

#### PHILIPPINE SCHOOL OF BUSINESS ADMINISTRATION

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# **BUSINESS RESEARCH JOURNAL**

Volume XIX June 2016



# **GRADUATE SCHOOL OF BUSINESS**

An Official Publication of the Philippine School of Business Administration, Manila

ISSN, No. 2449-3392

#### GRADUATE SCHOOL OF BUSINESS

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# **PSBA**

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# **Business Research Journal**

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### **The Editor-In-Chief's Perspective:**

## Human Motivated Hierarchy of Needs Level Assessment Calculator in Philippine Context

Tabassam Raza, Caparas Erwin A, Gutierrez Alma Rossana A, Lim, Frances Necitas T, Arzaga Rosario Corazon O, Aquino Lea A, Komutthaphong Suradet, Vazquez, Amalia Lyn, Villamin, Francisco Jr. H, Cabrera Rodrigo E, Guerrero, Georgia Katrina B, & Pascua Earlweena DC

#### 1. Introduction

Employees do their tasks on their own initiative or do them with the influence of others or through the direction of their superiors. Behavioural scientists use various theories about human needs as their springboard to determine the needs of individuals to find the best way of motivating them. It is assumed that it could be done by either satisfying their needs or withholding the satisfaction of those needs.

Abraham Maslow inferred that these needs are inherent in every individual but vary in intensity, depending on the circumstances. Generally, an individual progresses from one dominant need to the other, following a level of succession.

The Hierarchy of Human Needs is most often illustrated through a pyramid. The lowest levels of the pyramid are made up of the most basic needs. While the more complex needs are located at the top of the pyramid. Needs at the bottom of the pyramid are basic physical requirements including the need for food, water, sleep and

warmth. Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security.

As people progress up the pyramid, needs become increasingly psychological and social. Soon, the need for love, friendship, and intimacy become important. Further up the pyramid, the need for personal esteem and feelings of accomplishment take priority.

The theory outline five sets of human goals, which are referred to as basic needs: physiological, safety, love, esteem and self-actualization. Maslow suggested two additional sources of motivation which are desire to achieve or maintain the various conditions upon which these basic satisfactions rest and certain more intellectual desires.

#### 2. Statement of the Problem

There were substantial studies done by various researchers regarding the hierarchy of needs of an individual in the society. These studies suggest that Maslow's concept has been taken into consideration for a variety of business and other social science fields. Specifically, it has been used in the areas of psychology, marketing and management. However, there is still a need to operationalize its definition, in measuring or assessing the progress of an individual or the organization. Hence, this research aims to answer the following questions:

- 2.1 What are the significant attributes/indicators for satisfying each of the five levels of the Maslow's hierarchy of needs?
- 2.2 Is there a relationship between age and individual's progress in the said hierarchy of needs?
- 2.3 What is the extent of achievement to which an individual can realize his/her level of satisfaction?
- 2.4 What appropriate calculator should be developed to determine well-being on the basis of human motivation hierarchy of needs?
- 2.5 What is the operational definition of the wellbeing.?

#### 3. Objectives

Below are the statements of objectives which will be used as a tool for aiming certain purposes that will be vital for the study:

- 3.1 To identify the significant attributes/indicators which influence the five levels of Maslow's hierarchy of needs;
- 3.2 To identify progress threshold (age class) pertinent to each hierarchy level;
- 3.3 To perceive in what extent an individual can reach the level of satisfaction:
- 3.4 To identify the problems encountered in assessing the human motivation hierarchy of needs;
- 3.5 To develop a calculator for level of needs assessment:
- 3.6 To give the operational definition of the human motivated hierarchy of needs.

### 4. Significance of the Study

This study shows the relationship of age to income based on educational attainment, house ownership, car ownership and insurance coverage for each level of hierarchy needs as shown in the enhanced Maslow's Hierarchy of Needs. This study is essential for revealing all the details of the attributes that is accompanied by Maslow's Hierarchy of Needs. The overview of Maslow's Hierarchy of Needs; its significance towards knowing the extent an individual can reach the level of satisfaction, the result of attributes or indicators that influence the five levels of Maslow's Hierarchy of Needs, and the problems encountered in assessing the Human Motivation Hierarchy of Needs are the key elements that are put into consideration.

This study is beneficial for management practitioners who see motivation as an important function of management to understand and get the best from the people by meeting their needs and responding to their aspirations. Each detail will be highlighted providing concrete information as to the attributes that can influence the five levels of the hierarchy.

This study is exceptionally vital in today's business environment because of the different factors that contribute to the satisfaction of an employee.

The benefits that will occur with this study are presentations of relevant information on the key attributes that influence Maslow's Hierarchy of Needs. The study

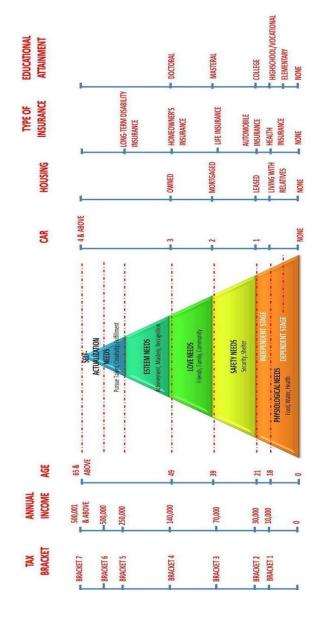


Figure Conceptual Framework based on Philippines' existing tax brackets and life expectancy modified after Maslow's Hierarchy of Needs.

provides necessary details to visualize the problems encountered in assessing the Motivation Theory thoroughly and the extent an individual can reach the level of satisfaction.

#### 5. Scope and Limitations of the Study

The study focuses on Maslow's Hierarchy of Needs; the key attributes or indicators that influence the five levels.

The study will only gather information about key attributes that influence the five levels of Maslow's study. Details will be shown to provide extensive information to realize questions that are needed to be answered. The scope is limited to the individuals residing in National Capital Region (NCR).

### 6. Conceptual Framework

The conceptual framework developed by the proponents is based on the age class bracket of 0-17, 18-20, 21-38, 39-48, 49-65 and 66 and above, corresponding to individual annual income based on the Bureau of Internal Revenue Taxable income brackets 1 to 7 from 0-10,000.00, 10,001.00-30,000.00, 30,001.00-70,000.00, 70,001.00-140,000.00, 140,001.00 – 250,000.00, 250,001.00 – 500,000.00 and 500,001.00 and above respectively as shown in table 6.1.

Amount of Net Taxable Income		Rate	
Over	But not over		
	P10,000	5%	
P10,000	P30,000	P500 + 10% of the Excess over P10,000	
P30,000	P70,000	P2,500 + 15% of the Excess over P30,000	
P70,000	P140,000	P8,500 + 20% of the Excess over P70,000	
P140,000	P250,000	P22,500 + 25% of the Excess over P140,000	
P250,000	P500,000	P50,000 + 30% of the Excess over P250,000	
P500,000	9	P125,000 + 32% of the Excess over P500,000 in 2000 and onwards	

source: bir.gov.ph

Table 6.1 BIR Tax Bracket showing amount of net taxable income

The individual standard progress will determine the relationship of age to income based on educational attainment, house ownership, car ownership and insurance coverage for each hierarchy level needs as shown in the enhanced Maslow's Hierarchy of Needs (Figure 1). With this framework, visible and invisible function under the concept of relevance must be connected with level assessment calculator and age class.

The Human Needs Theory was adopted (Maslow's Motivation and Personality, 1970) and refocused on the demographics such as age class and income. This study aims to determine whether individual or organizations can assess their progress in each level of the hierarchy of needs and to what extent an individual can reach the level of satisfaction

The processes involved were conducting surveys, subjecting gathered data to statistical testing, interview, and critical evaluation. The five levels of Maslow's Hierarchy of Needs marked with calculated age class, BIR annual income bracket, educational attainment, house – car ownership and insurance coverage. The expected outputs were well-defined level assessment calculator that would determine the appropriate and significant age class for each hierarchy of needs and identify the transition from one level need to another.

The result of the research will define, measure and identify the main determinant influence and the problems encountered in assessing the human motivation hierarchy of needs in the five levels of Maslow's hierarchy, progress threshold (age class) pertinent to each level need, perceived extent an individual can reach the level of satisfaction to develop a calculator for level of needs assessment and to give the operational definition of the human motivated hierarchy of needs.

The significant attributes /indicators of satisfying each of the five levels of Maslow's Hierarchy of Needs, the level progress assessment would be operationalized to measure individual or organizations progress and the significant relationship between age class and the individual or organizational progress in the hierarchy of needs.

