Nick Shanny and Thomas Palka. They created a site that lets the users contribute personal reviews of destinations, hotels, and attractions. It eventually became the largest online travel community in the world.

Their team came up with the idea while Kaufer and his wife was plaming on where to spend their vacation. He searched at the internet but there was no information given whether the hotel they have been looking for is a good place where they could spend their vacation with. Suddenly Kaufer's wife suggested building a better search engine in order to be able to see what they are actually looking for. After a year, he decided to build a travel search engine. He was introduced to Langley Steinert. They came to realize that it was something the people needed so they got their first funding in February 2000.

They then decided to run ads on their site. They placed it on links so a lot of clicked on the links and that is when they began to grow as a company. They were able to raise about $3 million a year.

The biggest challenge they encountered was on the sales and marketing and business development as well. The sales and marketing strategy stop them from being successful. There was a time when a major company went to them and wanted to license their database and offered to pay them. But later on they figured out that the company wanted to cut out of the deal after the term and walked away with all of their intellectual properties. So they immediately refused it.

Quitting never crossed their minds. They never wanted to give up what they had worked for.

At first, they didn't know how to run business and didn't know how to ell it. But TripAdvisor worked out well.

They had reviews from their users regarding their experience on the hotels. Some were good while some were bad. The hotel owners sometimes complain about how terrible the review was. They rate which hotels their travelers liked the most so they have a big impact on where visitors choose to stay.

Their site was not just for traveling, it is also a collection of the user reviews. The hotels are forced to provide good services to their customers because words about them were spreading.

What I have learned:

Every entrepreneur must have the skills and interest in building new things that people want. They should be listening to all of the feedbacks they get from the people who use their product. I learned the importance of valuing your customers.

In starting companies, you must not expect too much on the vision of the company because things will eventually change. They will not always go according to the plans. So we must not be afraid of committing mistakes because it also serves as a lesson to us.

CASE STUDY 27
HOT or NOT

HOT or NOT is a website wherein users are able to upload their photos and let other people rank their hotness on a scale of 1 to 10. James Hong and Jim Young was the cofounder of HOT or NOT. They launched the website in year 2000. Their site grew really fast so they immediately thought of doing it as their business. James Hong and Jim Young created this website just to have fun. People liked it because it was something for fun and the idea was really new.

James Hong got this idea when Jim Young mentioned to him that he saw a girl from a party and he thought she was a perfect 10. The thought immediately crossed his mind and that is to create a service where people could post pictures into the system and enable people to rate their pictures from 1 to 10 whether he/she is hot.

It was easy for them to start it but the difficult part was the scaling to make the site better and faster. They didn't take it seriously at the beginning. The first person who tried HOT or NOT was James Hong's dad. They knew it from then that it is something that the users would want so they launched it and emailed it to their friends. They realized that to keep it from drowning, they needed to reduce their costs, make money from it, and add more machines.

The first problem they encountered was to get rid of the huge bandwidth driven by the pictures. But fortunately, they were able to solve this problem. Another problem was regarding the porn and naked pictures that were posted on their site. So they came up with the motto "fun, clean and real". What they did to solve this problem was they built a system where people could kill inappropriate pictures by clicking the link. They also decided to open up a community of moderators to the public. They instructed the moderators to erase all pictures that were inappropriate. They needed to keep the site clean so that they could advertise it.

What I have learned:

After reading this case study, I realized that we may also learn from people who are experienced. Because these are the people who actually understand what are the things that needs to be done and the things that needs to be avoided.

Each of us has our own goals and dreams in life so we have to be aware of the direction that we are going through. We may go through different paths but we only aspire to reaching our every goal.

Next, if you want to become a startup founder, you should love different ideas and should have the desire of building stuffs. If we go for higher risk, there will have a great possibility that we will get higher rewards. We must learn how to get better and better.

CASE STUDY 28
Tickle

James Currier came up with this idea after he took a Myers-Briggs corporate personality test in Harvard Business School. He then realized that there is no technology that allows a person to get media about themselves. So when James Currier saw that people actually loves talking about themselves and other people, he immediately thought of building a digital media company. He decided to put the test online and in a reasonably priced. Currier basically wanted that people would benefit from it.

He thought that he would be able to help people search for the right job, get a great date, and helps them facilitate conversations with their families.

Some of the difficult part was when nobody understood what he wanted to create. Maybe because others are not capable of seeing something that doesn't even exist.

The test for "what kind of breed of dog are you" took the people's attention. In just a span of 8 months, a million people began visiting their site. Because of that, they were able to get their VCs.

Their company was motivated through James Currier's willingness and understanding. He really cared about his people. it was mainly because of his empathy for his team.

Basically James Currier built tickle to help people learn more about themselves.

Tickle was acquired by Monster in year 2004 for $100 milion.

What I have learned:

I have learned from this case study that a startup founder must have knowledge on how to employ its people. Their characteristic is an important aspect to look for to an employee. They should hire employees who are nice to other poeple, communicative to the clients and capable enough for the job.

According to James Currier, it takes that amount of passion to make something work. That is why in everything that we do, we have to put our hearts into it. It is essential to love what we're doing.

CASE STUDY 29
Firefox

Firefox was first started as a side project of Blake Ross and Dave Hyatt. Blake Ross was just 14 years of age when he started creating firefox. During their free time, they built a new browser that was faster, simpler, and reliable. The initial version of it called Phoenix was launched in 2002. And in 2004, they released firefox 1.0. Ross then left Standford University and did a startup with Joe Hewitt.

Blake Ross' first job was with the Netscape team. With his companion, David Hyatt and Joe Hewitt, they soon began creating it and named it Pheonix. But when the Phoenix Technologies complained about their product's name, they immediately renamed it as Firebird. Unfortunately there was an open source database that was already named Firebird so they needed to rename it once more for the third time. After a couple of moths, they came up with the final name and called it Firefox.

When they created their startup company, they didn't worry about money. They were concerned more on their users. Basically they crated Firefox as their hobby. In addition, another reason why they build this product is because they saw the need for it.

People liked it because it is much faster and easier to use compared to other software. They became popular through the word-of-mouth marketing.

They succeeded because they never listened to the negative things other people tell them. They ignored all of it and continued doing firefox and eventually it worked.

At first, Blake Ross' family didn't have any idea that Blake was actually involved with firefox until they saw the magazine that featured them.

What I have learned:

The lesson I learned from this case study is the significance of communicating with the people who are eventually going to use your company product. You need to assure the users about the quality of your product and how it differs from other companies out there. As an entrepreneur, one must be capable of convincing clients to start using it. The technique to that is to keep on talking to your prospective clients and do not stop on developing and improving your product.

CASE STUDY 30
Six Apart

Six Apart is a blogging software that was founded by Mena and Ben Trott.

The idea of creating a blogging software popped out their minds when the company Mena Trott was working with got closed. The moment they released the Movable Type, it instantly became known and popular to the users. They started to build their own company because they were pushed by their clients. Mena and Ben Trott began to build things that they love. But when the time came that they were no longer happy with the Movable Type, they decided to just go straight to their customers and that was when TypePad was born.

The main reason why Mena Trott started blogging was that she wanted to have connections with other people through the web. Mena Trott felt that she does not have any friends at all that is why she kept on blogging and through her blogs, little by little she was able to be friends with other people.

One of the difficult parts their company has encountered was on the handing over of their company's CEO because at that time, they needed to do a lot of negotiations and it was hard.

Basically all they wanted to do is to come up of a service that anybody could use that is why they started developing TypePad. The product really differs from the Movable Type. The reason why TypePad did not eventually become Movable Type is because their audiences were so different.

What I have learned:

After reading this case study, I learned that if you wish for having a successful company someday, do not feel shame about it. But rather you must be proud of your aspirations in life because it only shows that you know what directions you would want to take for the rest of your life. We should not loose hope on what we dream to achieve because there is nothing wrong with being ambitious when in fact it is going to be your stepping stone to attaining all of your dreams.

CASE STUDY 31
Lycos

A computer scientist at Carnegie Mellon University named Michael Mauldin invented Lycos' original technology in 1994. It was his research project. At the beginning he doesn't know what he would do with it so instead he worked with CMV's Tech Transfer office and tried to sell them his technology. It grew into one of the most successful internet investment firms of its era. Dave Wetherell founded CMGI's venture firm. He understood what it would soon become so he acquired 80 percent of the company and 20 percent of it went to Michael Mauldin and Carnegie Mellon.

Bob Davis was unhappy with his job as a VP of sales for an old-line technology company. Since Dan Nova was his friend, he joined their company as a CEO of Lycos. But at during that time, Lycos didn't exist yet.

During the first month, they concentrated to building their team for the company, tried to understand what they do for a living and how they were going to go about doing it. They tried to be both technology and media company but unfortunately it didn't work so they stick to being media company.

The problems that they have encountered in their first 9 months were about hiring people, firing people, understanding their business model, getting customers, serving the customers, finding office space, sealing the company, starting down competitors, going public, raising money and satisfying shareholders.

Their company became known through promoting, advertising and by PRs. And then they began to get a lot of press.

Lycos was different from other companies because they focused on the earnings from the day they incorporated. They were a profitable company.

They considered Yahoo to be their biggest competitor. Because when they just started their company, Yahoo was already a big company back then.

Lycos focused on hiring and building customers. They were able to put up a great team who served as the foundation of their company.

What I have learned:

      We must realize that there are always new opportunities and challenges that an entrepreneur will face day after day so they must know how to deal with them. I realized that if you want to be an entrepreneur in the future, you must be ready to take all the risks, challenges and failures you will encounter. It is just a matter of overcoming them.

CASE STUDY 32
Alliant Computer, Shareholder.com

Ron Gruner, Craig Mundie, and Rich McAndrew are the ones who founded Allient Computer Systems. Basically their goal was to put up parallel supercomputers. The purpose was to build a device that uses a multiprocessing to improve the performance compared to the fastest single-CPU machines. In 1992, Ron Gruner founded Shareholders.com.

Ron Gruner was a computer designer in Data General. But in 1982, he left Data General and started to work on Alliant Computer Systems accompanied by his two cofounders Craig Mundie and Rich McAndrew. Their team aimed to produce a high-performance computer system and they were able to raise venture capital by themselves. Carl Carmen and Jesse Aweida were some of the people who had facilitated them to get their product launch. They spent about 6 months on writing their business plans in commercializing parallel processing technology.

As time passed by, they came up with the idea of creating a parallel processing that computes non-stop. So they raised money from Kleiner Perkins. They in fact got $5 million in revenue for the first year and $30 million on the following year. They went public on December 1986 and grew rapidly. But unfortunately, Gruner left Alliant due to the disagreements they had on the team so he got fired.

Despite that Ron Gruner left Alliant Computer Systems, he still wanted to be an entrepreneur. Because of this, he thought of building up his own company. He wanted to have a business that had a recurring revenue stream. He immediately had a negotiation with a purchasing agent and they soon build a company that uses technology to reach out and communicate with the shareholders. They also had offered web services.

Ron Gruner started all of these from scratch and he was only educated on the industry by his consultants. Their company made money instantly and turned profitable in 1994. In January 2006, they sold their company to NASDAQ.

What I learned:

      I came to realize from this case study that it is very essential for an entrepreneur to focus on the client's approval of their product. They should be aware that not all things work out the first time. So all they have to do is just to try and try until they succeed. In addition, they must also have patience and endurance on their work. Ron Gruner once said in his interview that the key to success is simply the "persistence" of the person on what he/she is trying to accomplish.

