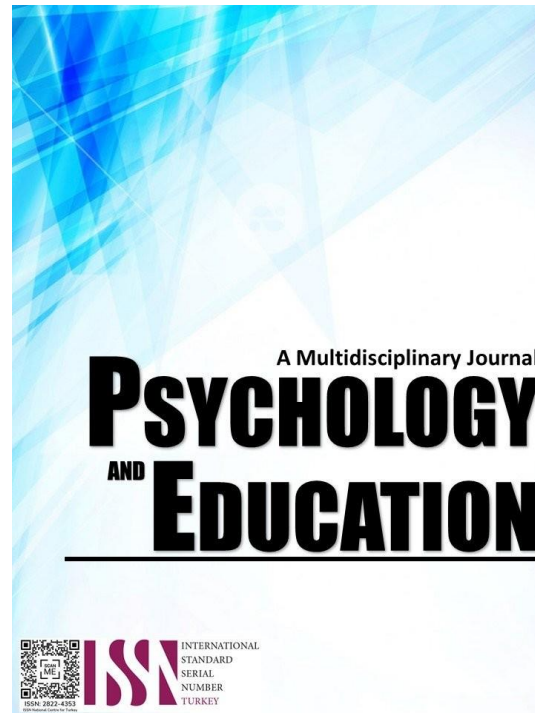


RECORD INFORMATION MANAGEMENT SYSTEM OF THE BUREAU OF FIRE PROTECTION TACLOBAN CITY FIRE STATION



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Record Information Management System of the Bureau of Fire Protection Tacloban City Fire Station

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Abstract

The Bureau of Fire Protection, Tacloban City Fire Station, Tacloban City is currently experiencing as revealed by the holistic approach of problem-solving done in the agency. The complete analysis for identifying the most significant and needed problem and determining possible alternatives to solve such problem was fascinated with the use of frequency table, Pareto Chart, and Fishbone Diagram. Also, the problem was analyzed through the respondents' answers during interviews and online survey questionnaires. The study finds that the BFP Tacloban Fire station Tacloban City is surfacing several problems in some areas, which are old and outdated firefighting apparatus and investigation tools/equipment, unreliable dispatch system for the emergency medical services, lack of serviceable firetrucks, outdated data recording keeping system and insufficiency of fire personnel. An Action Plan was formulated and designated to guide the implementation of the activities on Records management information system. In the prioritization and selection of the problems, the identified most pressing problem at the Bureau of Fire Protection Tacloban City Fire Station was the outdated data recording keeping/system.

Keywords: *information, management, protection, system*

Introduction

We live today in an electronic information age; We therefore know that information is the key to progress. However, to use information it must be managed first and one of the ways to attain that first is through records management. Records management as a practice has not been taken up seriously at the BFP. The Bureau of Fire Protection, Tacloban City Fire Station is just like other government agencies, they inspect buildings, business establishments, and residences. Monitoring records and updating one's files are becoming outdated because of the present manual record keeping used by this agency.

The BFP with the latest technology still use paper based methods during recording whereby According to the BFP Customer Reit takes long hours just to capture ones information from into system and yet they have daily activities to do. lations Officer, the manual entry of data is time-consuming. The recent data recording uses a logbook to record data, manual computation of fire code fees, slow scanning of record, slow processing of certification. There are complex data that require comprehension before being entered, would delay the process further.

There are a lot of difficulties in maintaining a large amount of information on log book, especially as there is usually no back-up for the information, access to information can prove difficult and time-consuming if it has to be searched for, and accuracy is needed in the recording of vital information. Traditionally, manual entry of recording information involved transferring data from various documents into record books or log books, etc. manual data entry entails manually entering specific and predetermined data such as customer name.

Research Objectives

This re-entry plan tends to:

1. Identify existing problem at the Bureau of Fire Protection Tacloban City Fire Station;
2. Determine and analyze the most pressing problem;
3. Identify the possible causes of the problem;
4. Select alternative courses of action;
5. Recommend the best alternative course of action to solve the most pressing problem; and
6. Formulate an action plan to solve the identified problem.