#### 7. Review of Related Literature

Motivation is defined as the process that initiates, guides and maintains goal-oriented behaviour. It involves

the biological, emotional, social, and cognitive forces that activate behaviour. Motivation is what causes us to act, whether it is getting a glass of water to reduce thirst or reading a book to gain knowledge. (Ozguner, 2011)

Motivation is a general term which may be applied to an entire class of drives, decisions, needs and wishes and similar forces. Managers motivate their employees to do things that they hope will satisfy their drives and desires and induce the subordinates to act in a desired manner. Motivation results from a person's attitudes reacting to a specific situation. It is the strength of the drive toward an action. A manager's job is to identify employees' drives and needs and to channel their behavior, to motivate them toward task performance. (Zulueta, 1999)

Abraham Maslow established theory personality that has influenced a number of different fields, involving education. This wide influence is due in part to the high level of practicality of Maslow's theory. This theory precisely describes many realities of personal experiences. Many people discover they can understand what Maslow says. They can recognize some features of their experience or behaviour which is true and identifiable but which they have never put into words. Maslow is a humanistic psychologist. Humanists do not believe that human beings are pushed and pulled by mechanical forces, either of stimuli and reinforcements (behaviourism) or of unconscious instinctual impulses (psychoanalysis). Humanists focus upon capabilities and potentials. They trust that humans make every effort for an upper level of capabilities. Humans search for the frontiers of creativity, the highest reaches of consciousness and wisdom. This has

been labelled "fully functioning person," "healthy personality," or as Maslow calls this level, "self-actualizing person." (Janet A. Simons, 1987)

Maslow studied exemplary people such as Albert Einstein, Jane Addams, Eleanor Roosevelt, and Frederick Douglas instead of mentally ill or neurotic people. This was a radical departure from two of the chief schools of psychology of his day: Freud and B.F. Skinner. Freud saw little difference between the motivations of humans and animals. We are supposedly rational beings; however, we do not act that way. Such pessimism, Maslow believed, was the result of Freud's study of mentally ill people. "The study of crippled, stunted, immature, and unhealthy specimens yield only a cripple psychology and a cripple philosophy" (Motivation and Personality). Skinner, on the other hand, studied how pigeons and white rats learn. His motivational models were based on simple rewards such as food, water, shelter, love and avoidance of pain. Say "sit" to your dog and give the dog a treat when it sits, and-after several repetitions – the dog will sit when you command it to do so. Maslow thought that psychologists should instead study the playfulness, affection, etc., of animals. He also believed that Skinner discounted things that make humans different from each other. Instead, Skinner relied on statistical descriptions of people. (Norwood, 1996)

The positivity of Maslow's Hierarchy of needs was an alternative to the depressing determinism of Freud and Skinner. Maslow felt that people are basically trustworthy, self-protecting, and self-governing. He further believed that humans tend toward growth and love. Although there is a continuous cycle of human wars, murder, deceit, etc., he

believed that violence is not what human nature is meant to be like. Violence and other evils occur when human needs are thwarted. In other words, people who are deprived of lower needs such as safety may defend themselves by violent means. He did not believe that humans are violent because they enjoy violence. Or that they lie, cheat, and steal because they enjoy doing them. (Norwood, 1996)

Maslow has arranged a hierarchy of five levels of basic needs. Beyond these needs, higher levels of needs exist. These include needs for understanding, aesthetic appreciation and purely spiritual needs. (Holliday, 2011) In the levels of the five basic needs, the person does not feel the second need until the demands of the first have been satisfied or the third until the second has been satisfied, and so on. Maslow's basic needs are as follows:

#### 7.1 Physiological Needs

These are biological needs. They comprise of needs for oxygen, food, water, and a relatively constant body temperature. They are the strongest needs because if a person were deprived of all needs, the physiological ones would come first in the person's search for satisfaction. (Janet A. Simons, 1987)

Employees will be indifferent to the long-term vision of a company when they are more concerned about providing basic necessities for their family. Though it has been noted that recognition is generally considered by employees to be more important than the amount of money earned, this is true only when the employee is living a reasonably comfortable lifestyle. For this reason, managers

must consider the ramifications of hiring an individual at low or minimum wages. Though it is considered acceptable by society to hire at such wages for unskilled positions, paying a little more will likely be a good long-term investment. Once an employee's immediate living needs are taken care of, he or she is likely to begin thinking about safety and security needs. (Holliday, 2011)

Human needs, such as the physiological requirements for food, clothing, shelter, water and air, are the basic aspects for human survival. These needs vary in intensity and the motivation involves a chain reaction. Felt needs give rise to wants or goals sought, which cause tensions, if desires are not fulfilled. These eventually give rise to action towards achieving goals which ultimately result in satisfaction.

#### 7.2 Safety Needs

When all physiological needs are fulfilled and are no longer controlling thoughts and behaviours, the needs for security can become active. Adults have little awareness of their security needs except in times of emergency or periods of disorganization in the social structure (such as widespread rioting). Children often display the signs of insecurity and the need to be safe. (Janet A. Simons, 1987)

Having fulfilled the need for basic necessities, the employee will want to make sure that those necessities will continue to be fulfilled. The employee desires the feeling that his or her job will continue to exist into the future. Even though no company can guarantee what the future holds, if the employee feels concern from management, and

knows that assistance will be provided even if layoffs do occur, the need for safety is likely to be fulfilled.

Emotional safety is also important. Management must ensure that the office environment is free from stressors such as sexual harassment, and managers should provide a safe means of allowing employees to express their needs and concerns whenever issues arise. When an employee feels safe, he or she will seek to become a contributing member of the community of employees. (Holliday, 2011)

Second level, when the first level needs have been adequately provided for, people would long for their continuity for a long time. It is observed that people construct their houses with strong and durable materials. Their offices are equipped with certain devices and means to protect employees from fire, accidents, pollution, thieves, and othe related problems. People open bank accounts and look forward to retirement benefits after serving the company. All these variables reflect people's concern for protection from possible harm and economic difficulty. (Zulueta, 1999)

### 7.3 Need of Love, Affection and Belongingness

When the needs for safety and for physiological well-being are satisfied, the next class of needs for love, affection and belongingness can emerge. Maslow states that people seek to overcome feelings of loneliness and alienation. This includes both giving and receiving love, affection and the sense of belonging. (Janet A. Simons, 1987)

Human beings are fundamentally and pervasively motivated by a sense of belongingness, having a strong desire to form and maintain enduring interpersonal attachments. People seek frequent, affectively positive interactions within the context of long-term, caring relationships. (Baumester and Leary,1995) The need to belong is often related to forming strong, stable and positive interpersonal relationship — mostly achieved through marriage.

There is a gap between men and women when it comes to marrying age. The median age for brides is 25.3 while 28.0 for grooms showing that women prefer to marry at an earlier age than men in the Philippines. The highest number of brides who got married was seen at age group 20-24, while for grooms it was in age group 25-29. According to Philippine law, individuals age 18-21 years old need to secure parental consent (from both parents with two witnesses), 21-25 years old individuals need to get parental advise (this may only be one parent with two witnesses), while those who are 26 years old and above need not get parental consent and parental advise but still need two witnesses. The purpose of the law regarding parental consent and parental advice is to guide young people about entering marriage. This law must be complied with in order to secure a marriage license. (NSCB, 2015)

Employees need to feel that they belong where they work. Managers can go a long way to fulfil this need by expressing pleasure whenever greeting the employee in the morning or when crossing paths with the employee throughout the day. Respect should also be shown for the employee as a human being. If an employee feels respected as a person, the manager can more freely criticize the employee (in a constructive way), without the risk of

causing the employee to withdraw from continuing to try to improve performance. (Hofstede, 1991)

Managers should be cautioned about forcing an employee to be more social. Many employees fulfill their social needs outside of the workplace and will feel resentment against participating in frivolous events against their will. The goal is not to make the office a place for social gathering, but to foster a sense of belonging and teamwork wherein the employee feels valued. Once the employee feels valued, he or she will seek to grow in competence and self-esteem. (Holliday, 2011)

The third level refers to a set of needs that impel people to seek from other people companionship, affiliation, camaraderie, and goal fellowship for them to feel that they belong and are a part of a group, accepted by others. (Zulueta, 1999)

#### 7.4 Need for Esteem

When the first three classes of needs are satisfied, the needs for esteem can become prevailing. These involve needs for both self-esteem and for the esteem a person gets from others. Humans have a need for a stable, firmly based, high level of self-respect, and respect from others. When these needs are satisfied, the person feels self-confident, self-assured, and appreciated as a person in the world. When these needs are unsatisfied, the person feels inferior, weak, helpless and worthless. (Janet A. Simons, 1987)

Note that all of the preceding levels are important to foster competent workers. An employee may come into the workplace with self-esteem, but this self-esteem will be difficult to maintain if the employee is concerned about paying bills, the stability of the job, and if co-workers are competing against or de-valuing the employee's work.

Employees need to have some feeling of control over what they do. This does not mean managers should give employees free reign, but that they should have some control over at least minor things. This may perhaps best be fostered by giving the employee parameters regarding performance expectations. The focus should be on results, allowing flexibility in means. Even if, due to the nature of the work, employees cannot be given much flexibility or individual creativity, the employees should feel that their ideas are heard and respected by management. (Holliday, 2011)

Recognition, both from management and from coworkers, provides external reinforcement for an individual's developing competence and self-esteem. Once an employee begins to feel good about him or herself, that employee will want to continue to grow.

Fourth level, there is a need for a person to be recognized as having valued skills, characteristics and achievement. A worker feels that whatever his work is, his respect and dignity must always be upheld. His capabilities and aspirations as an individual must be recognized. The need encompasses the need for independence, self-confidence, self-worth and appreciation. (Zulueta, 1999)

#### 7.5 Need for Self-Actualization

When all of the preceding needs are satisfied, then and only then are the needs for self-actualization activated. Maslow describes self-actualization as a person's need to be and do that which the person was "born to do." "An artist must paint, a musician must make music, and a poet must write." When these needs are not satisfied a person feels signs of restlessness. The person feels being on edge, tense, lacking something, in short, restless. If a person is hungry, unsafe, not loved or accepted, or lacking self-esteem, it is very easy to know what the person is restless about. It is not always clear what a person wants when there is a need for self-actualization. (Janet A. Simons, 1987)

Though some jobs are more facilitative than others in producing fulfilment, if an employee has basic needs met, feels secure in his or her position, feels valued, feels competent, has a broad base of knowledge and experience, and organizes all of his or her talent into the work done, the employee can now feel that his or her work is something in which he or she can take pride of. Given the amount of time people spend working, the employee's self-concept and identity is intimately tied to the work he /she does. A person with all of the previous needs met now feels productive and useful, and feels that his or her work has meaning. (Holliday, 2011)

Once a person feels that he or she has achieved his or her potential, that person will begin to feel a need for a connection with something greater.