USE CASE NARRATIVE 1
Enrollment

ENROLLMENT
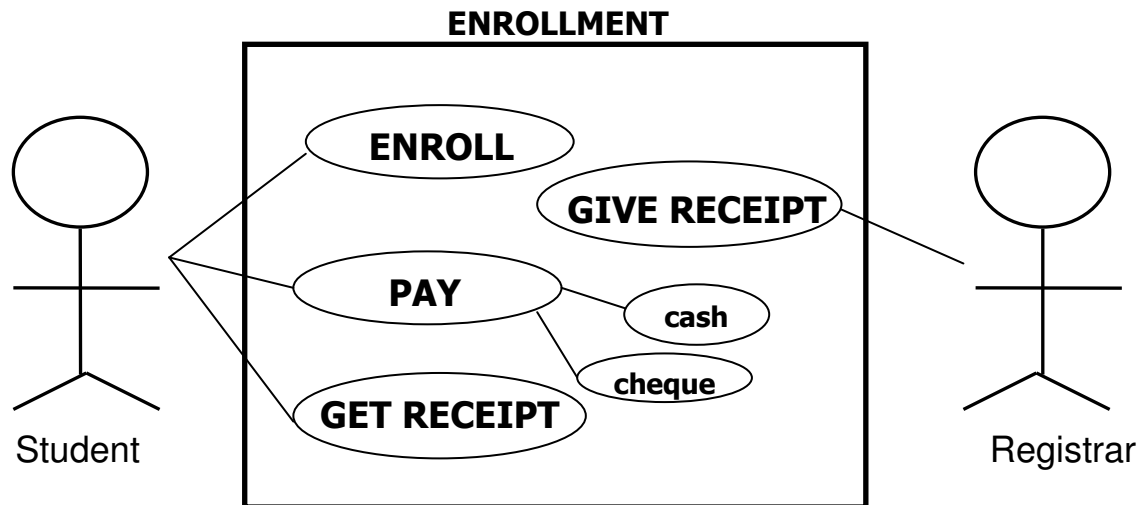
Identification summary

Title: Enroll
Summary: this use case allows a student to enroll at De La Salle-College of Saint Benilde
Actors: Student
Creation Date: June 5, 2008   **Date of Update: June 5, 2008**
Version: 1   **Person in Charge: Ma. Louise Lim**

Flow of Events

   Preconditions:
      1. **The student must have EAF**
      2. **The student must have money for the tuition fee**
      3. **The student should receive an enrollment receipt**

   Main Success Scenario:
      1. **Fall in line in the registrar**
      2. **Give EAF**
      3. **Pay cheque or cash**
      4. **Get the receipt**

Alternative Sequences:

      A1: Incorrect ID number
           1. The registrar informs the student to check his ID number for the second time.
      A2: Wrong accounting window
           1. The person in charge points out the right window for enrollment to the student.

Error Sequences:

      E1: The student forgot to bring his cheque or cash.
           1. The registrar will not let the student enroll without paying his tuition fee. Use case fails.
      E2: The accounting office already closed.
           1. The person in charge tells the enrollee they are open until 5pm. Use case fails.

Post Conditions:

      1. The accounting office consume power electricity
      2. The ink lessens

USE CASE NARRATIVE 2
Barangay Clearance
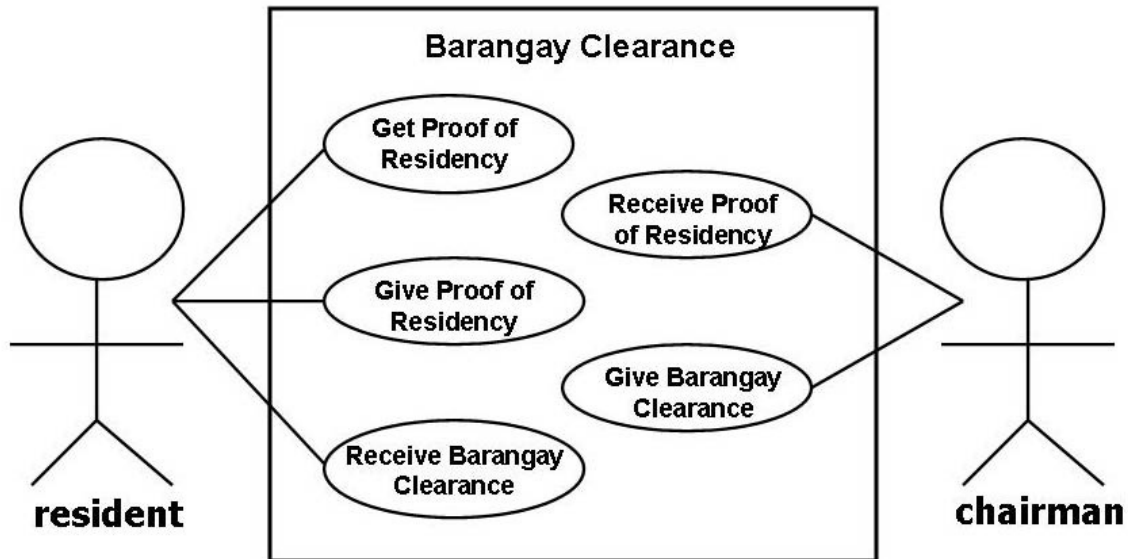
Identification Summary

    Title: Barangay Clearance
    Summary: This use case allows a resident to get barangay
               clearance
    Actors: Resident and Chairman
    Creation Date: June 12, 2008   Date of Update: June 12, 2008
    Version: 1   Person in Charge: Ma. Louise Lim

Flow of Events

    Preconditions:
          1. The resident must have proof of residency
          2. The residence has to be within the scope of the barangay
          3. The barangay chairman must be present
          4. The certification letter should be ready

Main Success Scenario:

     5. Go to Barangay Hall
     6. Give Proof of Residency
     7. Get Barangay Clearance

Alternative Sequences:

     A1: Lack of requirements
          1. The chairman will ask you to complete first the requirements
     A2: Incorrect address
          1. The chairman will ask to write down the correct address

Error Sequences:

     E2: Mistaken barangay hall
          1. The chairman will ask you to go to your proper barangay hall
     E1: The chairman is not around
          1. The person in charge will ask you to come back again

Post Conditions:

     1. Certification letter is lessen

USE CASE NARRATIVE 3
Epurse
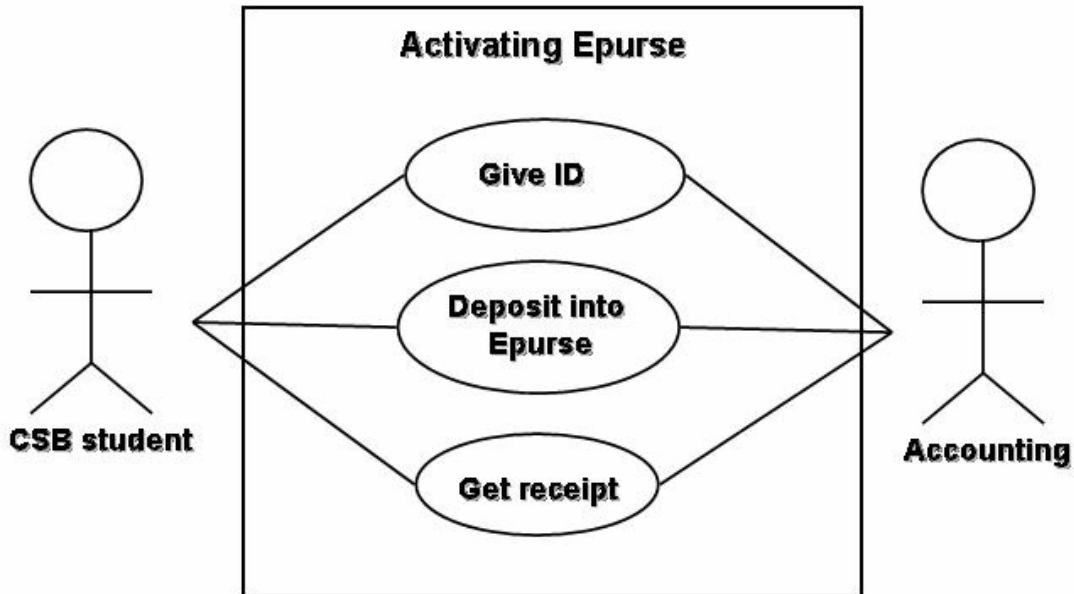
Identification Summary

Title: Activate Epurse
Summary: This use case allows a student from CSB to activate his/her Epurse account.
Actors: CSB student, Accountant
Creation Date: June 18, 2008   Date of Update: June 18, 2008
Version: 1   Person in Charge: Ma. Louise Lim

Flow of Events

Preconditions:
1. The accounting office must be open
2. The student must have ID
3. The student should pay for Epurse
4. The student must receive official receipt

Main Success Scenario:

1. Fall in line at window 2 in accounting office

2. Give ID to the person in charge
3. Go to window 1
4. Pay in cash
5. Go to window 4
6. Input pin code
7. Get receipt and ID

Alternative Sequences:

 A1: Not enough money for depositing into Epurse
  1. The person in charge informs the student he/she must have
   money to be able to have an Epurse.
 A2: Incorrect pin code
  1. The person in charge informs the student to input again his/her
   pin code.

Error Sequences:

 E2: Invalid ID
  1. The person in charge cannot continue with the process of
   depositing into Epurse without the student's ID. Use case fails.
 E1: The accounting office is closed
  1. The person in charge tells the student they will not be able to
   activate Epurse because the accounting is close. Use case fails.

Post Conditions:

 1. Printer's ink is lessen
 2. The accounting office consume power
 3. Fewer papers for the receipt

USE CASE NARRATIVE 4
Student Permit

Release of Student Permit

Get application form

Give ID picture, Birth Certificate and Letter of parental consent

Get Student's Permit

Student
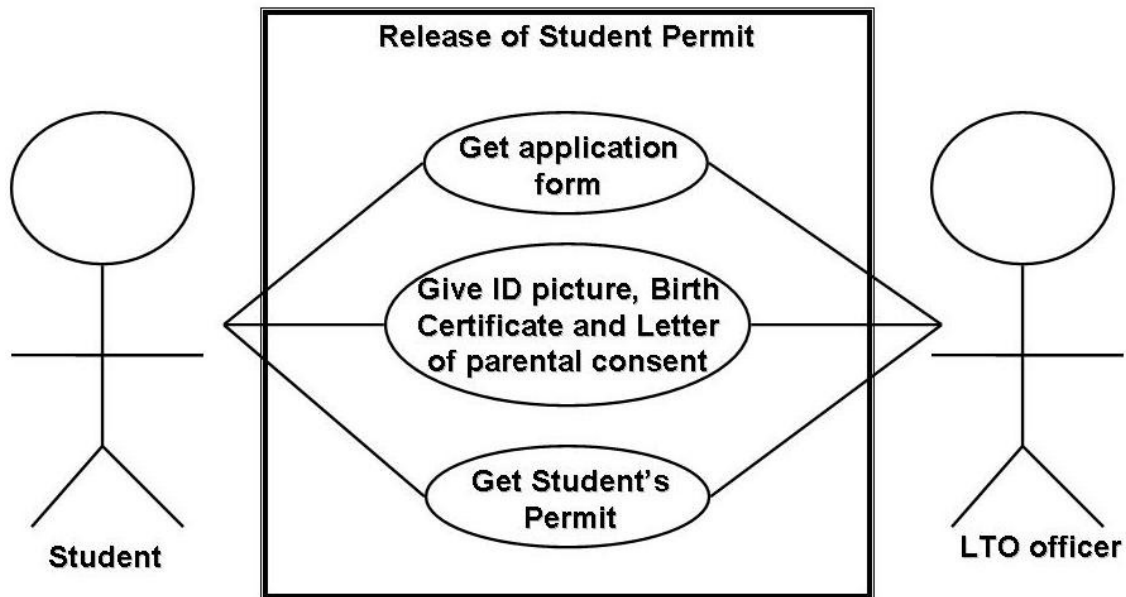
LTO officer

Identification Summary

Title: Releasing Student Permit
Summary: This use case allows a student to get student permit.
Actors: Student, LTO officer
Creation Date: July 3, 2008   Date of Update: July 3, 2008
Version: 1   Person in Charge: Ma. Louise Lim

Flow of Events

Preconditions:
    1. The LTO must be open
    2. The student must have ID picture, Birth Certificate and letter of parental consent
    3. The student must receive student permit and official receipt

Main Success Scenario:

    1. Go to LTO
    2. Get application form for Student Permit
    3. Submit 2 pieces 2"x 2" ID picture
    4. Give photocopy of NSO Birth Certificate
    5. Submit letter of parental consent
    6. Pay to LTO officer
    7. Get Student Permit and receipt

Alternative Sequences:

A1: from 1
    2a - LTO is not yet open
    3a - Wait until it opens
    Back 2
A2: from 2
    3b - Wrong application form
    4b - Get a new one
    Back 3
A3: from 3
    4c - Submitted someone else' ID
        picture
    5c - Give the correct picture
    Back 4
A4: from 4
    5d - Submitted someone else'
        Birth Certificate

    6d - Give the correct Birth
        Certificate
    Back 5
A5: from 5
    6e - Submitted wrong letter
    7e - Give letter of parental
        consent
    Back 6
A6: from 6
    7f - Insufficient payment
    8f - Add money
    Back 7
A7: from 7
    8g - Refuse Receipt

Error Sequences:

E1: from 1
    2a - LTO is close
    3a - Use case fails
E2: from 2
    3b - No application form
    4b - Use case fails
E3: from 3
    4c - No ID picture
    5c - Use case fails
E4: from 4
    5d - Birth Certificate is invalid

    6d - Use case fails
E5: from 5
    6e - No letter of parental consent
    7e - Use case fails
E6: from 6
    7f - Forgot to bring money
    8f - Use case fails
E7: from 7
    8g - Student Permit cannot be
        released
    9g - Use case fails

Post Conditions:

    1. Printer's ink is lessen
    2. The LTO consume power
    3. Fewer papers for the receipt
    4. Student has less money
    5. Student has Permit

User Interface: Land Transportation
Office

USE CASE NARRATIVE 5
TIN number
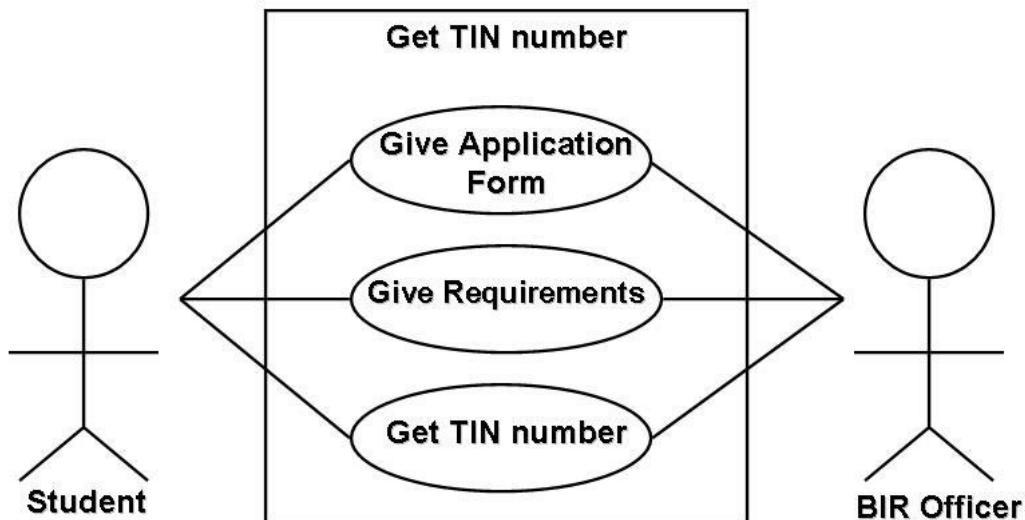
Identification Summary

Title: Get TIN number
Summary: This use case allows a student to get TIN number.
Actors: Student, BIR officer
Creation Date: July 10, 2008   Date of Update: July 10, 2008
Version: 1   Person in Charge: Ma. Louise Lim

Flow of Events

Preconditions:
  1. The BIR must be open
  2. The student must have Birth Certificate, Barangay Clearance and Residence Certificate
  3. The student must get TIN number

Main Success Scenario:

  1. Go to Bureau of Internal Revenue (BIR)
  2. Get application form for TIN number
  3. Give the filled up application form
  4. Submit Birth Certificate, Barangay Clearance and Residence Certificate
  5. Get TIN number

Alternative Sequences:

A1: from 1
     2a. BIR is not yet open
     3a. Wait until it opens
     Back 2
A2: from 2
     3b. Wrong application form
     4b. Get application form for TIN
     number
     Back 3
A3: from 3
     4c. Application form is not
     completely filled up

     5c. Fill up everything
     Back 4
A4: from 4
     5d. Submitted someone else's
     birth certificate
     6d. Give the correct one
A5: from 5
     6e. TIN number is not yet
     validated
     7e. Validate TIN number

Error Sequences:

E1: from 1
     2a. BIR is closed
     3a. Use case fails
E2: from 2
     3b. BIR does not have application form
     4b. Use case fails
E3: from 3
     4c. No application form
     5c. Use case fails
E4: from 4
     5d. Student was not able to bring requirements
     6d. Use case fails
E5: from 5
     6e. TIN number cannot be released
     7e. Use case fails

Post Conditions:

     1. The BIR consume power
     2. Less application form
     3. Student has TIN number

User Interface: Bureau of Internal Revenue (BIR)

USE CASE NARRATIVE 6
Civil Service Eligibility
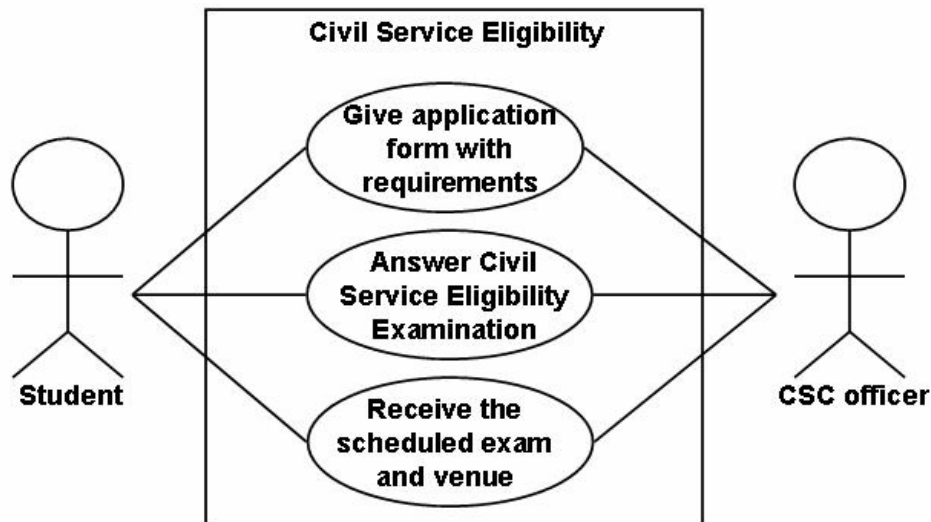
Identification Summary

Title: Civil Service Eligibility
Summary: This use case allows a student to take civil service examination
Actors: Student, Civil Service Commission Officer

Creation: July 8, 2008	Date of update: July 8, 2008
Version: 1	Person in charge: Ma. Louise Lim

Flow of Events

Preconditions:
1. The CSC must be open
2. The student must not be under age
3. The student must receive scheduled exam and venue

Main Success Scenario:
1. Go to CSC
2. Student gets application form
3. Student answers the Civil Service Eligibility Examination Form
4. Student gives filled up application form and requirements
5. Student receives scheduled exam and venue

Alternative Sequences:

A1: from 1

      2a. CSC is not yet open

      3a. Student wait until it opens

      Back 2

A2: from 2

      3b. Student got the wrong application form

      4b. Get the right one

      Back 3

A3: from 3

      4c. Student did not answer everything in the form

      5c. CSC officer gives back the application form

      Back 4

A4: from 4

      5d. Student filled up the wrong application form

      6d. CSC asks the student to fill up a new one

      Back 5

A5: from 5

      6e. Student asks for another schedule of exam

      7e. CSC postpones the first exam

Error Sequences:

A1: from1

      2a. CSC is close

      3a. Use case fails

A2: from 2

      3b. No application form

      4b. Use case fails

A3: from 3

      4c. Student can't have exam because he/she is underage

      5c. Use case fails

A4: from 4

      5d. Student did not bring requirements

      6d. Use case fails

A5: from 5

      6e. Schedule of exam and venue is not given

      7e. Use case fails

Post condition:
1. The CSC consumes power
2. Less Civil Service Eligibility form

User Interface: Civil Service Commission Office

USE CASE NARRATIVE 7
Smart Money
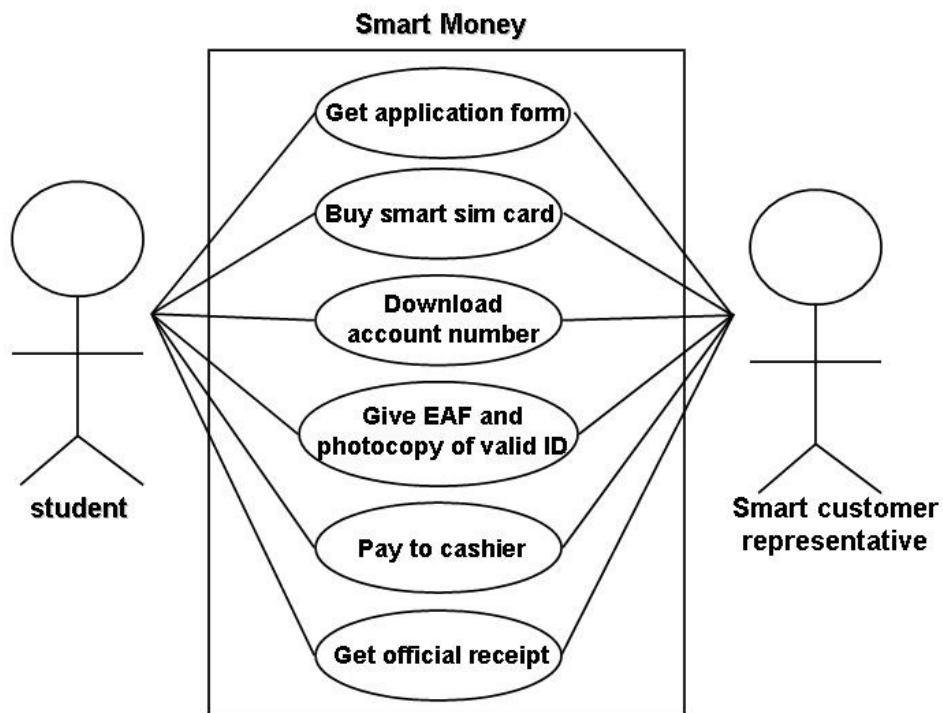
Smart Money

Identification Summary

Title: Smart Money
Summary: This use case allows a student to activate Smart Money
Actors: Student,
Creation Date: July 16, 2008   Date of Update: July 16, 2008
Version: 1   Person in Charge: Ma. Louise Lim

Flow of Events

Preconditions:

1. Smart Communication Center must be open
2. Student must bring EAF and valid ID
3. Student should have smart sim card
4. Student must have application form

5. Student has to pay to cashier
6. Student must get receipt
7. Student must have Smart Money

Main Success Scenario:

1. Go to Smart Communication Center
2. Get application form
3. Buy smart sim card
4. Download account number from phone
5. Give filled up application form
6. Give EAF and valid ID
7. Pay to cashier
8. Get official receipt
9. Get Smart money card after 2 weeks

Alternative Sequences:

A1: from 1
     2a. Smart Communication Center is not open yet
     3a. Wait until it opens
     Back 2
A2: from 2
     3b. Student got the wrong application form
     4b. Get the correct one
     Back 3
A3: from 3
     4c. Not enough money for sim card
     5c. Borrow someone else's money
     Back 4
A4: from 4
     5d. Download sending always fails
     6d. Try it again and again until it sends
     Back 5
A5: from 5
     6e. Student filled up the wrong application form
     7e. Fill up a new one
     Back 6
A6: from 6
     7f. Student gave the wrong EAF
     8f. Give the correct one
     Back 7
A7: from 7
     8g. Money paid to cashier is lacking
     9g. Pay again to cashier
     Back 8
A8: from 8
     9h. Student refuse to get receipt

Error Sequences:

E1: from 1
    2a. Smart Communication Center is closed
    3a. Use case fails
E2: from 2
    3b. No application form
    4b. Use case fails
E3: from 3
    4c. No sim card available
    5c. Use case fails
E4: from 4
    5d. Student does not have smart sim card
    6d. Use case fails
A5: from 6
    7f. Student does not have EAF and valid ID
    8f. Use case fails
A6: from 7
    8g. Student does not have money
    9g. Use case fails

Post Conditions:
    1. Smart Communication Center consumes power
    2. Student has less money
    3. Student has Smart money

User Interface: Smart Communication Center

USE CASE NARRATIVE 8
Multiply.com

Use Case Narrative
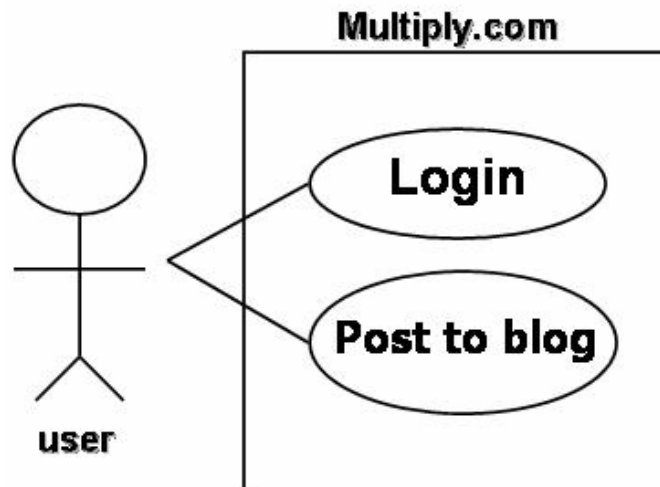
Identification Summary