Methodology

Research Design

This study employs a descriptive research design. Descriptive research design is a type of research method that is used when one wants to get information on in the current situation. It is used to describe what is in existence in respect to conditions or variables that are found in each situation. Thus, this type of method for research is very much applicable since it aims in determining the common existing issue or concern being experienced by the personnel of the Bureau of Fire Protection Tacloban City Fire Station.

The researcher was able to gather the needed information through brainstorming, interviews, and group discussions at the Bureau of Fire Protection Tacloban City Fire Station as well as personal experiences of the Uniformed and Non-uniformed personnel which include the researcher.

Respondents

The respondents of the study were chosen randomly. Twenty-six (26) respondents, composing of nine (9) sections chief, 5 Operation personnel, 3 Admin personnel, 3 Fire Safety Enforcement personnel and 2 Finance personnel. They have identified the most common issue or concern existing in the workplace.

Instrument

A survey questionnaire constructed by the researcher was used as a main tool in data gathering. It was constructed in a simple manner so that respondents can easily understand the questions for an accurate response. Information was also collected through Focused Group Discussion (FGD), brainstorming and interview with the Uniformed and Non-uniformed personnel and came up with list of problems and possible solutions to the problem.

Procedure

Brainstorming, interviews, surveys, and focused group discussion were the means of collecting the needed information. Data on the existing concerns and issues were also gathered through the experiences and observation of the Uniformed and Non-uniformed personnel of the Bureau of Fire Protection Tacloban City Fires Station.

Data were analyzed to come up with the best solution to address the most pressing issue identified. The following tools were used in the analysis of data gathered:

Pareto Chart. It is also called a Pareto distribution diagram, was named after Vivid Pareto, is a vertical bar graph in which values are plotted in decreasing order of relative frequency from left to right. Pareto charts are extremely useful for analyzing what problems need attention first because the taller bars on the chart, which represent frequency, clearly illustrate which variables have the greatest cumulative effect on a given system. The purpose of the Pareto chart is to highlight the most important among a (typically large) set of factors. It provides facts needed for setting priorities. It also organizes and displays information to show the relative importance of various problems or causes of problems. It is a form of a vertical bar chart that puts items in order (from the highest to the lowest) relative to some measurable effect of interest: frequency, cost or time. The chart is based on the Pareto principle, which states that when several factors affect a situation, a few factors will account for most of the impact (<http://www.reliableplant.com/Read/2251/pareto-chart>).

Ishikawa diagram also known as the Fishbone Diagram or the Cause and Effect Diagram, is a tool used for systematically identifying and presenting all the possible causes of a particular problem in graphical format. The possible causes are presented at various levels of detail in connected branches.

The Ishikawa Diagram resembles a fishbone (hence the alternative name "Fishbone Diagram") - it has a box (the 'fish head') that contains the statement of the problem at one end of the diagram. From this box originates the main branch (the 'fish spine') of the 8 diagram. Sticking out of this main branch are major branches that categorize the causes according to their nature.

The four main categories are:

Manpower: The causes that can be attributed to the people working on the process so things such as training would be placed on this arm of this diagram.

Methods: It is about how we conduct the operation that can cause the effect that we are trying to solve such as machine setup process used.

Machines/ Materials: the causes due to materials used, such as difference between two suppliers of the same material and/or causes due to the equipment or machine in the process, maybe you have more than one machine used for the process.

Money: The causes concerning to financial or budgetary concerns.

For the researchers to assess situations/problems encountered by the Bureau of Fire Protection, Tacloban City Fire Station. The needed information was collected through the conduct of a survey using self- structured questionnaires, focused group discussions, brainstorming sessions and interviews.

Data on the issues and concerns of the Bureau of Fire Protection Tacloban City Fire Station are also gathered through actual daily observations resulting from the first-hand experiences of the researchers.