Even a person who is "self-actualized" may still feel that something is missing. The person may feel a longing for connection with the surrounding community, and for the environment in which we all live. The need for transcendence does not refer to leaving the "material world" behind, but rather refers to the transcendence of the sense that the individual is an isolated, lonely being.

A company can help to fulfil this need by allowing employees to participate in the long-range vision of the company. If an employee is in touch with the far-reaching impact of his or her work on the community, the work takes on a grander, more fulfilling meaning. Likewise, if the employee is aware of contributing to environmental pollution, the fulfilment of this need is likely to be stifled. Hence, investment in community, the environment, and charities is also an investment in employee productivity.

When an employee's work is imbued with grander meaning, he or she will be less likely to indulge in short-term unethical behaviour. The employee will also be internally motivated to keep doing good work, with continuous improvement.

The hierarchic theory is often represented as a pyramid, with the larger, lower levels representing the lower needs, and the upper point representing the need for self-actualization. Maslow believes that the only purpose that people would not move well in the direction of self-actualization is the limitations placed in their way by society. (Schwartz, 1987) He states that education is one of these limitations. He recommends ways education can switch from its usual person-stunting tactics to person-growing approaches. Maslow states that educators should respond to the potential an individual has for growing into a self-actualizing person of his/her own kind.

Ten points that educators should address to meet the need for self-actualized are listed:

- Teach people that life is precious, that there is joy to be experienced in life, and if people are open to seeing the good and joyous in all kinds of situations, it makes life worth living.
- Teach people to transcend their cultural conditioning and become world citizens.
- Teach people to be authentic, to be aware of their inner selves and to hear their inner-feeling voices.
- Help people discover their vocation in life, their calling, fate or destiny. This is especially focused on finding the right career and the right mate.
- Accept the person as he or she is and help the person learn his or her inner nature. From real knowledge of aptitudes and limitations we can learn what to build upon, and discover potentials that are available.
- Refresh consciousness, teaching the person to appreciate beauty and the other good things in nature and in living.
- See that the person's basic needs are satisfied. This includes safety, belongingness, and esteem needs.
- Teach people to transcend the trifling problems and grapple with the serious problems in life. These include the problems of injustice, of pain, suffering, and death.
- Teach people that controls are good, and complete abandon is bad. It takes control to improve the quality of life in all areas.
- Teach people to be good choosers. They must be given practice in making good choices.

Successful marketing influences a potential client to purchase the product or service you are selling. One of the most effective ways to accomplish this is to appeal directly to one or more of his basic needs. Many business students are taught to view Maslow's hierarchy of needs as a guideline against which to target marketing efforts, arguing that success depends on meeting one of Maslow's identified needs. Although other needs theories also have relevance. Maslow's needs hierarchy remains the foundation for many fruitful psychological approaches marketing. (Ozguner, 2011)

The fifth level, which is the need to realize one's full potentials as a person when satisfaction in accomplishing something is more important than what others may say about it. This is the point when it becomes a need when an individual craves to maximize and utilize all his/her natural endowments or potentials. This need is not present in ordinary people because there may only be a few who might have reached this level. (Zulueta, 1999)

This particular theory was advocated by Abraham Maslow, a clinical psychologist, and was considered the most widely referred to theory of motivation. This theory is based on two fundamental premises:

First, human beings are motivated by their own desire to satisfy certain needs: physiological, safety, belongingness, esteem and self-actualization. These needs create tensions to an individual and once satisfied, tension decreases. Once a need has been satisfied, it no longer becomes a motivator, until it becomes reactivated.

Second, the needs of individuals are universal. As the lower needs are satisfied, behavior is motivated to satisfy the next level of need. Behavior satisfaction must always start from the psysiological need before going to the next level of need. This motivation process continues until the self-actualization needs are fully satisfied. The mind and emotion will only function effectively through the satisfaction of the hierarchy of needs. (Arante, 2011)

# 7.6 Maslow's hierarchy of needs as a motivational theory for 21st-century workers

How does the hierarchic pyramid relate to today's diverse generational workforce?

During his initial research of motivation, Abraham Maslow's study did not involve a multigenerational workforce. It appears that no one motivational theory addresses a single generation, nor are the theories known to be specific to all generations. Today's leaders face challenges of effectively managing four generations in the workforce: Seniors, Baby Boomers, Generation X, and Generation Y. The workforce's moral values and structures achieved by seniors and Baby Boomers have deteriorated throughout the years, resulting in an emotional strain for current managers trying to maintain a current generational productive workforce. According to the latest World Health Organization (WHO) data published in April 2011 life expectancy in Philippines is: Male 66.4, female 72.5 and total life expectancy is 69.4 which give Philippines a World Life Expectancy ranking of 114. Motivational theories have been studied and researched to enhance management effectiveness. This study revisited Maslow's hierarchy of needs, as it applies to today's diverse generational workforce, to determine if there would be any significant changes. There is a growing need for resources that can be used to better understand and improve management effectiveness in addressing the generational differences in businesses and organizations. Successful management is never easy, and is further complicated by the multigenerational workplace. Therefore managers must be prepared to lead effectively and motivate individuals across all generations to increase and sustain high-level workplace performance. (Carter-Steward, 2009)

The minimum age for employment is 15 years old and below that age is not allowed. Persons of age 15 to 18 can be employed provided that they work in non-hazardous environments. As for overseas employment of Filipinos, foreign employers are not allowed to directly hire Philippine nationals except through board and entities authorized by the Secretary of Labor. Travel agencies also cannot transact or help in any transactions for the employment or placement of Filipino workers abroad. Once Filipinos have a job in a foreign country, they are required to remit or send a portion of their income to their families, dependents, and/or beneficiaries in the Philippines.

Minimum wage rates in the Philippines vary from region to region, with boards established for each region to monitor economic activity and adjust minimum wages based on growth rates, unemployment rates, and other factors. The normal hours of work of any employee shall not exceed eight (8) hours a day. All employees have the right to have a 24 consecutive hours of rest day after every

6 days of work. Employers are responsible for determining and scheduling the rest day of employees except only if the employee prefers a different day based on religious grounds. However, the employer may require an employee to work during his/her rest day in cases of emergencies, special circumstances at work in which employees are seriously needed, to prevent losses or damage to any goods or to the employer, and other cases that have reasonable grounds. The retirement age for an employee depends on the employment contract. Upon retirement, the retired employee should be given his/her benefits according to the agreement or contract between the employer and the employee. However, if there is no existing retirement plan or agreement for the employee, he/she may retire at the age of 60, given that he/she has served the employer for 5 years, and shall be given a retirement pay of at least half a month's salary for every year of service (6 months of work given is considered as 1 whole year for the retirement pay). (Robles, 1996)

While Maslow's hierarchy makes sense from an intuitive standpoint, there is little evidence to support its hierarchical aspect. In fact, there is evidence that reverses the order of needs specified by the model. For example, some cultures appear to place social needs before any others. Maslow's hierarchy also has difficulty explaining cases such as the "starving artist" in which a person neglects lower needs in pursuit of higher ones. Finally, there is little evidence to suggest that people are motivated to satisfy only one need level at a time, except in situations where there is a conflict between needs. (Raspa, 2006)

In general, through, the Hierarchy of needs theory is still important and relevant in today's business organizations, for every organization that seeks to obtain success and excellence, any attempt to shy away from practical application of the hierarchy of needs theory, will affect negatively the organizational culture, human resource management and the employee's performance. To achieve organizational excellence and create good atmosphere, better work environment and to achieve the target at the right time then a drive and application of the theory is paramount.

Understanding the strengths and weakness of Maslow's hierarchy of needs is important in the field of international business. Evaluating the different needs, values, drives and priorities of people from different countries - individualistic or collectivist - is incredibly valuable in cross-cultural communications, and especially within the workplace. It also illustrates how differences in values can greatly affect work atmosphere and work ethic between cultures. For example, societal cultures in many individualistic countries, such as the United States, may lead to an advantage in technological research and development. Many collectivistic societal cultures, such as that in Japan, may result in an advantage in workforce organization, quality control of products and service, and establishment of good relationships among contractors, suppliers and customers. (Kaur, 2013)

During the early days, in order to motivate people to attain greater heights of achievements, management offers money, in the form of contest prizes or bonuses. Money fills the psychological needs of employee. Salaries, instead of commissions, retirement plans and other fringe benefits have been offered to fill the security needs of employee. (Arante, 2011)

Holding sales meetings, conferences, and seminars, organizing exclusive achievement clubs, and a sincere concern about the employees satisfy the crave for belongingness and love. Esteem needs may be attained by promotion into a higher executive level or by recognition for superior work performance. (Arante, 2011)

#### 8. Methodology

The study used an Exploratory, Quantitative and Descriptive Type of Research. The main aim is to identify the boundaries of the environment in which the problems, opportunities, or situations of interest are likely to reside and to identify the salient factors or variables that might be found there and be of relevance to the research.

The objective of the study is to develop a calculator for level of needs assessment, the age class or individual standard progress for each hierarchy level and to perceive in what extent an individual can reach the level of satisfaction

The proponents used the exploratory type of research in order to identify the variables/indicators for each level in the hierarchy of needs. As cited by Wyk (2015), exploratory research is appropriate for projects in addressing the subject with a high level of uncertainty for research is usually characterized by high flexibility and less formal structure.

Furthermore, in order to determine the profile of the respondents in terms of age, income, personal, professional and financial achievements, the researchers used Descriptive Type of Research. Descriptive research is used to describe characteristics of a population or phenomenon being studied. The characteristics used to describe the situation of the population are usually some kind of categorical scheme also known as descriptive categories, thus, descriptive research is appropriate for the study as this will establish the characteristics of the respondents.