 Title: Multiply.com
 Summary: This use case allows the user to post to blog
 Actors: User
 Creation Date: July 15, 2008   Update Date: July 15, 2008
 Version: 1   Person-in-charge: Ma. Louise Lim

Flow of Events

Preconditions:
 1. The user must have access to the internet
 2. The user should have a multiply account

Main Success Scenario:
 1. Go to multiply.com
 2. Login to your account
 3. Click "Post to blog"
 4. Input title
 5. Input body
 6. Click "Save & Publish"

Alternative Sequences:

A1: from 1
        1a. User went to wrong site
        2a. Go to multiply.com
        Back 2
A2: from 2
        2b. Incorrect input of password
        3b. Input correct password
        Back 3
A3: from 3
        3c. User didn't click "post to blog" button
        4c. Click "post to blog"
        Back 4
A4: from 4
        4d. User haven't chosen a title
        5d. Input title

A5: from 5
        5e. User haven't typed anything
        6e. Input body
        Back 6
A6: from 6
        6f. User didn't save his/her blog
        7f. Click "save & publish" button

Error Sequences:

E1: from 1
        1a. User does not have access to the internet
        2a. Use case fails
E2: from 2
        2b. User do not have multiply account
        3b. Use case fails
E3: from 3
        3c. There is no "post to blog" button
        4c. Use case fails
E4: from 5
        5e. No blog inputted
        6e. Use case fails
E5: from 6
        7g. No "save" button
        8g. Use case fails

Post Condition:
      1. User consume electricity
      2. Blog will be posted on multiply

User Interface: Monitor

Activity Diagram
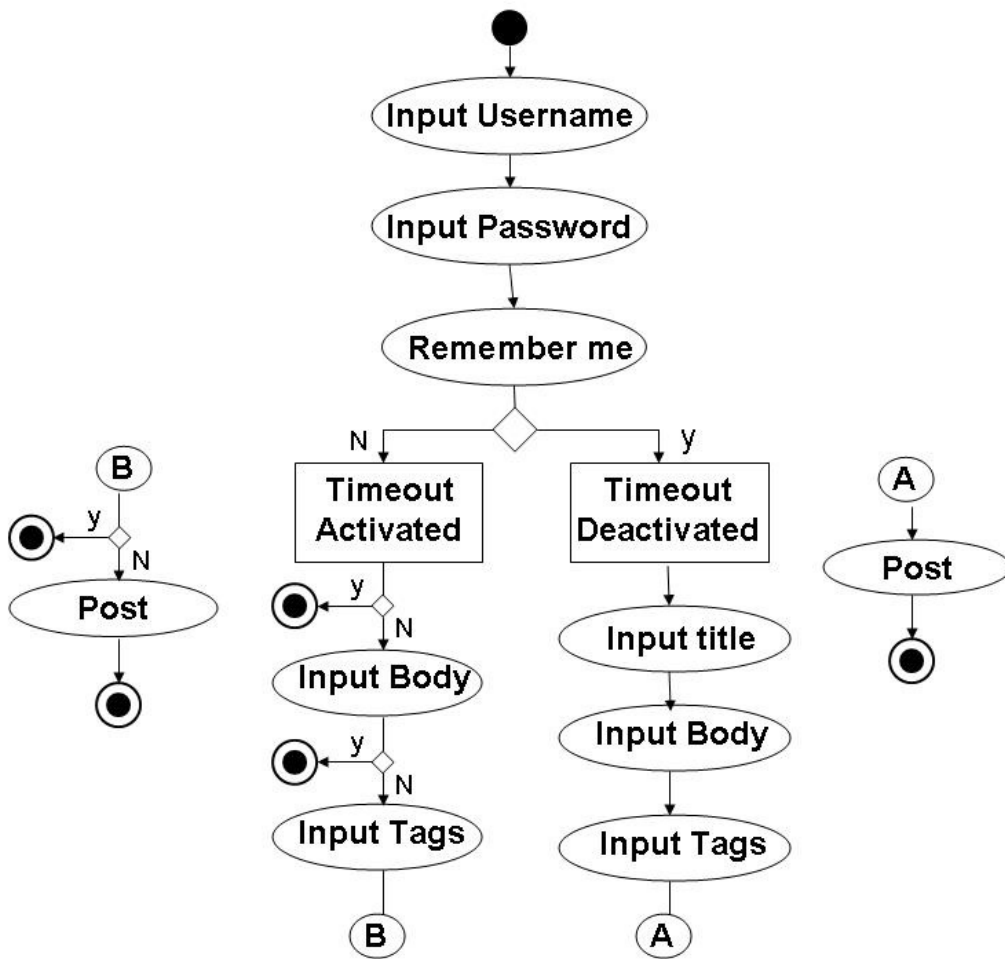
USE CASE NARRATIVE 9
Linkedin.com
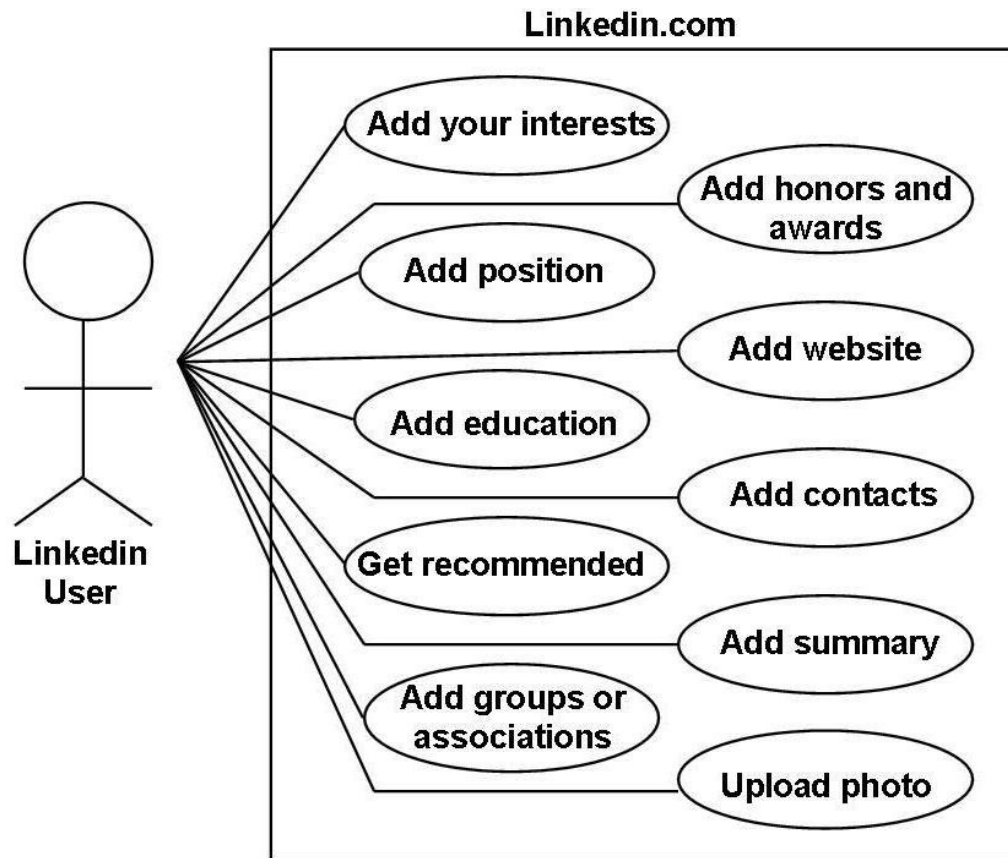
Linkedin.com

Identification Summary:
Title: Linkedin.com
Summary: This use case allows a user to write recommendation on Linkedin.com
Actors: Linkedin user
Creation date: July 24, 2008   Date of update: July 24, 2008
Version: 1   Person in charge: Ma. Louise Lim

Flow of Events

Preconditions:
1. User must have access to the internet
2. User must have Linkedin account

Main Success Scenario:
1. Input email address
2. Input password
3. Click "get recommended" button

4. Select from your connections list
5. Choose category
6. Choose basis of recommendation
7. Choose your title at the time
8. Enter contact's title
9. Enter contact's organization
10. Input body
11. Click "send"
12. Confirm recommendation is sent

Alternative Sequences:

A1: from 1
    1a. Inputted incorrect email address
    2a. Input correct one
    Back 2
A2: from 2
    2b. Inputted incorrect password
    3b. Input correct one
    Back 3
A3: from 3
    3c. User clicked incorrect button
    4c. Click "get recommended"
    Back 4
A4: from 4
    4d. User selected wrong contact
    5d. Go back to connections list
    Back 5
A5: from 5
    5e. User didn't choose category
    6e. Choose category
    Back 6
A6: from 6
    6f. User didn't choose basis of recommendation
    7f. Choose basis of recommendation
    Back 7
A7: from 7
    7g. User didn't choose title at the time
    8g. Choose your title at the time
    Back 8

A8: from 8
    8h. User didn't enter contact's title
    9h. Enter contact's title

Back 9
A9: from 9
9i. User didn't enter contact's organization
10i. Enter contact's organization
Back 10
A10: from 10
10j. User didn't input body yet
11j. Input body
Back 11
A11: from 11
11k. User forgot to click send
12k. Click 'send"

Error Sequences:

E1: from 1
1a. No email address
2a. Use case fails
E2: from 2
2b. No password
3b. Use case fails
E3: from 3
3c. No "get recommended" button
4c. Use case fails
E4: from 4
4d. No contacts
5d. Use case fails
E5: from 10
10j. User does not have anything to write on recommendation
11j. Use case fails
E6: from 11
11k. No "send" button
12k. Use case fails

Post Condition:

1. User consume electricity
2. Contact has recommendation

User Interface: Computer monitor

USE CASE NARRATIVE 10
Twitter.com

Twitter.com

Login

Add contacts

Change background design

Update account

Upload picture
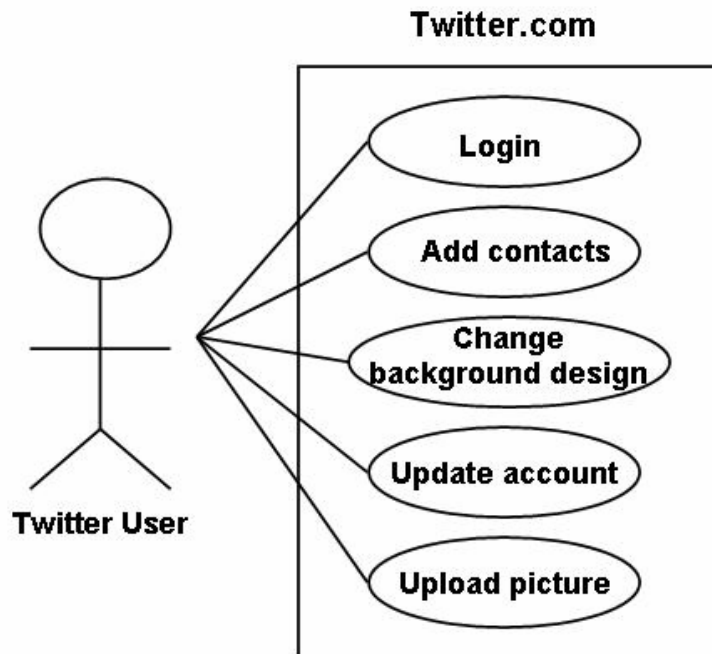
Twitter User

Identification Summary
Title: Twitter.com
Summary: This use case allows the user to design twitter background
Actors: Twitter user
Creation Date: July 31, 2008   Update Date: July 31, 2008
Version: 1   Person-in-charge: Ma. Louise Lim

Flow of Events

Preconditions:
1. The user must have access to the internet
2. The user should have a twitter account

Main Success Scenario:
1. Go to settings
2. Go to design
3. Choose custom style
4. Choose background color
5. Choose background image
6. Choose text color
7. Choose name color

8. Choose link color
9. Choose sidebar fill color
10. Choose sidebar border color
11. Click "save"

Alternative Sequences:

A1: from 4
    4a. User haven't chosen a background color yet
    5a. Choose a background color
    Back 5
A2: from 5
    5b. User chose the wrong image background
    6b. Input correct image
    Back 6
A3: from 11
    11f. User didn't save the changes
    12f. Click "save" button

Error Sequences:

A1: from 1
    1a. User does not have access to the internet
    2a. Use case fails
A2: from 2
    2b. User does not have twitter account
    3b. Use case fails
A3: from 4
    4c. Background color is not available
    5c. Use case fails
A5: from 7
    7e. Name color is not available
    8e. Use case fails
A6: from 11
    11g. No "save" button
    12g. Use case fails

Post Condition:
    1. User consume electricity
    2. Twitter background design will be changed

User Interface: Computer Monitor
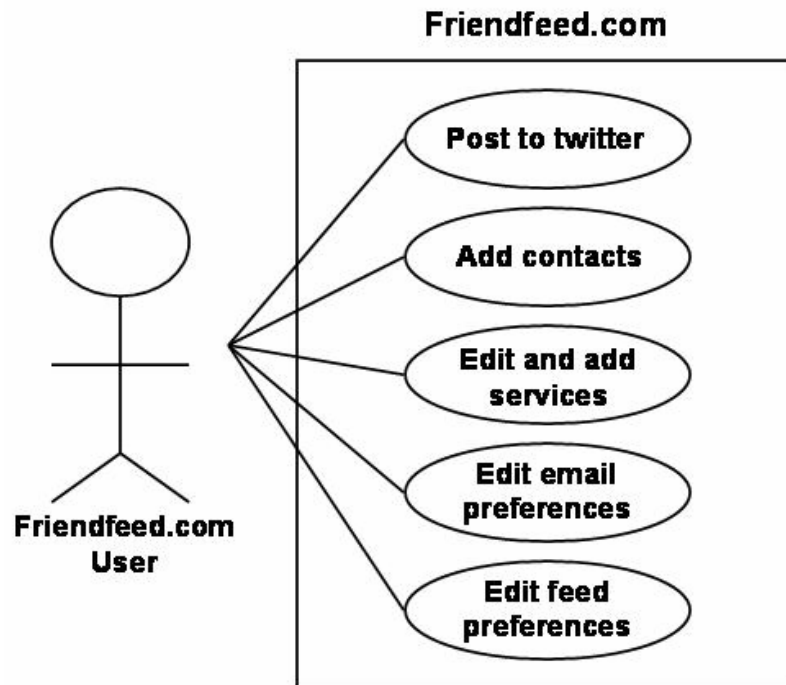
Friendfeed.com

Identification Summary

Title: Friendfeed.com (Post to twitter)
Summary: This use case allows a user to post a message on twitter.com
Actor: Friendfeed.com User
Creation date: August 7, 2008   Date of update: August 7, 2008
Version: 1   Person in charge: Ma. Louise A. Lim

Flow of events

Pre Conditions:
1. User should have access to internet
2. User should have friendfeed account
3. User should have twitter account

Main Success Scenario:

1. Go to friendfeed.com
2. Click "me" button
3. Click "Twitter"
4. Login to twitter.com

5. Go to home
6. Input message
7. Click "update"

Alternative Sequences:

A1. From 1
    1a. User inputted wrong username
    2a. Input correct username
A2. From 4
    2b. User inputted wrong password
    3b. Input correct password
A3. From 7
    3c. User forgot to click "update"
    4c. Click on "update" button

Error Sequences:

E1: From 1
    1a. User does not have friendfeed account
    2a. Use case fails
E2: From 2
    2b. No "me" button
    3b. Use case fails
E3: From 3
    3c. User doesn't have links on twitter
    4c. Use case fails
E4: From 4
    4e. User does not have twitter account
    5e. Use case fails

Post Conditions:

1. User was able to update on twitter
2. User consume power electricity

User Interface: Computer Monitor

USE CASE NARRATIVE 12
Emeraldinsight
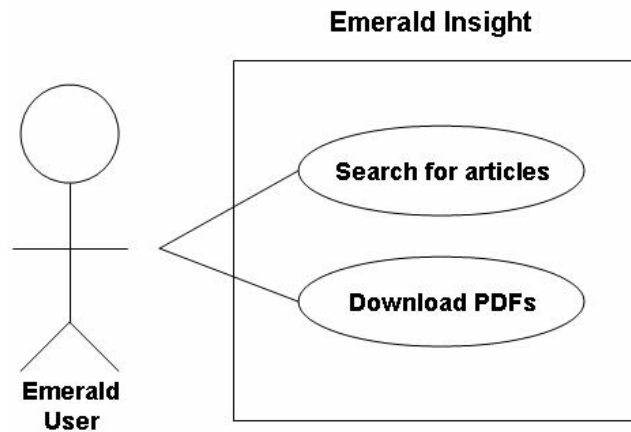
Identification Summary

Title: Emerald Insight (Download PDF)
Summary: This use case allows a user to download PDF from emerald
Actor: Emerald User
Creation date: August 19, 2008   Date of update: August 19, 2008
Version: 1   Person in charge: Ma. Louise A. Lim

Flow of events

Pre Conditions:
1. User should have access to internet
2. User should have access to emerald insight

Main Success Scenario:

8. Go to csb site
9. Input ID number
10. Input password
11. Go to library search
12. Go to emerald journals
13. Select a topic
14. Copy html

Alternative Sequences:

A1. From 1
       1a. User went to wrong site

2a. Go to csb site

A2. From 2

2b. User inputted wrong ID number

3b. Input correct ID number

A3. From 3

3c. User inputted wrong password

4c. Input correct password

A3. From 6

4b. Topic not available

5b. Select a new one

Error Sequences:

E1: From 1

1a. CSB doesn't have a site

2a. Use case fails

E2: From 2

2b. User does not have ID number

3b. Use case fails

E3: From 3r

3c. User does not have password

4c. Use case fails

E4: From 7

4e. There is no html available

5e. Use case fails

Post Conditions:

3. User was able to download pdf from emerald
4. User consume power electricity

User Interface: Computer Monitor

USE CASE NARRATIVE 13
Slideshare.net
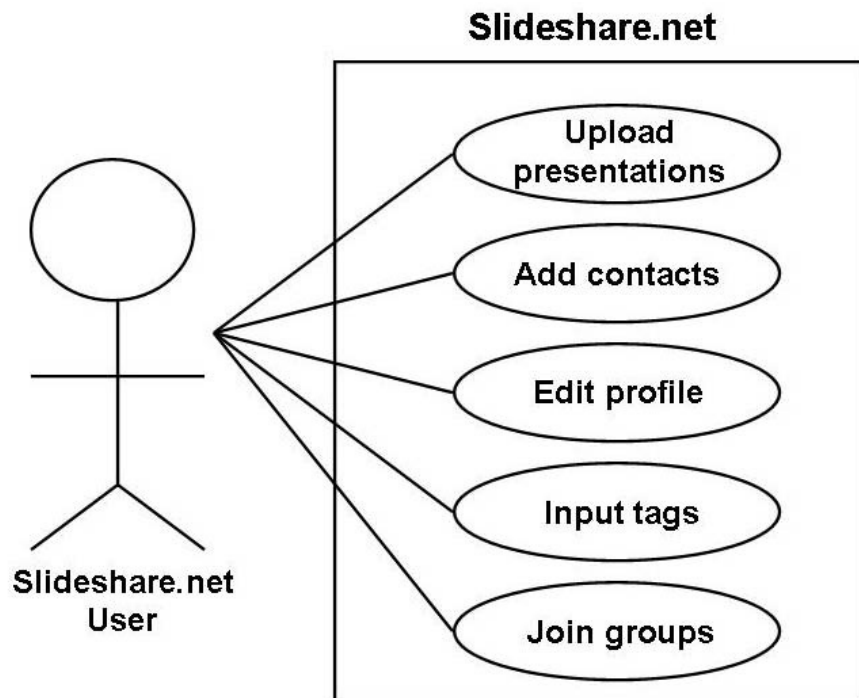
Identification Summary

Title: Slideshare.net (Upload Presentation)
Summary: This use case allows a user to upload a presentation on slideshare.net
Actor: Slideshare.net User
Creation date: August 19, 2008   Date of update: August 19, 2008
Version: 1   Person in charge: Ma. Louise A. Lim

Flow of events

Pre Conditions:
    1. User should have access to internet
    2. User should have slideshare account

Main Success Scenario:

    15. Go to slideshare.net
    16. Input username
    17. Input password
    18. Click "upload" button
    19. Click "browse and select files"
    20. Click "publish"

Alternative Sequences:

A1. From 1
      1a. User went to the wrong site
      2a. Go to slideshare.net
      Back 2
A2. From 2
      1a. User inputted wrong username
      2a. Input correct username
      Back 3
A3. From 3
      2b. User inputted wrong password
      3b. Input correct password
      Back4
A4. From 7
      3c. User forgot to publish the presentation
      4c. Repeat previous steps

Error Sequences:

E1: From 1
      1a. User does not have slideshare account
      2a. Use case fails
E2: From 2
      2b. User does not have username
      3b. Use case fails
E3: From 3
      3c. User does not have password
      4c. Use case fails
E4: From 4
      4e. Presentation cannot be uploaded
      5e. Use case fails

Post Conditions:

5. User was able to upload presentation on slideshare.net
6. User consume power electricity

User Interface: Computer Monitor

APPENDIX 1
Systems Analysis and Design Paper

A Systems Analysis Study on the

Telemarketing system

Of Extra Ordinaire Janitorial & Manpower Services Inc.

Presented to the

Computer Applications Program

School of Management and Information Technology

De La Salle – College of Saint Benilde

In partial fulfillment of the

Requirement of the subject

Systems Analysis

Submitted By:

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Buce, Marjorie

Capilitan, Maria Lourdes C.

Lim, Ma. Louise A.

SYSANAL(O0A)

August 5, 2008

Submitted To:

Mr. Paul Pajo

<u>**SYSANAL Final Project (1st term, SY 2008-2009)**</u>

TITLE: "An Analysis on the telemarketing system of Extra Ordinaire Janitorial & Manpower Services Inc."

I. Chapter 1
- ➢ **Company Background**
    - • **Company Overview:**

        Company Name: Extra Ordinaire Janitorial & Manpower Services Inc.

        Company Address: 2nd and 3rd Floor LFM Bldg., 186 Dona Soledad Avenue, Better Living Subdivision, Paranaque City.

        Line of Business: Janitorial Services

        Manpower Services

    - • **Mission:**

The company aims to deliver an extra ordinary performance, a fall order but achievable. Its primary mission is customers satisfaction, which could be attained through service excellence by its team of highly qualified key personnel and technically experienced and rigidly screened and trained manpower pool.

    - • **Vision:**

In the future, the company plans to operate not only key urban counter but also in other parts of the country where companies demand for highly dedicated and discipline janitorial, front, and back-end personnel.

    - • **Company History:**

Extra Ordinaire Janitorial & Manpower Services, Inc. was formally registered with the Department of Trade and Industry (DTI) on March 11, 2002. Its principal office is at 3/F LFM Building, 186 Dona Soledad Ave., Better Living Subdivision, Paranaque City.