The research paradigm is presented in Figure 8.1. The proponents made a thorough research on the stages of Maslow's Hierarchy of Needs, the indicators for each stage, and legal bases for the establishment of age bracket for each stage. The researchers used MS Excel for the development of the system, the developed calculator were initially tested and were validated by the respondents.

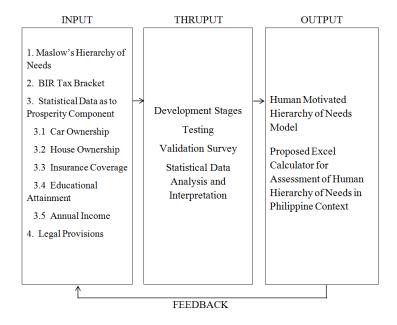


Figure 8.1 Research Paradigm

# 9. Data Collection & Analysis

To develop and calibrate the calculator, the proponents made a thorough research on the variables of each level of hierarchy of needs. It aims to establish the age class/group as a parameter for each level in order to develop a standard calculator that would determine the progress of an individual towards the hierarchy of needs. The program used in the development of the calculator is the Microsoft Excel, thus, it requires minimum specifications for the system and hardware requirements.

Constant testings were done to assure that every parameter used in accordance with the objectives of the

study and to determine the efficiency and effectiveness of the calculator for each individual circumstance / status.

The developed calculator was tested among the peers of the researchers, all comments and recommendations were noted and were integrated into the system. After the system testing and integration were completed, the researchers subjected calculator for validation. A survey-questionnaire was developed to determine the target respondents' age, socio-economic status.

Purposive sampling of the respondents was used in the study. Representatives from different age bracket were selected in order to test if the parameters used are applicable for different age groups and their economic status.

The data were tabulated, treated and analyzed. To be able to determine if there is a significant relationship between the respondents' age and progress, the researchers used regression analysis. The regression analysis provides information about the strength of the relationship between the dependent variable (age) and independent variable (progress).

Based on the survey result from 100 respondents, 43% of the respondents fall under age bracket of 21-38. Moreover 22% of the respondents are from age bracket 39-48, 15% of the respondents from age bracket 49-65, 9% of the respondents from age 66 and above, 10% of the respondents from age bracket 18-20 and 1% of the respondent from age range 0-17. (Figure 9.1)

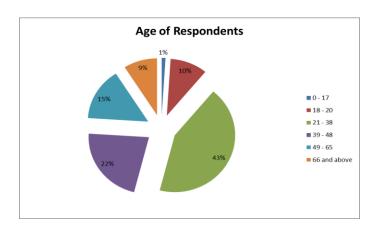


Figure 9.1 Graphic presentation of respondents by age

Based on annual income survey, 27% of the respondents are in Tax bracket 6 with annual income 250,001.00 – 500,000.00. Some 25% of the respondents are in the Tax bracket 5 and Tax bracket 7 with annual income between 140,001.00 – 250,000.00 and, 500,001.00 and above respectively. In addition, 10% of the respondents are in the Tax bracket 4 with income 70,001-140,000. Moreover, 6% of the respondents in the Tax bracket 3 and Tax bracket 1 with annual income between 30,001-70,000 and between 0-10,000. Only 1% of the respondents are in the Tax bracket 2 with annual income of 10,001-30,000. (Figure 9.2)

Figure 9.3 portrays the number of vehicle (Car). There are 55% of the respondents who do not have their own vehicles. However, 25% of the respondents have their own car at least one, 14% of the respondents have their own car of at least two, and 4% of the respondents have their own vehicle at least three.

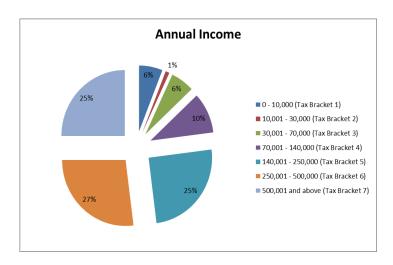


Figure 9.2 Graphic presentation of respondents by annual income

However, only 2% of the respondents have their own vehicle of four or more.

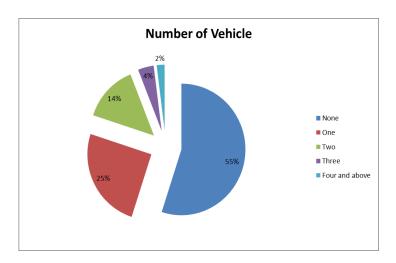


Figure 9.3 graphic presentation of respondents by vehicle owned

Figure 9.4 shows that there are 34% of the respondents who own a house, followed by living with parents, mortgaged and leased which is 28%, 21% and 13% of the respondents respectively. Only 4% of the respondents have no house ownership.

Figure number 9.5 illustrates that all respondents have their own insurance coverage's. From the study 36% of the respondents have the health insurance, 31% of the respondents have the life insurance. Follow with automobile, long-term disability insurance and homeowners insurance which is 17%, 9% and 7% of respondents respectively.

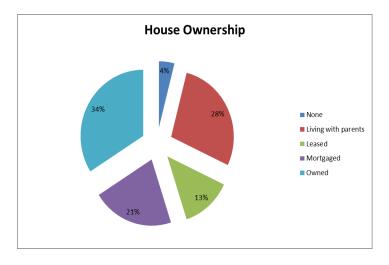


Figure 9.4 portrays graphic presentation of respondents by house ownership

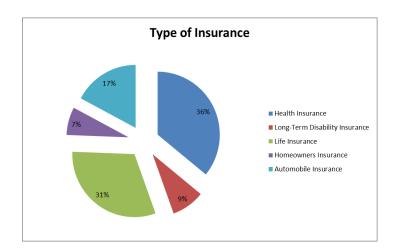


Figure 9.5 portrays graphic presentation of respondents by type of insurance

All respondents have attained education at least elementary at 1%. The highest education attained by the respondents is at bachelor's degree at 52%, next is master, s degree at 23%. Those with Doctoral degree and vocational graduates represents only 6% of the respondents (Figure 9.6)

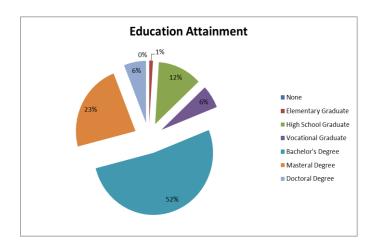


Figure 9.6 portrays graphic presentation of respondents by house ownership

#### 10. Conclusion and Recommendations

Examining the results of the survey made on the profile of 100 salaried employees currently employed in the National Capital Region (NCR), it can be seen that age and income are directly related to the achievement of individual's physiological, safety-related and social needs.

A great number of employees who are able to reach more years of work experience are able to satisfy the higher level of needs because of higher income received. The employees on the young age bracket are able to satisfy the lower-level needs.

It should be noted that the survey respondents were limited to 100 salaried employees at the National Capital

Region (NCR). Furthermore, the respondents were not distinguished whether they were in the private or public sector. Note that the locus of the survey was at the National Capital Region as opposed to provincial setting. For example, where the cost of living is generally lower, one may be able to buy a house and lot at a certain income level. The equivalent in Metro Manila may not be able to do or afford such convenience.

On their employment being public or private, this is an important distinction as well. Generally speaking, the private sector, given a certain set of qualification standards, pays more than its equivalent in the government, like in the case of teachers.

On the other hand, the public sector when you are a civil service eligible and occupying a plantilla position, offers more job security albeit with lower pay in comparison to an equivalent position in a private company. But the private company can collapse if business is not doing well because of unfavourable market conditions and one may end up jobless and out in the streets looking for a job.

For both, a higher educational attainment is always an advantage. Age is an important factor too. As one grows in years, all things being equal, his experience becomes more and more valuable and may lead to promotion which often carries a salary increase as well.

The Human Hierarchy of Needs Calculator while generally reliable, needs to introduce finer distinction as in this day and age, society and culture have become more complex than where Maslow first developed his formulation.

The study shows that young successful entrepreneur will have achieved much more early in his life than a distinguished accomplished bureaucrat nearing his retirement age. But then again, the former's reward comes in the form of financial security while the latter's comes thru public acclaim and recognition that may not necessarily translate to monetary returns. That doesn't mean the latter is less happy than the former

The study also showed that educational attainment of an employee together with age and income are determinant variables in the achievement of higher-level needs. As an individual progresses in his/her educational attainment, his/her status as an employee increases and economic rewards in the form of acquisition of house and car follows. He/She also becomes conscious of the importance of various types of insurance as he/she ages to cover more security for his/her loved ones. The new school espoused the idea that individuals are by nature unsatisfied and want to seek for more needs. Their desire to increase the extent on level of happiness is apparent from the survey results.

The quantitative research is based on the premise that the results tabulated can be put into a human motivated hierarchy of needs level assessment calculator that is a result of an exploratory research which will intensify the Abraham Maslow's Hierarchy of Needs in the Philippine setting covering the new millennium.

The developed Human Motivated Hierarchy of Needs Level of Assessment Calculator is a system of measuring the satisfaction level of an individual in the five hierarchy of needs level relative to age and income level.

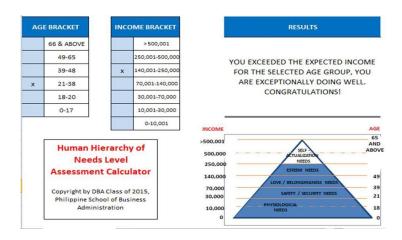


Figure 10. Interface of the Developed Human Motivated Hierarchy of Needs Level Assessment Calculator

In order for the study to be significant, the proponents suggest that a further research be undertaken to cover the correlations of other determinants in the fulfilment of the Maslow's hierarchy of needs. This will further show new findings which will be able to meet future researchers' needs.