    - • **Products and Services:**

        Janitorial Services:

Marble Crystallizations

Carpet Shampooing

General / One Time Cleaning

High Rise Window Cleaning

Ground Maintenance

Landscaper / Gardener

Manpower Services:

Hotel Restaurant Workers

Skilled Maintenance

Porter / Usherette

Messengerial

Elevator Operator

Sales Clerk / Bagger

Cashiers / Encoder

Office Personnel

Factory Worker / Production

Worker

Painter

Carpenter

Electrician / Plumber

- **Number of Customers: 21**

- **Number of Transactions: approximately 50 per day**

- **Organizational Chart:**

```
                          ┌─────────────┐
                          │  President  │
                          └──────┬──────┘
              ┌──────────────────┴──────────────────┐
   ┌──────────────────────┐           ┌──────────────────────┐
   │  Vice President for  │           │  Vice President for  │
   │       finance        │           │      operations      │
   │ Chief Finance Officer│           │Chief Operations Officer│
   └──────────┬───────────┘           └──────────┬───────────┘
      ┌───────┴────────┐        ┌────────────────┼────────────────┐
┌───────────┐  ┌──────────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐
│ Purchasing│  │  Accounting  │ │ Operations│ │ Marketing │ │   Human   │
│ Department│  │   Manager    │ │ Department│ │ Department│ │  Resource │
│  manager  │  │              │ │  Manager  │ │  Manager  │ │ Department│
└─────┬─────┘  └──────┬───────┘ └─────┬─────┘ └─────┬─────┘ │  Manager  │
      │        ┌──────┴──────┐        │             │       └─────┬─────┘
┌───────────┐ ┌──────────┐ ┌────────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐
│ Purchasing│ │  Billing │ │Compensation/│ │   Area    │ │ Marketing │ │    HRD    │
│  officers │ │Collection│ │  Benefits  │ │  Managers │ │  officers │ │  officers │
└─────┬─────┘ └────┬─────┘ │Section Officer│ └─────┬─────┘ └─────┬─────┘ └─────┬─────┘
┌───────────┐ ┌──────────┐ └──────┬─────┘ ┌───────────┐ ┌───────────┐ ┌───────────┐
│   Clerks  │ │  Clerks  │ ┌────────────┐ │    Area   │ │   Sales   │ │    HRD    │
└───────────┘ └──────────┘ │   Clerks   │ │Coordinators│ │Representative│ │Staff/ Clerks│
                           └────────────┘ └─────┬─────┘ └───────────┘ └───────────┘
                                          ┌───────────┐
                                          │    Area   │
                                          │Supervisors│
                                          └─────┬─────┘
                                          ┌───────────┐
                                          │Field Staff│
                                          └───────────┘
```

> ## Statement of the Problem

The critical business process the study focuses on is the telemarketing of the company wherein they promote the products they offer and acquire clients over the phone. The general problem the study identifies is that only a few numbers of proposals are approved among the numerous proposals the company passed.

- the company is not known

- the company does not prioritize advertisement

- the company has no budget for advertisement

- the company has few revenue

- the company has few clients

The telemarketing system of the company was chosen because this system would enable the company to gain clients and introduce them the services they offer. Moreover, through this system, the company

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would be able to achieve its goal to operate on key urban areas and in other parts of the country needing their services.

➢ **Objectives of the System**

The proposed system of the study aims to open new markets and increase sales opportunities for the company

- to increase the flexibility of the company by improving its ability to respond and adapt to the technological changes in the environment

- to improve asset utilization by introducing them the functions and benefits of the computers they use

- to reduce the long process cycle time of the company's marketing system

➢ **Significance of the Study**

The importance of the study is that the proposed system would be means of increasing the number of approved proposals submitted by the company to its prospective clients. This would also provide means of enhancing the marketing system of the company that would in turn open new markets and increase sales opportunities. Moreover, this would also be means of letting the company gain more clients that would in turn make them gain more revenues. The ability of the company to respond to technological changes in the environment would be increased as well as the utilization of their assets.

➢ **Scope and Limitation**

The analysts are doing a web-based marketing system for the company wherein a website would be created for the company. But the website that would be created would not be those that cost because the analysts are into the free websites offered in the Internet. They could

just update some blog posts and stuffs that they would put in their website. The searching of the prospective clients would not need for a purchase of business directory database that are sold. Instead the directory would just be those that are also offered for free by some sites such as Philippine Business Pages. The study would only cover the marketing of the company such as with its advertisement and acquisition of clients.

II. Chapter 2

➢ Use Case Diagram

Extraordinaire Telemarketing System
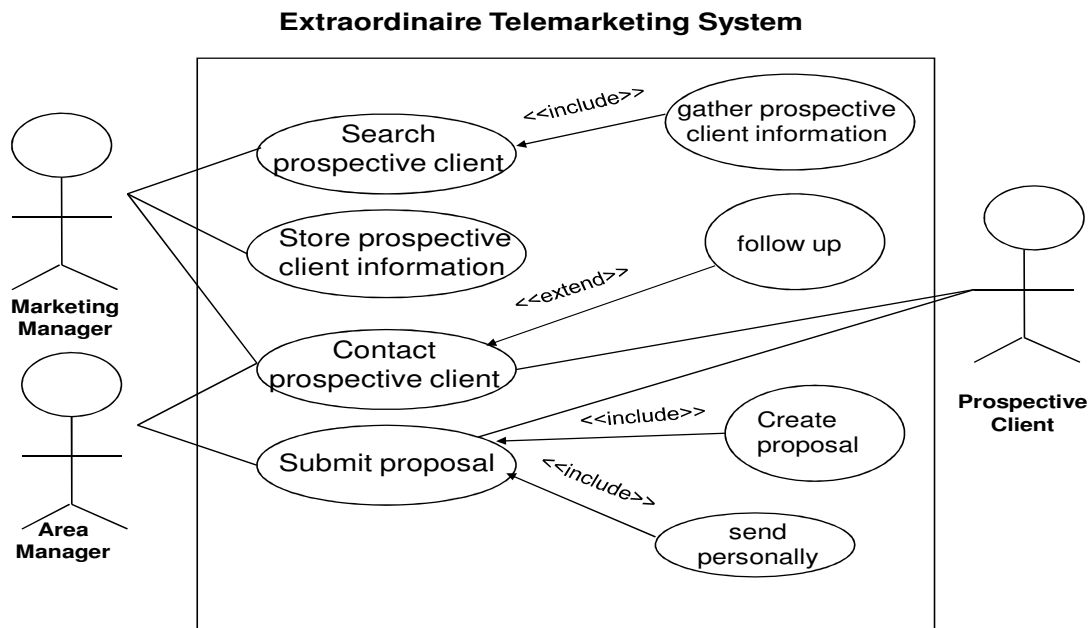
➢ Use Case Narratives

1. Identification Summary
Title: Search Prospective Client
Summary: This use case allows the Marketing Manager of the company to search
for their prospective clients through telephone directories
Actor: Marketing Manager
Creation Date: August 5, 2008   Date of update: August 9, 2008
Version: 1.0   Person in charge: Marjorie Buce

Flow of Events

   Preconditions:
1. The marketing manager must have time to search for prospective clients.
2. The company should have an updated telephone directory book.
3. Prospective client must not be present client.

Main Success Scenario:
1. Marketing Manager searches for the information (company name, address, contact number) about their prospective clients in the telephone directory book.
2. Marketing Manager gathers information about their prospective clients.

Alternative Sequences:

A1: Telephone directory page torn
> From 1
> 1a. Marketing Manager points out good prospective client.
> 1b. Information about the prospective client could not be seen because page is partly torn.
> 1c. Marketing Manager turns page and looks for other prospective clients
> Back to 1

A2: Telephone directory page spilled off with liquid
> From 1
> 2a. Marketing Manager points out good prospective client
> 2b. Information about the prospective client could not be clearly seen because page was spilled with liquid
> 2c. Marketing Manager turns to other page and look for other prospective client

Back to 1

A3: Prospective client info not immediately written
> From 2
> 3a. Marketing Manager forgot to write prospective client info
> 3b. Marketing Manager researches prospective client info
> 3c. Marketing Manager found the prospective client info
> Back to 2

Error Sequences:
> E1: No telephone directory book
> From 1
>> 1a. The company has no telephone directory book
>> 1b. use case fails
> Back to 1
> E2: Client info not written

From 2
            2a. Marketing Manager didn't write info about their prospective clients
            2b. Use case fails
        Back to 2

Post Conditions:
        1. Telephone directory book is used
        2. Marketing Manager's time is used up
        3. Marketing Manager had information about prospective clients

User Interface: Directory book

2. Identification Summary

Title: Store Prospective Client Information
Summary: This use case allows the marketing manager to store information about their prospective client in Microsoft Excel.
Actors: Marketing Manager

Creation Date: August 5, 2008	Date of update: August 9, 2008
Version: 1.0	Person in charge: Ma. Louise Lim

Flow of Events
Preconditions:
        1. Marketing Manager must have time to store information about prospective clients
        2. Marketing Manager must have gathered information about their prospective clients
        3. The company must have a computer
        4. There must be electricity for the computer
        5. The computer of the company must have Microsoft Excel
        6. Past stored potential client info file is in the computer

Main Success Scenario:
        1. Marketing Manager collects gathered information about prospective clients
        2. Marketing Manager stores gathered information in excel
        3. Marketing Manager saves the information in Excel to company file folder

Alternative Sequences:
A1: Gathered prospective client info misplaced
        From 1
        1a. Marketing Manager looks for the gathered info
        2b. Marketing Manager finds gathered info
        Back to 1
A2: Past stored prospective client info file transferred
        From 2
        2a. Marketing Manager asks colleagues where the file is

2b. Marketing Manager is informed that the file was just transferred
2c. Marketing Manager finds where the file is
Back to 2

A3: Electricity lost for minutes
    From 3
    3a. Marketing manager turns on the computer as soon as electricity comes back
    3b. Marketing Manager goes back to excel
    3c. File not saved was recovered

Error Sequences:
E1: Prospective info file lost
    From 1
    1a. Marketing manager could not find gathered perspective client info file in the file folder location
    2b. Use case fails
    Back to 1
E2: Stored prospective client info file deleted
    From 2
    2a. Marketing Manager accidentally deleted file folder
    2b. Marketing Manager looks for it at the recycle bin
    2c. The deleted file was not in the recycle bin anymore
    2d. Use case fails
    Back to 2
E3: Electricity temporarily lost
    From 3
    3a. Marketing Manager turns on the computer.
    3b. Marketing Manager gives back to Excel.
    3c. Use Case Fails
    Back to 3

Post Conditions:
1. Marketing Managers time was used up.
2. Electricity consumption of the company is increased.
3. Marketing Manager has stored the gathered information about prospective clients.
4. Prospective clients increased.

User Interface: Computer

3. **Identification Summary**

Title: Contact Prospective Client
Summary: This use case allows the marketing manager and the area manager to contact their prospective client over the telephone.

Actors: Marketing Manager, Area Manager, Client
Creation Date: August 13, 2008   Date of Update:
Version: 1.0   Person in charge: Maria Lourdes
Capilitan

Flow of Events:
   Preconditions:
   1. Marketing Manager or Area Manager must have time to call their prospective clients.
   2. The company must have a telephone line for the Marketing Manager.
   3. The Marketing Manager or Area Manager must have the contact numbers of their prospective clients.
   4. The telephone line of the company must be working.

   Main Success Scenario:
   1. Marketing Manager or Area Manager dials the number of their prospective clients.
   2. Marketing Manager or Area Manger receives answer from their prospective client.
   3. Marketing Manager or Area Manager introduces the company to the prospective client and asks permission to submit proposal to them.

   Alternative Sequences:
A1: Incorrect Phone Number
       From 1
       1a. Marketing Manager or Area Manager notices that the phone number exceeds the limit number of phone numbers.
       1b. Marketing Manager or Area Manager checks it in the telephone directory.
       1c. Marketing Manager or Area Manager finds out that we had a mistake with the number be stored.
       1d. Marketing Manager or Area Manager corrects the phone number error in the database.
       Back to 1

A2: Prospective client's line is busy
       From 2
       2a. Marketing Manager or Area Manager is informed that the line of the phone number he dialed is busy.
       2b. Marketing Manager or Area Manager waits for a few minutes.
       2c. Marketing Manager or Area Manager redials the number of their prospective client.
       2d The number dialed is ringing.

Back to 2
A3: Marketing Manager was hanged up
From 2
3a. Marketing Manager or Area Manager ends call
3b. Marketing Manager or Area Manager waits for minutes and redials the number.
3c. The number dialed is ringing.
Back to 2

A4: Marketing Manager or Area Manager is asked to call again
From 3
4a. Marketing Manager or Area Manager receives an answer from the prospective client.
4b. Marketing Manager or Area Manager is asked to call again on the date said.
4c. Marketing Manager or Area Manager waits for the day to come.
4d. Marketing Manager or Area Manager redials the number on the said date.
4e. Marketing Manager or Area Manager answer from personal Computer.
Back to 3

A5: From 4
4e. Marketing Manager or Area Manager received a set date for submission of proposal from Personal Computer.
Back to 4

Error Sequence:
E1: The telephone line is out of service
From 1
1a. Marketing Manager or Area Manager is informed that the line of their prospective client is out of service.
1b. Use Case Fails
E2: Wrong Number
From 1
2a. Marketing Manager or Area Manager is answered by different people and is informed that number dialed is wrong.
2b. Use Case Fails
Back to 1
E3: Call ended immediately

From 2
3a. Prospective client dropped phone after knowing the caller.
3b. Use Case Fails
Back to 2
E4: Prospective Client not interested
From 3
4a. Marketing Manager or Area Manager is informed that the prospective client is not interested with their company.
4b. Use Case Fails
Back to 3
E5: Prospective Client not interested
From 4
5a. Marketing Manager or Area Manager is informed that the prospective client is not interested with their company.
5b. Use Case Fails
Back to 4

Post Conditions:
1. Marketing Manager or Area Manager time is used up.
2. Telephone bill or the company is increased.
3. Follow up calls for the prospective clients increased.
4. Prospective clients knew the company and service.

User Interface: Telephone

4. Identification Summary:

Title: Submit Proposal
Summary: This use case allows the Area Manager to submit company proposal to their prospective clients.
Actors: Area Manager, Prospective Client
Creation Date: August 13, 2008   Date of Update:
Version: 1.0   Person in Charge: Maria Lourdes Capilitan

Flow of Events:
    Preconditions:
        1. The Area Manager must have time to submit the company proposal.
        2. The area manager must have the prospective client's address.
        3. They must have created the proposal for the Area Manager to submit.
        4. Prospective client must have a set date for the company's submission of proposal.

    Main Success Scenario:
        1. Area Manager goes to the specified address of the prospective client.
        2. Area Manager submits company proposal to their prospective clients.

Alternative Sequences:

A1: Transportation Budget robbed.
From 1
1a. Area Manager was robbed along the way.
1b. Area Manager walks if the place is already near.
Back to 1

A2: Area Manager not allowed to enter.
From 2
2a. Area Manager is blocked by the guard of the prospective client.
2b. Area Manager informs the guard that he has an appointment with the company.
2c. Area Manager is asked to just leave the proposal to the guard.
Back to 2

A3: Incorrect Proposal for the prospective client.
From 2
3a. Area Manager notices that the proposal handled is not for the prospective client he's into.
3b. Area Manager goes back to the company and asks the Marketing Manager for the right proposal.
3c. Area Manager goes back to the Person in Charge
Back to 2

A4: Incorrect Person in Charge address
From 1
1a. Area Manager is informed that the address or the Person in Charge there into.
1b. Area Manager contacts the Person in Charge with their number.
1c. Area Manager is directed to the right address.
Back to 1

Error Sequence:

E1: Person in Charge transferred address
From 1
1a. Area Manager is informed that the forces resident of the address already transferred.
1b. Area Manager contacts the Person in Charge.
1c. Area Manager is ignored that the line is already out of service.
1d. Use Case Fails
Back to 1

E2: Prospective client company totally closed.
From 2

2a. Area Manager is informed that the Person in Charge in the company stopped operation.
2b. Use Case Fails
Back to 2

Post Conditions:
1. Area Manager's time is used up.
2. Area Manager got tired.
3. Area Manager submitted the company's proposal to Person in Charge.
4. Person in Charge got to know the services that the company offers.
5. Prospective client on the company increased

➢ **Process Walkthrough**

Existing System Activities	Process Walkthrough
1. Search Prospective Clients	
2. Store Prospective Clients Information	
3. Contact Prospective Clients	
4. Submit Proposal	
4.1 Create Proposal	

Activity Diagrams

Contact Prospective Client

Area Manager Marketing Manager   **Prospective Client**

Call prospective client

Incorrect phone number?

y

Phone number exceeds

n

Checked directory?

n

v

Correct the phone number

Receives answer from client

Line is busy?

y

n

Introduce the company

Called again?

n

y

Receive call

n

Confirm a meeting?

y

Date Set
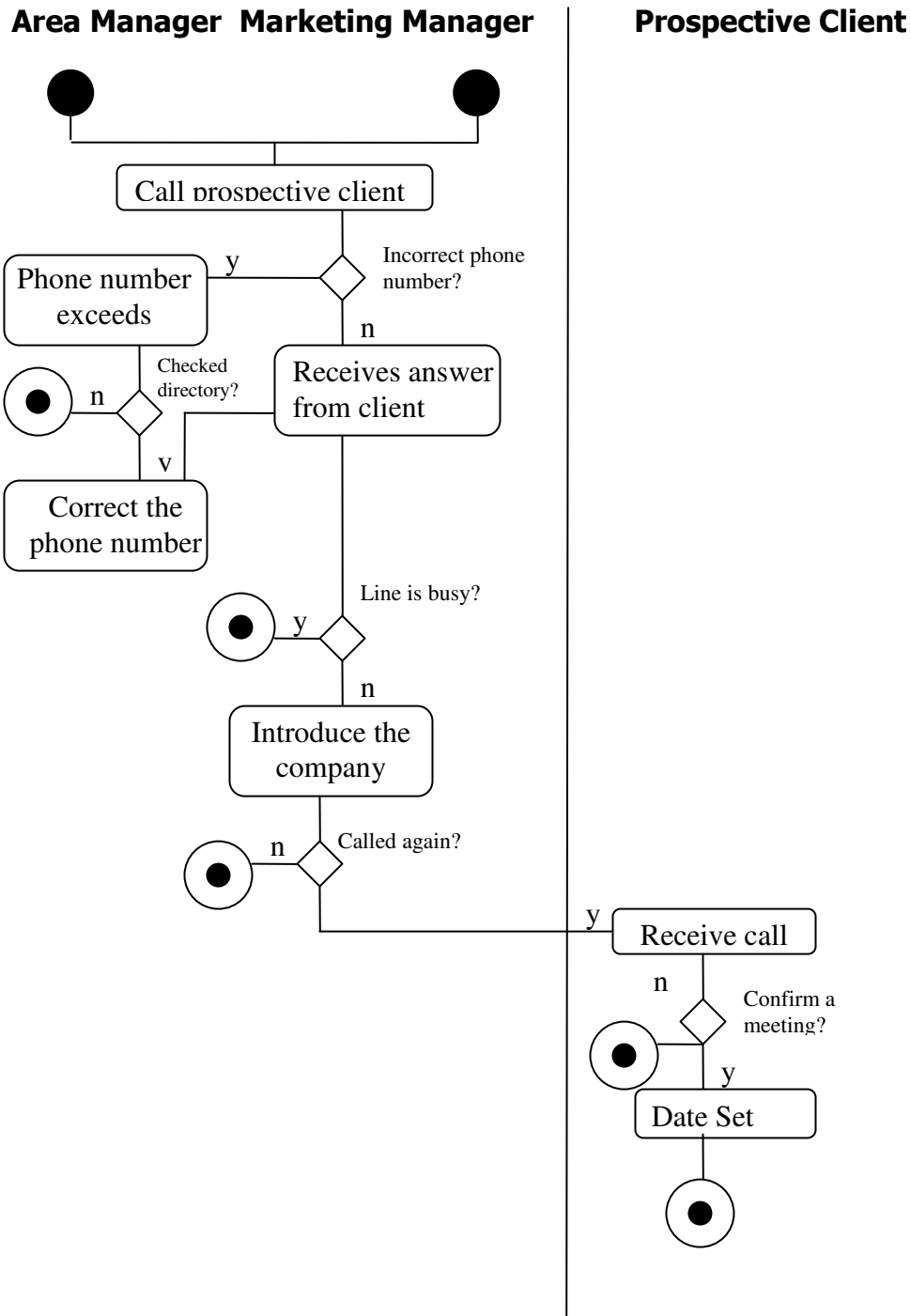
Submit Proposal

Marketing Manager	Area Manager	Prospective Client

Goes to specified address of the prospective client

n —— Address Incorrect?

y

Call the prospective client

n —— Got correct address?

y

Submit company proposal

n —— Received?

y

Set an appointment

n —— Prospective client received wrong proposal?

y

Give correct proposal
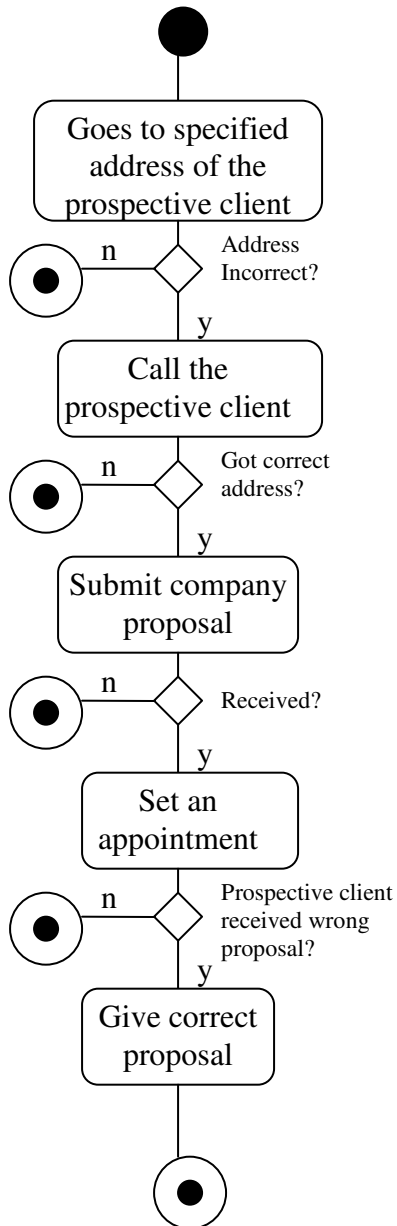
Store Prospective Client's Information in Excel

Area Manager Client	Marketing Manager	Prospective

Gather information about prospective client

Y — ⬦ Information gathered loss?

n

Gathered information stored in Excel

Y — ⬦ Doesn't have excel?

n

Save information into company file folder

Search

Area Manager	Marketing Manager	Prospective Client

Gather information about prospective clients

Information misplaced? — n / y

Look for the information

Found information? — n / y

Gather information about prospective client

Prospective client file transferred? — n / y

Look for the file from colleagues

File transferred? — n / y

Solves information in Excel to Company File

Electricity available? — n / y

Wait for the electricity to be back

Electricity back? — n / y

Goes back to Excel

File saved? — n / y

Save the file

Process time vs. Cycle Time

| Activities	Processing Time	Cycle Time
Search prospective clients through telephone directories	1 min.	60 min
Store Prospective clients Information in Excel	5 mins	120 mins
Contact Prospective clients	10 mins	120 mins
Create Company Profile	50 mins	180 mins
Review Proposal	5 mins	30mins
Revise Proposal	10 mins	60 mins
Follow up call to prospective clients	5 mins	20 mins
Submit Proposal	60 mins	240 mins

II. Chapter 3

➢ **Table of Recommendations**

Problem to be addressed	Recommended change	Activities affected
Few numbers of approved proposals	Existing System: Telemarketing Proposed System: Web-based marketing system	-Search Prospective Clients -Contact Clients -
Company is not known	Before: There is just a	

	little form of advertisement through telephone calls. -Company should consider advertising through blog posts and videos about the company	
Company does not prioritize advertisement	Before: Company just give some photocopies of leaflets to employees who give these to some of the people they knew -Company should give focus on advertisement by creating a website where they could post some advertisements about the company	
Company has no budget for advertisement	Before: Company gives importance to telephone bill payments and some expenses for photocopying of leaflets as their form of advertisement -Company should instead shift to focusing on paying bills for Internet connection and electricity bills for a worthwhile	

	advertisement via the Internet	
Company has few revenue	Before: Company does not focus more on big businesses as their clients -Company should consider more bigger businesses as their clients	
Company has few clients	Before: Employees of the company could call their prospective clients as soon as they have time and as soon as they had searched from the telephone directory -An employee of the company such as the marketing manager should send emails to prospective clients after having searched Philippine Business pages via the Internet wherein the email contains the link of the company website.	