#### 11. References:

- Zalenski, Robert J. &Raspa, Richard; Maslow's Hierarchy of Needs: A Framework for Achieving Human Potential in Hospice
- Loh, Dawn; Wrathall, Jeff & Schapper, Jan; The Maslow Revival: Maslow's Hierarchy of Needs as a Motivational Theory; Faculty of Business & Economics, Monash University
- Kaur, Avneet; Maslow's Need Hierarchy Theory: Applications & Criticisms; Jesus and Mary College, University of New Delhi
- Jerome, Nyameh: Application of Maslow's hierarchy of need theory; impacts and implications on organizational culture, human resource and employee's performance; Department of Economics, Taraba State University, Jaling, Nigeria
- Maslow's Needs Hierarchy as Framework for evaluating Hospitality House Guests (Journal of Pediatric Nursing, Volume 26, Issue 4, Aug. 2011), www.yahoo.com
- Wyk, Brian van., (2015) Research Design and Methods:
  Post Graduate Enrolment and Throughput. South
  Africa: University of Western Cape. Retrieved
  March 01, 2015.
  http://www.uwc.ac.za/Students/Postgraduate/Pages/
  default.aspx
- Internet Center for Management and Business Administration Inc. 2010. Maslow's Hierarchy of Needs. NetMBA Business Knowledge Center. Retrieved March 23, 2015. http://www.netmba.com/mgmt/ob/motivation/maslow/

- Maslow, A. (1968). Toward a psychology of being (2nd Ed.). Princeton, NJ: D. Van Nostrand Company, Inc.
- Maslow, A. (1970). Motivation and personality (2nd Ed.). New York: Harper & Row, Publishers, Inc.
- Moss, D. (1999). Humanistic and transpersonal psychology: A historical and biographical sourcebook. Westport, CT: Greenwood Press.
- National Statistics Coordination Board (NSCB)., 2015, Parental Advise or Parental Consent under Family Code, retrieve on December 15, 2015 from www.nscb.gov.ph
- Simmers, Louise. (1998). Diversified Health Occupations, 4th Edition. New York: Delmar Publishers.

#### **BUSINESS PLAN 1**

## **Proponents:**

Ang, Jester Marvin G. Dela Cruz, Lex Phil C. Inog, Mohammad Ramadhanie M.

#### Professor:

Antonio M. Lopez, MBA, DBA 2<sup>nd</sup> Semester AY 2015 - 2016

#### **EXECUTIVE SUMMARY**

Name of the Project: AUTOMED – Automated Drug Machine

## 1. Objective of the Project

The global healthcare industry is experiencing a massive shift driven by one major objective - to improve the quality of professional care being delivered. New entrants from outside the traditional business of healthcare are redefining the global healthcare market for consumers, providers, payers, and investors in both developed and developing nations. These "new entrants" are pioneering pathways into virtual healthcare, more affordable and convenient care options, wellness and fitness, and more.

In accordance with the World Health Organization (WHO) ranking of health systems in 2000, the Philippines ranked 60 among 190 countries globally. The WHO no

longer produces such a ranking table, because of the complexity of the task.

The Philippines, being able to surpass more than half of the countries in terms of healthcare services, has the chance to move forward and be with the leading countries.

The Philippine Healthcare System, nowadays, can still be considered to be of a good standard according to Allianz Worldwide Care. However, one major challenge it is facing is the high demand for medicines available in the market. Innovations in the health industry, specifically in pharmacy, should be done to target the growing population and demand of the Philippines. With little or large scale of innovative contributions, it may drastically impact the country's health state when these contributions are all combined. One innovation is with nonprescription medicine or also known as the over-the-counter (OTC) medicines which is defined, in the Philippines, under the New Republic Act No. 10918 of 2016, "AN ACT REGULATING AND MODERNIZING THE PRACTICE OF PHARMACY IN THE PHILIPPINES. REPEALING FOR THE PURPOSE REPUBLIC ACT NUMBERED FIVE THOUSAND NINE HUNDRED TWENTY-ONE (R.A. NO. 5921), OTHERWISE KNOWN AS THE PHARMACY LAW", as medicines used for symptomatic relief of minor ailments and which may be dispensed without a prescription.

According to Intelligent Vending Ltd. in United Kingdom, Vending machines are an excellent way to sell medicines and related products in day to day usage, for example, aspirin, paracetamol, ibuprofen, as well as

products for relief from indigestion and heartburn. These products are generally small and well packaged, so they can be delivered through a range of compact machines, such as those typically found in washrooms and toilets. The vending mechanism is straightforward and could be wholly mechanical, operated by battery, or connected to the mains. Such possibilities provide utmost flexibility in terms of location and space. Floor-standing vending machines could also be used if a full retail experience is required, and these could offer a much wider range of products vending at a higher price point.

Machines selling the above items, plus condoms, feminine hygiene products, and tights etc. are already a common feature in pubs, restaurants, clubs, cinemas, colleges, universities and offices in the Western market, but there are many possibilities to extend the product range beyond the common items. A range of basic first aid and related items e.g. plasters, antiseptic creams, nail files and scissors, eye drops, cold sore treatments could all be delivered this way, plus sun tan lotions and after sun cream etc.

Clearly, common sense needs to be used in the positioning of vending medicines of any description, especially to avoid access by young children. Location of machine is often the key to this, and it is best to site medicine vending machines, even those vending only OTC products (over the counter), where they can be subject to adult supervision if at all possible. This is not a problem in adult only settings, but it could be where children are frequent users of the facility. On busy sites, machines could be located close to normal check-out locations, offering the

multiple benefit of easy access, oversight, and a means of relieving staff when things are hectic.

# 2. Location of The Project

Six (6) Automated Drug Machines (ADM) are to be placed in different exits of LRT/MRT stations in Metro Manila for the initial launch to the Philippines.



Figure: Location Map of

### 3. Legal Structure

AUTOMED will be organized as a partnership of three entrepreneurs namely, Jester Marvin G. Ang, Lex Phil C. Dela Cruz and Mohammad Ramadhanie M. Inog, to be duly registered in the Securities and Exchange Commission

(SEC) and the Food and Drug Administration (FDA), in accordance with existing laws in the Philippines.

The business entities' product, Automated Drug Machine (ADM), will be engaged in the dispensing of branded packs of over-the-counter (OTC) medicines, including vitamins and supplements, first-aid products, medical devices and refreshment. The ADM's service entails informative medicine inquiry and procurement through its user-friendly "ATM"-like system for the customers. Prescription medicines are not being catered in the ADM due to Republic Act No. 9502, AN ACT PROVIDING FOR CHEAPER AND **OUALITY** MEDICINES, **AMENDING** FOR THE **PURPOSE** REPUBLIC ACT NO. 8293 OR THE INTELLECTUAL PROPERTY CODE, REPUBLIC ACT NO. 6675 OR THE GENERICS ACT OF 1988, AND REPUBLIC ACT NO. 5921 OR THE PHARMACY LAW, AND FOR OTHER PURPOSES, under Chapter 7: AMENDMENTS REPUBLIC **ACT** NO. 5921. AS AMENDED. OTHERWISE KNOWN AS THE PHARMACY LAW. Section 43 that connects with section 25 of Republic Act No. 5921, as amended, otherwise known as the Pharmacy Law, is hereby amended to read as follows:

"SEC. 25. Sale of medicine, pharmaceuticals, drugs and devices. - No medicine, pharmaceutical, or drug, except for those which are non-prescription or over-the-counter, of whatever nature and kind or device shall be compounded, dispensed, sold or resold, or otherwise be made available to the consuming public except through a prescription drugstore or hospital pharmacy, duly established in accordance with the provisions of this Act.

Non-prescription or over-the-counter drugs may be sold in their original packages, bottles, containers or in small quantities, not in their original containers to the consuming public through supermarkets, convenience stores and other retail establishments.

"Pharmaceutical, drug or biological manufacturing establishments, importers and wholesalers of drugs, medicines, or biologic products, shall not sell their products for re-sale except only to retail drug outlets, hospital pharmacies or to other drug wholesalers under the supervision of a registered pharmacist, and supermarkets, convenience stores, other retail establishments for overthe-counter drugs, duly licensed by the Bureau of Food and Drugs.

## 4. Brief Description Of The Project

**Vision**: We envision *AUTOMED* as a globally recognized brand of delivering automations in the pharmaceutical industry and as a market leader of providing quality medicines tailored to the needs of our valued clients.

*Mission:* To improve health services by integrating technological advancements in the pharmaceutical industry. To provide medical awareness, enhanced convenience and accessibility as well as quality medicines to our valued clients.

## **Customer Value Proposition**

People need medicines in their lives. They may come for them on a daily, weekly, monthly basis, or the usual necessity – as needed. Thus, it is crucial to extend the reach of medications for the people, especially in the Philippines due to lack of improvement in health deliverables unlike other first world countries.

For this business proposal, integrating medicines such as OTC drugs, medical devices, vitamins and supplements, first aid products as well as a refreshment in vending machines will make an impact in terms of geographical reach of medications in the Philippines. Delivering quality health and wellness should not be limited to drugstores or even convenience stores only. It is time for creativity and improvement; an innovation in pharmacy services.

# 5. Logo

The logo of AUTOMED focuses on pharmacy services and medicines. Thus, part of the logo is the traditional symbol of medicine, the caduceus with a feature of two snakes winding around a winged staff, inside a hexagon - representing a "6", which means initial implementation of AUTOMED starts with six inventions. As for this proposal, six (6) ADMs are for initial launchings



. The blue color of the hexagon as well as the "Automed" font symbolizes serenity in individual's life because renewed health medicines bring about peace to one's body due to being healthy. As for the orange color, it represents the ample amount of aggressiveness of AUTOMED to innovate on pharmacy deliverables, unlike a red color which indicates too much aggressiveness.

The tagline, "**Pharmacy services**", means innovative pharmacy services within every individual's reach. Hence, it is the objective of Automed to enhance pharmacy services through new ideas and technological creations

# 6. Product Capacity or Project Size/Scale

## **6.1 Business Prospects**

This business proposal is deemed viable because of the endless demand for medicines. Unlike prescription medicines, a customer may not procure the medicine unless he/she consults with a physician for his/her prescription. With over-the-counter (OTC) medicines, customers are all welcome to procure these from providers for their health and wellness.

Automated Drug Machine (ADM) is an excellent business venture innovation that caters to the health needs of the customers. Having an integrated user-friendly system that is found in Automated Teller Machines (ATMs) from banks, it gives the customer confidence and familiarity to use the ADM. In general, customers are most likely using the famous "ATMs" which are combined to a vending machine. Also, with the easy-to-follow digital counselling feature, queries and health concerns can be easily solved!

LRT and MRT stations specifically, on the exit side of the station, are the primary location for ADMs. Numerous passengers pass-by every day and as ADMs are displayed along their way, they could easily catch the passengers' attention. With readily available OTC medicines, they can procure their medical needs on a self-service learning basis and in a convenient way.

ADM's product is welcome to people who are 12 years old and above. Thus, the location of ADM is important to target the market's needs. Since ADM will be located at exits of LRT/MRT stations, the primary customers will be the commuters, it be employees, professionals or even students, Secondary customers will be any nearby individuals who need products and services of ADM.

The business, AUTOMED, with its first-to-offer product in the Philippines, the Automated Drug Machine (ADM), is committed to provide 24/7 availability,

convenience, self-learning opportunity and an extended accessibility of OTC medicines to the market's reach through its quality pharmacy services.

#### 7. Products and Services

#### 7.1 Product

PRODUCTS	PACKAGE	CLASSIFICATION
Advil Softgel	10	OTC Drug
Alaxan FR (Fast Relief) Capsules	10	OTC Drug
Allerta Tablets	4	OTC Drug
Ascof Forte Tablets	10	OTC Drug
Bioflu Tablets	5	OTC Drug
Biogesic Tablets	10	OTC Drug
Bonamine Chewable Tablets	10	OTC Drug
Buscopan Tablets	4	OTC Drug
Claritin Reditabs	4	OTC Drug
Decolgen No-Drowse Tablets	4	OTC Drug
Dequadin Lozenges	10	OTC Drug
Diatabs Capsules	4	OTC Drug
Dolfenal Tablets	10	OTC Drug
Dulcolax Tablets	4	OTC Drug
Flanax Tablets	5	OTC Drug
Gaviscon Chewable Tablets	8	OTC Drug
Kremil-S Tablets	4	OTC Drug
Medicol Advance Tablets	5	OTC Drug
Neozep Forte Tablets	4	OTC Drug
Robitussin Liquigel Capsules	10	OTC Drug
Salonpas (10 patches)	1	OTC Drug
Saridon Triple Action Tablets	4	OTC Drug
Skelan Tablets	4	OTC Drug
Solmux Capsules	4	OTC Drug
Strepsils Lozenges	8	OTC Drug
Tuseran Forte Capsules	4	OTC Drug
Calciumade Tablets	12	Vitamins
Enervon Tablet	4	Vitamins
Enervon Activ Softgel Capsules	8	Vitamins
Fern-C Capsules	10	Vitamins
Hemarate Tablets	10	Vitamins
Myra-E Softgel	8	Vitamins
Neurogen-E Tablets	8	Vitamins
Revicon Forte Tablets	4	Vitamins
Robust Tablets	2	Vitamins
Stresstabs Tablets	8	Vitamins
Blue Cross Pregnancy Test Strip	4	Other Products
Bottled Water	4	Other Products
Mediplast Standard (10 Strips)	4	Other Products
Trust Condom	4	Other Products

#### 7.2 Services

What is primarily involved in Automed provided service is the use of its own Automated Drug Machine that serves as the dispensing machine for OTC medicines and other medical products.

Below is the layout of AMD gadget that is designed to provide user-friendly features tailored to the valued customer needs.



#### 7.3 Features

Figure 7.2 shows the three dimensional perspective of the Combined feature of a vending machine and an automated teller machine (ATM) with the following features:



- Contains readily available products that are displayed in the ADM.
- Carries branded over-the-counter (OTC) medicines supplied by top brand drug manufacturers or distributors.
- Contains manufacturer's repackaged OTC medicines to include only necessary number of medicines in a package per treatment duration (e.g. usual package of a certain tablet is by 10's in a

blister pack. Repackaged medicines make it only 4, which may indicate the right amount of tablets needed to administer for the course of the treatment.) Please see sample pictures below:



- Carries vitamins and supplements which are also supplied by top drug manufacturers, medical devices such as condoms and pregnancy tests, firstaid products such as bandages and bottled water for convenience of administering OTC medicines as well as a refreshment for the valued clients of AUTOMED.
- Language option Before communicating with ADM, customers are asked to choose which language they would prefer. It is either English or Taglish as shown below:.



• Inquiry – assists customers on what medicine to buy by asking them symptoms and match it with the database to give them various choices of OTC medicines. This is optional, as customers may decline to be counseled if they know what medicine/s to buy as shown below:.



- Cash inlet automated cash acceptor for paper bills.
- **Printable receipts** contain summarized **drug information** (**DI**) of medicines purchased. The receipts with drug information feature explains the following:
  - Name of Branded OTC drug with package number and manufacturer – name of the medicine purchased.
  - Dosage form physical appearance of the medicine purchased. It may be as tablets (chewable or not), capsules, softgels or lozenges.
  - Generic Name with dose strengths gives knowledge on the composition of the medicine as well as its strength (e.g. milligrams mg, micrograms mcg, international units IU)

- Drug Indication answers the question, "This medicine is for what?" (i.e. for headaches, stomach pain, reducing fever, etc.)
- Dosage answers the question, "How often do I need to take this medicine?" (e.g. 1 tablet every 4 hours)
- Receipt information such as the cost of the medicine, cash used, change etc.
- Mini Monitor displays different TV advertisements, commercials specifically for branded over-the-counter medicines and medical devices such as Biogesic, Bioflu, Neozep, Gaviscon, Enervon, Advil, trust condom and many other products of ADM.
- CCTV Camera provided for protection to ADM and its customers for theft, robbery, and other unexpected incidents. Information Technology specialist are the ones who will monitor the surveillance of the ADM

#### 8. Product Process

Figure 8.1 shows the product process from supplier to the end-user consumption.



Figure 8.1 Shows product process from supplier to customer

### 9. Market Feasibility

# 9.1 Target Market -

AUTOMED's ADM is strategically based on positioning to the market. Thus, the primary target customers will be passengers of LRT 1, LRT 2 and MRT 3 stations at the exit of the station. These target customers are most likely to be employees/professionals/adults or even students who are 12 years old and above. The secondary target customers will be individuals near the LRT/MRT stations. These can be any individuals: employees in nearby establishments, people living near the stations, passers-by and any other individuals who need OTC medications or other health products.

# 9.2 Market Segmentation

## **Demographic**

Age: 12 years old and above

Sex: Any

Education: Attained, at least, elementary education

Occupation: Any Civil Status: Any

Income Level: Low Income (but not poor), lower middle income, middle class, upper middle income upper income (but not rich) and the rich class.

## Geographic

After conducting a market survey from 100 random respondents of employees/professionals/adults and students in Metro Manila (age ranges from 14 to 69 years old; 23% are students and the remaining 77% are employees/professionals/adults; 54% are Male and 46% are female respondents), in Metro Manila. Results showed that exits of LRT/MRT stations are the most favourable location tor ADMs to operate.

With the data gathered from the Department of Transportation and Communications (DOTC), the most number of daily passengers in exits of LRT/MRT stations were determined. Thus, the management of Automed decided to place six (6) ADMs for the initial start-up of the business to those crowded LRT/MRT stations such as the following stations:

LRT 1 – EDSA Station
61,460 exit passengers daily
LRT 1 – Monumento Station
55,244 exit passengers daily

LRT 2 – Recto Station
43,169 exit passengers daily

MRT 3 – North Ave. Station 51,198 exit passengers daily

MRT 3 – Araneta Station 60,291 exit passengers daily

MRT 3 – Taft Station
72,701 exit passengers daily
Total = 344,063 exit passengers daily

(Source: 2014 Statistics from DOTC)

### 10. Financial Feasibility

AUTOMED will be formed as partnership between three (3) people, therefore, funds of the business will be sourced equally through the investments of each partner, Ph. Pesos 5,000,000.00 each specifically. All capital expenditures of the business will be acquired and purchased from sole equity funds to avoid unnecessary costs from external financing.

Moreover, working capital requirements comparable to twelve months must also be available and funded from equity as well. These includes operational expenses related to salaries and wages of all employees, rental payments for leased properties, utilities, and other operational expenses.

The business will be solely under the main ownership and control of the proponents. Thus, it will not offer participation from private individuals, investors, and institutions to be part investors. Until such time, that the management will see the firm's readiness and eagerness to expand its investor relationships beyond the three pillars of partnership.