➢ **Use Case Diagram of the Proposed System**

Extraordinaire Web-based marketing System
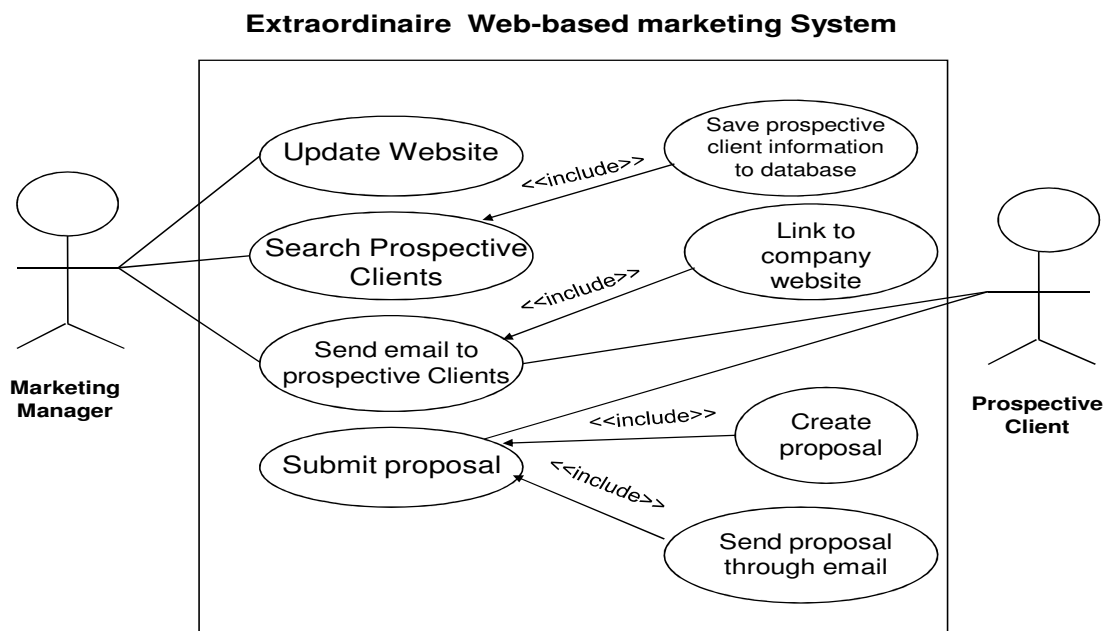
Identification summary
Title: Update website
Summary: This use case allows the marketing manager of the company to update their website that perspective client could see.
Actors: Marketing Manager
Creation Date: August 09, 2008   Date of update:
Version: 1.0   Person in charge: Ruth Ann Basnillo

Flow of events:
 Preconditions:
  1. Marketing manager must have already created a website for the company.
  2. Marketing manager must have time to update website.
  3. The company must have electricity.
  4. The company must have computer for the marketing manager.
  5. The computer of the marketing manager must have Internet access
  6. Marketing manager must know the account of the company website.
  7. Marketing manager must have access to the company website account
  8. Company website host must be available.

 Main Success Scenario:
  1. Marketing manager logs in to the company website.
  2. Marketing manager posts to blog.

3. Marketing manager approves comments from the company website visitors.
4. Marketing manager post to photos of the company website
5. Marketing manager posts to videos on the company website.
6. Marketing manager edits company websites appearances.

Alternative Sequences:
A1. Incorrect username or password
    From 1
    1a. Marketing manager types username and password.
    1b. Marketing manager is informed that username or password is incorrect.
    1c. Marketing manager retypes user names and password.
    1d. user name and password accepted.
    Back to 1
A2. Internet Cable Unplugged
    From 2
    2a. Marketing manager is informed that there is no internet connection because internet cable is unplug.
    2b. Marketing manager plugs internet cable.
    2c. Marketing manager returns to company website blog page.
    Back to 2

A3. Unacceptable comments
    From 3
    3a. Marketing manager reads comments of the company website
        visitors.
    3b. Marketing manager receives negative comments from the company website visitor.
    3c. Marketing manager won't publish the negative comment of the company website visitor.
    3d. Marketing manager will work on the negative comment of the company website visitor.
    Back to 3

A4. Internet connection timed out
    From 4
    4a. Marketing manager is informed that internet connection has timed
        out.
    4b. Marketing manager refreshes page.
    4c. Marketing manager returns to photo page of the company website.
    Back to 4

A5. Videos to post misplaced
    From 5
    5a. Marketing manager finds back up of the videos to post.

5b. Marketing manager uploads videos to post.
Back to 5

A6. Company website is informed that the company website connection has timed out.
From 6
6a. Marketing manager is informed that the company website connection has timed out.
6b. Marketing manager refreshes page.
6c. Marketing manager return to edit website appearance page.
Back to 6

Error Sequences:
E1. Forgotten account
1a. Marketing manager inputs username and password.
1b. Marketing manager is informed that account has not been created.
1c. Use case fails.
E2. No internet connection
From 0
2a. Marketing manager clicks internet browser.
2b. Marketing manager is informed that there is no internet connection
2c. Use case fails.

E3. Company website not hosted anymore
From 1
3a. Marketing manager is informed that the website is not hosting anymore.
3b. Use case fails.
Back to 1

Post Conditions:
1. Marketing manager's time is used up
2. The electricity connection bill of the company is increased.
3. Internet connection bill of the company is increased.
4. Company website capacity is increased
5. The company website is updated.

User interface:
Computer, Company website

Identification Summary
Title: Search prospective clients
Summary: This use case allows the Marketing manager to search for perspective clients in the Internet and save information about them in the database.
Actor: Marketing manager
Creation Date: August 09, 2008   Date of update:

Flow of events:
    Preconditions:
        1. The company must have computer for the marketing manager.
        2. the computer must have internet access
        3. Marketing manager must have time to search for perspective client.
        4. Marketing manager must have a database for the gathered information about prospective clients.
        5. Prospective clients must not be present clients.
        6. The company must have electricity.
        7. Database has auto recovery.
        8.   There is confirmation for file deletion.

    Main Success Scenario:
        1. Marketing manager searches for the information's (company name, address, contact no, email address) of their prospective clients in the Philippine business pages in the internet.
        2. Marketing manager transfers information about their prospective clients for database.
        3. Marketing manager saves gathered information in excel

    Alternative Sequences:
        A1. Internet cable unplugged
            From 1
            1a. Marketing manager is informed that there is no internet connection because the internet cable is unplugged.
            1b. Marketing manager plugs the internet cable.
            1c. Marketing manager returns to the page.
            Back to 1
        A2. Prospective Client information not immediately copy.
            From 2
            2a. Marketing manager forgot to copy prospective client information
            2b. Marketing manager researches prospective client information
            2c. Marketing manager finds prospective client information
            Back to 2
        A3. Electricity temporarily lost
            From 3
            3a. Marketing manager turns on the computer as soon as electricity comes back.
            3b. Marketing manager goes back to database.
            3c. File not saved was auto recovered.
            back to 3
Error Sequences:
        E1. No internet connection

From 1
1a. Marketing manager is informed that there is no internet connection.
1b. Use case fails.
back to 1

Post Conditions:
1. Internet bill of the company is increased.
2. Marketing manager time is used up
3. Prospective clients are increased.
4. Electricity consumption of the company is increased.
5. Gathered information about prospective client is saved.

Use interface:
Computer, web, database

3. Identification Summary

Title: Send email to prospective client
Summary: This use case allows the Marketing Manager to link the company website by sending email to prospective clients
Actors: Marketing Manager, Prospective Client
Creation Date: August 9, 2008   Date of update:
Version: 1.0   Person in charge: Ruth Ann Basnillo

Flow of Events
Preconditions:
1. The company must have a website
2. The company must have an email address
3. Marketing manager must have the email address of their prospective client
4. The company must have computer for the marketing manager
5. The company must have internet connection
6. Marketing Manager must know the company's email account
7. The company must have electricity
8. Marketing Manager must have time to send emails

Main Success Scenario:
1. Marketing Manager logs in email account
2. Marketing Manager creates a message for the prospective client and puts the link of the company website
3. Marketing Manager sends the email to the prospective client's email address

Alternative Scenario:
A1: Incorrect username or password
From1
1a. Marketing Manager inputs username and password

1b. Marketing Manager is informed that username or password is incorrect

1c. Marketing Manager retypes username and password

1d. Username and password accepted

Back to 1

A2: Internet connection timed out

From 3

3a. Marketing Manager is informed that internet connection has timed out

3b. Marketing Manager refreshes page

3c. Marketing Manager returns to compose new message

3d. Marketing Manager resends the email to prospective client

Back to 3

Error Sequences:

E1: Invalid email account

From 1

1a. Marketing Manager inputs username and password

1b. Marketing Manager is informed that account is not valid

1c. Use case fails

Back to 1

E2: Invalid email address of P.C.

From 3

2a. Marketing Manager receives an email from mailer demon

2b. Marketing Manager is informed that the email address of the Marketing Manager has not been created

2c. Use case fails

Post Conditions:

1. Electricity consumption of the company is increased
2. Internet connection bill is increased
3. Marketing Managers' time is used up
4. Prospective client receives email from the company
5. Prospective client is directed to the link of the company's website

User Interface: Computer

4. Identification Summary

Title: Submit Proposal

Summary:

Main Success Scenario:

1. Marketing manager edits the draft message for submitting proposal.
2. Marketing manager attaches the company proposal in the messages.
3. Marketing manager inputs multiple email address on the prospective clients.
4. Marketing manager click the sends link.

Alternative Scenario:

A1. Submit Proposal draft accidentally deleted
    From 0
    1a. Marketing manager opens the trash folder.
    1b. Marketing manager click the draft of the email needed.
    1c. Marketing manager recovers the draft of the email.
    Back to 0
A2. Message in the draft deleted
    From 1
    2a. Marketing manager presses the control key and z to undo the
        deletion.
    2b. Marketing manager recovers the message of the draft
    Back to 1

A3. Internet connection timed out
    From 2
    3a. Message is display informing that internet connection has timed out.
    3b. Marketing manager refreshes the page.
    3c. Marketing manager returns to the page
    Back to 3

A4. Message appears that message can't be sent to email address
    From 3
    4a. Marketing manager checks the email address.
    4b. Marketing manager detects typographical error in one of the email
        address.
    4c. Marketing manager corrects the email address according to his list
    of email address.
    Back to 4

Error Sequences:
    E1. Email server down
        From 0
        1a. Marketing manager goes to email site.
        1b. Marketing manager is informed that email server is currently down.
        1c. use case fails.
        back to 0
    E2. No internet connection:
        From 0
        2a. Marketing manager clicks the browser
        2b. Marketing manager is informed that there is no internet connection
        2c. Use case fails
        Back to 0

    E3. Proposal not attached
        From 4
        3a. Marketing manager checks the sent items for Prospective clients

3b. Marketing manager notices that one of the sent items for Prospective clients has no proposal attached.

Back to 4

Post Condition:
1. Electricity consumption of the company increases
2. Email contacts of the company increases
3. Email with the company proposal attached is sent to the prospective client
4. Prospective clients received the email from the company
5. Prospective clients increase

User interface:

Computer, Internet (email)

➢ **Benchmarking**

Metrics	Extra Ordinaire Janitorial and Manpower Services	City Service Corporation
1. Number of customers	21	Thousands
2. Number of Transactions per day	50	More than 100 per day
3. Number of Branches	0	3
4. Type of Information System	Semi-automated System	Computer-based System
5. Number of proposals		Thousands
6. Number of Services offered	19	9
7. Number of employees	21	More than a 100

➢ **Streamlining**

Process Cycle Time Reduction:

The group applied the Process Cycle Time Reduction in the proposed system by proposing the activity wherein the marketing manager of the company, who would be responsible for the web-based marketing system of the company, would just search prospective clients in the Internet instead of scanning over the pages of a telephone directory. More than that, the transferring of the information of the prospective clients would be easily transferred to the database by simply copying and

pasting those from the Internet. The long process of dialing and waiting for an answer in the telephone calls would be eliminated simply when the activity which is to send email to prospective clients would be implemented. There would be no more long hours talk between the caller such as the marketing manager and the prospective clients over the phone because with the system, the website of the company would talk for the marketing manager. If the prospective clients got interested with the services they offer, prospective clients could simply send an email to the company. Soon, the marketing manager could already send the company proposal through email without letting the area manager to submit it personally. The long hours of travel from the company to the place where the proposal would be submitted could be eliminated. There would no longer have follow-up calls on the side of the marketing manager because the prospective clients could already give comment on the company website if they agree with the proposal or they could simply email without any hassles.

Big Picture Improvement

The analyst thought of a marketing system for the company wherein the existing system which is telemarketing would be changed into a web-based marketing system. Prospective clients, most especially those who are big time, are very busy and lack time to answer phone calls. That is why most of them tend to hire personnel that would answer phone calls for them such as in a call center agency. Thus, if telemarketing system would be pursued upon by the company, they would really have a hard time acquiring more clients. That is why the group decided to propose a system wherein telephone calls and extra efforts like going to the company to submit proposal would be eliminated. And this system would be a web-based marketing system wherein the company would do all their transactions in acquiring clients in the web. The ones recommended by the group could be the new options for the company's new system and through these; the company could now focus more on the key success factors that would in turn have a great impact for the company by letting it earn and gain more revenues. Big picture improvement as soon as this proposed system would be implemented is that the company would be known by big

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businesses in the Philippines not only because of their performance but because of their marketing system that's according to the trend nowadays. Not only that but the people themselves who have already tested their performance could speak for them through comments and blog posts in their website.

APPENDIX 2

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