# 10.1 Initial Capital Requirement

Listed below is the schedule of the initial start-up cost of the business:

Initial Investment	
Partner 1	5,000,000.00
Partner 2	5,000,000.00
Partner 3	5,000,000.00
Total Initial Investment	15,000,000.00
Allocated to the following:	
Purchase of Vendo Machines	2,400,000.00
Installation of Software for Vendo	500,000.00
Office Rent Security Deposit	200,000.00
Vendo Machine Rent Security Deposit	600,000.00
Leasehold Improvement	700,000.00
Furniture and Fixture	372,891.24
Vehicle	766,000.00
Initial Inventory	4,151,250.00
Taxes and Licenses	100,000.00
Total Investment	9,790,141.24
Remaining Cash	5,209,858.76

#### 11. Environmental Soundness

The business of Automed is not only profit-oriented but also promotes environmental welfare. Hence, Automed ensures that the production process of the business will not harm the environment in any way. From proper disposal of defective machines, waste management, and segregation procedures, all of these will be strictly implemented.

## 12. Social Acceptability Employee

As to the proposed business, AUTOMED opens job opportunities for several people. Furthermore, it will greatly help each employee to receive competitive salary, learning opportunities, and benefit packages which can alleviate poverty and improve the lives of its employees.

### **Economy**

As long as the business is going on it helps the economy by strengthening the buying power of people that will eventually result to circulation of money and goods resulting further to economic growth.

#### Government

For the government, Automed ensures proper compliance with the regulations, policies and laws set by the Government.

## Community

The business will help the community in many ways such as the following:

- a. Automed ensures that the price and cost of its distributed products are at the lowest cost.
- b. The CCTV attached to each ADM will serve as protection for each individual nearby the ADM, whether customers or passers-by.
- c. Automed will continuously participate in medical missions as its corporate social responsibility.
- d. The business of Automed will uplift the kind of living of families and individuals by offering them technology advancements in buying their OTC medicines within their reach.

#### 13. Reference

Republic Act No. 9502, An Act Providing For Cheaper And Quality Medicines, Amending for the Purpose Republic Act No. 8293 or the Intellectual Property Code, Republic Act No. 6675 the Generics Act Of 1988, Republic Act No. or Pharmacy Law, and for Other 5921 or the Purposes, Under Chapter 7: Amendments to Republic Act No. 5921, as Amended, otherwise Known as the Pharmacy Law, (2008), No. 1658 and House Bill No. 2844. Senate Bill Philippines. Retrieved on Republic of the August 2016 form:http://www.lawphil.net/statutes/repacts/ra2008 /ra 9502 2008.html

## INFORMATION TECHNOLOGY PROJECT PROPOSAL 1

#### **Proponents:**

Lex Phil Dela C. Cruz Jester Marvin G. Ang Dina B. De Ala

2<sup>nd</sup> Semester 2015-2016

**Professor:** 

Tabassam Raza

Project Title: Radio Frequency Identification (RFID) System, PSBA, Manila Employees

### 1. Introduction and Present Setup

Philippine School of Business Administration (PSBA), as an educational institution, relies its strength on the employees who are the main contributors to achieving quality academic services to its sole client, the students. As the innovation of technology makes an impact to countless establishments, it is inevitable not to remain stagnant on the management system of the school. In today's generation, the technology of management information systems had made a gargantuan impact to the world that continues to emerge and evolve day-by-day. One of those technology is the Radio Frequency Identification (RFID) system which changed the era of "traditional" processes to an innovative and efficient process for every organization. Thus, organizations yearn to rely and utilize the "automatic" and

innovative processes rather than the "manual; old-fashioned" way, and Philippine School of Business Administration (PSBA) is not an exception.

According to the article of Okorafor G. Nwaji, et. al., entitled, "Automatic Door Unit Radio Frequency Identification (RFID) Based Attendance System". documented in the International Journal of Science and Emerging Technologies, Radio-frequency identification (RFID) is a smart technology that uses radio waves to transfer data from an electronic tag, called RFID tag, attached to an object, through a reader for the purpose of identifying and tracking the object. One of several application areas of using an RFID system is for schools and universities. In the Philippines, some schools have already embedded RFID readers to their gates and provided IDs, with RFID tag attachment, to their students and employees which can be used to assist them on borrowing books at the library, buying items at the school shop or canteen and also, signing in and signing out for their attendance.

At present, one of the "traditional" processes being implemented in the school is the existing attendance system, which is the use of a bundy clock. As many are aware, this traditional "attendance system" uses attendance register to "punch" down the paper for date and time recording via the daily time record (DTR). It has less accuracy due to manual insertion of the attendance record. It is which also is time-consuming especially if there are long queuing, inconvenient since there is a possibility that a time card might get lost or tampered by others and also, the administrative person needs to maintain the attendance

records and must manually check each employee's login and logout time.

Currently, there are approximately 90 employees affiliated in PSBA-Manila, excluding employees who are connected with agencies. With usual school arrangements, they are also working from Mondays to Saturdays. Manual checking of attendance records is still being applied. Also, the school has only one main entrance where all employees and students enter.

## 2. Rationale and Significance

The absence of proper attendance monitoring system including integration of departmental functions inside the organization will clearly result to inefficiency and unproductivity of employees assigned to each functional task.

Thus, the proposed system will improve the employee attendance system by the use of the Radio Frequency Identification (RFID) technology which is one of the product of automation technology that is beneficial in improving current traditional way of attendance monitoring. It enables an RFID tag and an RFID reader to communicate without the need for one to physically touch or contact the other. As every tag has its own unique ID, it is easy to differentiate every tag holder. In addition, a Graphical User Interface (GUI) provides more efficient way to review the monitor. Thus, the integration of RFID technology and the GUI in a monitoring system will produce an automatic system which will give better performance and efficiency than the traditional method of employee attendance.

In this RFID system, each employee will have an RFID card which will also serve as his/her new employee ID. An RFID reader will be placed on the main entrance of PSBA. Whenever the employee enters the school ground, he/she has to take the RFID card near the RFID reader. Then the RFID reader will verify the RFID card number and the time at which the employee has logged in. And in the same manner while leaving, the employee has to show the card so the exit time will be recorded.

With the new and innovative attendance system in place, not just employees would be able to benefit from it but the management as well. It features more than the attendance system since it is a baseline of other functional tasks like performance evaluation, payroll computation, and other HR functions like leave management, shifting assignments, and task monitoring.

## 3. Project Requirement and Layout

# 3.1 Project Requirement

#### 3.2 Software

Item	Requirement	Specification	Estimated Cost in Phy
1	Time Tracker Software	(DBMS - backend) -Time-in and Time-out Recording (GUI - frontend) -Manual TITO Recording -Shift Assignments -Leaves Application Inquiry Approval -Monthly Timesheet Reports -Task Monitoring	Php90,000.00
		TOTAL	Php90,000.00

## 3.3 System Features:

- As a DBMS, it serves as a threshold of all recorded Time-in and Time-Out for each employee.
- As a Graphical User Interface (GUI), each employee will be given a log-in detail connected to his/her unique RFID Tag.
- Included features are manual overrides of time in/time out limited to lost proximity card, left proximity card at home, and unregistered timein and time-out due to system failure.
- Shift assignments which is customize for each employee depending on the schedule for the purpose of monitoring late time-ins and under times.
- Another feature is the consideration of leaves as to leave application, leave inquiry, and leave approval which each employee has a default leave approver.
- There is also a monthly timesheet report individually or departmentally which is very useful in the payroll computation for each employee.
- Task Monitoring is another feature which ensures that there is proper tracking of tasks and duties for each employee which can also be a basis in conducting performance evaluation.

## 3.4 Hardware

Item	Requirement	Specification	Quantity	Estima	ted Cost in Php
1	RFID Reader	Reader with LCD and Keypad	1	Php	92,000.00
2	RFID Tag	Passive RFID Tag	Approx. 90 1 @ Php 15.00 (90)	Php	1,350.00
3	Host Computer	At least, DUAL CORE with 2GB DDR3 and 500G of HDD	1	Php	50,000.00
4	Cables and Connectors	-	Varies	Php	2,000.00
	TOTAL			Php	145,350.00

Source: http://ibms-tech.com

# • Proposed technical staff for the installation, training and simulation

Personnel	Function	No. of Staff	Compensation
1	Assigned IT	1	Php25,000.00
		TOTAL	Php25,000.00

# • Summary of Estimated Financial Requirements

Item	Item	<b>Estimated Cost</b>
1	Hardware	Php145,350.00
2	Software	Php90,000.00
3	Technical Staff	Php25,000.00
	TOTAL	Php260,350.00

# 4. Proposed Layout

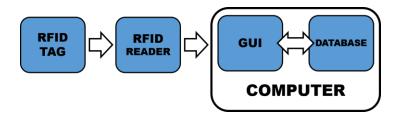


Figure 4.1 Block Diagram of RFID Attendance System

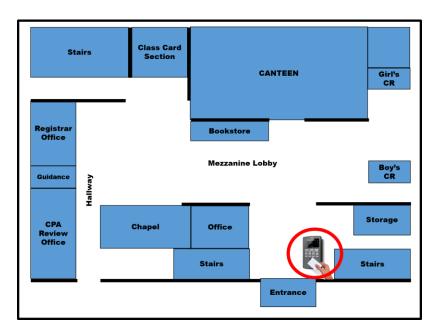


Figure 4.2 Proposed Layout - Place of Implementation

#### 5. Plan to Recover the Cost

Without the proposed system, the school needs to purchase time cards, ink for the bundy clock and only one (1) accounting staff could lead to payroll mismatches or even errors. Since advancements and innovations will be instigated to the school for the benefit of management enhancement and employee convenience and efficacy, so the students should be able to benefit too from this. The ID of the students are also to be improved with RFID system functionality but for identification purposes only. As insertion of IDs to the entrance makes it a hassle for some students and even employees. Innovations will be made through the implementation of this proposal which is to make it more convenient and time-saving. Additional cost of the IDs would be the recovering factor of the proposal.

Proposed Set-up (with RFID enhancement)		
Original Cost of ID Php250.00		
Additional Cost (RFID system)	Php100.00	
Estimated number of students	Php1,500.00	
TOTAL INCOME	Php525,000.00	
TOTAL INCOME of Proposed Set-up	Php525,000.00	
TOTAL Expense of RFID Proposal	Php260,350.00	
TOTAL PROFIT*	Php264,650.00	

<sup>\*</sup>Part of the total profit may be used to enhance the student IDs with RFID technology including raw materials and upgrade of host computer connected to RFID System.

# 6. Social Responsibility

Having this kind of technological proposal, it has counterpart environmental effects like any other technology products that exist today. With that, this proposal take responsibility on the proper waste management of RFID Tags as it is a potential environmentally hazardous waste. It contains silicon, adhesive, and nickel which contaminants to the environment. The proposal ensures that proper waste management will always take place whenever there is a defective RFID Tag and unused tags to deliver it directly to manufacturers and recyclers of this kind of product. This proposal also includes the elimination of paper usage in the current attendance system used by the school. It aims to help the environment lessen the use of paper.

#### 7. References:

- PSBA Employees Graduate School Office, Accounting Department and Guidance Office.
- Nwaji, O.G., 2012. Radio Frequency Identification (RFID)

  Based Attendance System With Automatic Door

  Unit. Academic Research International, 2, 16.
- Microtronics Technologies. 2013. *RFid Based Attendance Management System*. [ONLINE] Available at: "http://www.projectsof8051.com/rfid-based-attendance-management-system". [Accessed 25 May 2016].

IBMS Technology. [ONLINE] Available at: "http://ibms-tech.com/#/home".

[Accessed 24 May 2016]. Pointwest. [ONLINE] Available at: "http://pointwest.com.ph/". [Accessed 24 May 2016].

## INFORMATION TECHNOLOGY PROJECT PROPOSAL 2

#### **Proponents:**

Paul Simon A. Francisco Bj Francis I. Tiamzon Melody Q. Co

**Summer 2016** 

#### **Professor:**

Tabassam Raza

**Project Title: AFPMBAI Records Section Digitalization** 

## 1. Introduction and Company Background

AFPMBAI an insurance arm of the AFP, PNP, BFP, BJMP, and PCG, was authorized to engage in the business of life insurance. It started by offering a Basic Insurance of P3,000 exclusively for members which due to a series of upgrading, is now P35,700 to P85,600 depending on the rank of the member. Later, the Association expanded its services with the introduction of additional insurance coverage like the Whole Life, 20-Pay life and 10, 15, 20-year Endowment plans, Anticipated 20-year Endowment plan, and Special Whole Life plan.

To date there are various competitive insurance coverage being offered by the Association including Endowment at Age 56, College Educational Plan, and Easy Pay Plan. Its membership has broadened by including the

dependents of regular members, the civilian or nonuniformed personnel of the AFP, PNP, BFP, BJMP, PCG, and those persons performing activities related to national security and preservation of peace and order.

AFPMBAI serves its members nationwide through its numerous Regional Areas/Offices and Extension offices. To date it has remained the Number 1 mutual benefit association in the Philippines in terms of assets and legal policy reserves. It also earned a respectable position among the top 10 domestic life insurance companies as it ranks 6th in terms of assets, 4th in legal reserves, based on CY 2005 Report of the Insurance Commission.

### 2. Present Set-up

The records section's responsibility is to collect, disseminate and preserve the transaction records of the company (AFPMBAI) in manual set-up. The records section is also responsible for the safekeeping, conservation and maintenance of the documents of each department of the company. Currently, due to voluminous records in hardcopy form, the company needs to rent a 2 storey building for its safekeeping.

With regard to manning, there are 15 employees in the records section of the company. Three of them are going to retire this year. Seven of them are regular employees and the rest are contractual employees.

Management Information System and Database Management are two major responses that AFPMBAI should take on to the call of initiatives to the growing use and adaptability of information technology to data keeping-related activities. However, due to the enhancement of the company's database, the digitization of the records sections was less prioritized.

## 3. Rationale and Significance

The issue of digitization has become important due to the advancement of information system and its application in all phases of life. AFPMBAI records section needs to adapt to the emerging scenario and take full advantage of this technology. One of the major activities listed is the digitization, and management of the data.

The effects of the absence of the database management directly results in inefficiency of the present system and the non-preservation of the archival documents where the wealth and treasure of such company lies upon.

Thus, the proposed management information system can be the best solution that AFPMBAI could consider to have a systematic digital records section where the three principal advantages over conventional ones are:

- 1. Digital accessibility
- 2. Powerful searching and browsing facilities that would serve the association for new value added services in context where collections that are rare and unique considering the kind of the documents AFMBAI have.
- 3. Cost reduction in paper and storage

# 4. Project Requirement and Lay-out 4.1 Software and Hardware

Item	Description	Amount in	n
		Pesos	
8 unit	COMPUTER DESKTOP, ACER M4630G i7,	P 464,000.00	
	1TB		
	Hashwell 4th Generation; Chipset: Intel B85		
	Express Chipset; Processor: Intel Core i7-4770		
	3.4 GHz 6mb Cache, 8;		
	Memory: 12 GB DDR3; Videocard: 4GB;		
	Operating System: Win8.1		
	Professional 64 bit OEM; Hard Drive: 2 TB HDD;		
	Expansion Slot: (1) PCI Express 3.0 16 slot		
	(1) PCI Express 2.0 1 slot, (1) PCI v2.3 (5 volt)		
	slot; Peripherals Interfaces (2) USB 2.0 port		
	Headphone & Microphone Jacks w/ printer port		
	cable;		
	PS/2 keyboard and mouse ports;		
	(3) Audio Ports; (1) VGA Connector; DVI-D		
	port;		
	(2) display port; (4) USB 2.0 ports; (2) USB 3.0		
	port;		
	RJ-45 port; Optical Drive: 16x Super Multi		
	DVD; Audio: HD Audio: Card Reader: Multi in 1 Card		
	Reader:		
	Networking: Gigabit Ethernet, 10/100/1000;		
	Speaker: Internal Speaker;		
2 unit	Dimension: 1815W x 451.3D x 376.9H mm;	P 388,000.00	
2 umt	Power Supply: 300W; Floppy Disk Drive: N/A	1 300,000.00	
	System Compliance: PC 2001, Energy Star 5.0		
	DMTF; Certification: FCC, CE, MET, NEMKO		
	(CB & GS)		
	MONITOR: 24" LED (ACER)		
	The contract of the contract o		
4 unit	SCANNER, DOCUMENT; PANASONIC KV-	P 20,320.00	
	S5076H	*	
	GRAND TOTAL	P872,320.00	

# 4.2 Proposed Technical Staff

To do the digitization by scanning the documents, we will assign 4 of the contractual employees in the records section to scan all the documents from the oldest to the latest. To hasten the process of scanning, they will be on a 2 shifts with the below schedule below:

Manning	Activities	Weekday Schedule
Contractual 1 and 2	Scanning	6:00 am to 2:00 pm
Contractual 3 and 4	Scanning	2:00 pm to 10:00 pm
Regular Emp	Troubleshooting and maintenance	6:00 am to 2:00 pm
Regular Emp	Troubleshooting and maintenance	2:00 pm to 10:00 pm
Regular Emp	Project Manager	8:00 am to 5:00 pm
Regular Emp	Record Update (new clients)	8:00 am to 5:00 pm

# 5. Proposed plan and activities

# **Timeline: 3 months**

- a. Presentation of the proposed set-up with its prototype when needed
- b. System administration
  - Set-up the system
  - Scan of the documents
  - If everything is in order, install the program
- c. Training and sampling
  - Coordinate with the records section employees as the key user for the designing of the training plan

- Design the training plan
- Execute the training on each module

# d. Simulation

- Administer the testing of the design through data encoding and uploading of the actual materials of AFPMBAI
- e. Data administration subsystem
  - Help users manage the overall database environment by providing facilities for backup and recovery
  - Hardware maintenance
  - Software maintenance

## 6. Project Lay-out



Figure 6.1 Project layout without scale for indicative purposes

#### 7. Plan to recover the cost

Cost of the project will be recovered through cost reduction which leads to savings. Details presented below:

Total Cost of the Project	872,320.00	
Total Cost Savings per month*	161,271.20	
Total Cost Savings per year	1,935,254.40	

#### \*SCHEDULE 1

Regular Employee	Conventional	Digitalization	Cost Savings
Basic Pay	12,000.00	12,000.00	12,000.00
Allowance	9,000.00	9,000.00	9,000.00
Total Salaries	21,000.00	21,000.00	21,000.00
x No. of Employees	7	4	3
Total	147,000.00	84,000.00	63,000.00
Contractual Employees	Conventional	Digitalization	Cost Savings
Basic Pay	14,567.80	14,567.80	14,567.80
Allowance		-	
Total Salaries	14,567.80	14,567.80	14,567.80
x No. of Employees	8	4	4
Total	116,542.40	58,271.20	58,271.20
Total (Employee Cost)	263,542.40	142,271.20	121,271.20
	Conventional	Digitalization	Cost Savings
Storage Rental	40,000.00	-	40,000.00
Grand Total (monthly)	303,542.40	142,271.20	161,271.20

# 8. Social responsibility

The project will help in the conservation of trees due to its paperless transaction. Also the company is planning to donate some portion of cost savings from this project to the victims of war and dependents of the fallen soldiers.

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