Structured questionnaires are handed out to the respondents after the researchers thoroughly explain the purpose of the study and how the form should be completed. The researchers also clarified any vague item to the respondent.

Lastly, as one of the employees of the BFP Tacloban City Fire Station under Operation Section and Fire Safety Enforcement Section, the researchers personal experience became an advantage to this study because it provides them a clear and distinct understanding of the importance of the study.

Data Analysis

The following problem identification and analysis tools were applied in the analysis of data gathered:

Pareto Chart. Is a basic quality tool that helps identify the most frequent defects, complaints, or any other factor you can count and categorize. The chart takes its name from Vilfredo Pareto. Pareto charts can be used any time you have data that are broken down into categories, and you can count how often each category occurs.

A Pareto chart is just a bar chart that arranges the bars (counts) from largest to smallest, from left to right. The categories or factors symbolized by the bigger bars on the left are more important than those on the right. This tool is exceptionally useful for problem analysis because it prioritizes the ones with the taller bars on the chart, which represents frequency of occurrence. The purpose of the Pareto Chart is to highlight the most important among a (typical large) set of factors. It is one of the seven tools of quality control as the bar graph that displays variances by the number of their occurrences. Variances are shown in their descending order to identify the largest opportunities for improvement, and to separate “critical few” from the “trivial many”. Using the frequency method, the selection and prioritization of problems was determined using the cumulative percentage.

Ishikawa Diagram or Fishbone Analysis. A diagram that shows the causes of an event and is often used in manufacturing and product development to outline the different steps in a process, demonstrate where quality control issues might arise, and determine which resources are required at specific times. The Ishikawa diagram was developed by Kaoru Ishikawa during the 1960s as a way of measuring quality control processes in the shipbuilding industry to show the causes of a specific event. They resemble a fish skeleton, with the “ribs” representing the causes of an event and the outcome appearing at the head of the skeleton. The purpose of the Ishikawa diagram is to allow management to determine which issues must be addressed to gain or avoid a particular event. As one of the seven “tools of quality”. This tool graphically breaks down cause and effects relationships leading to an effect or problem. One of the basic concepts of the diagram is to find solutions for preventing the problems that arise. Ishikawa Diagram aims to show all possible causes of a result and finding the root problem. Once the root problem is identified, the diagram provides quality improvement from the “bottom up”. Causes of the root problem are usually identified into major categories classified in line with the 5 M’s of management, to wit:

Manpower: It refers to the managerial and non-managerial personnel employed in an organization.

Methods: The performance of the process and its requirements on how to do it.

Materials: This represents the physical raw materials and intermediate which are converted and/or assembled into finished products with the help of certain processes and technology.

Machine: It is the equipment used to process the materials into finished or semi- finished products.

Money: It refers to the financial resources and is the most critical and all-purpose resource because it is used to acquire other resources needed.

Results and Discussion

Wholistic Problem Solving Analysis

This wholistic problem solving analysis is used to determine the most pressing problems and possible causes that triggered these problems at the Bureau of Fire Protection, Tacloban City Fire Station and identify the most viable solution to mitigate or eliminate the occurrence of the problem.

This part of the study involves generating and classifying the problems affecting the organization, prioritizing, analyzing, and specifying the problem, identifying, and categorizing the possible causes of the problem; identifying the root cause of the problem; identifying alternative solutions and making decisions; and developing an action plan that would address the problem.

Generating and Clarifying the Problem

With the desire to improve the services of the Bureau of Fire Protection, Tacloban City Fire Station, the researcher-initiated series of assessment, meetings, personal interviews and brainstorming with the personnel of the Bureau of Fire Protection, Tacloban City Fire Station. Through these activities, the following problems were identified:

1. Lack of safe storage of report & equipment for safe keeping
2. Old outdated firefighting apparatus and investigation tools/equipment
3. Lack of serviceable fire trucks
4. Lack of fire personnel
5. Unreliable dispatch system for the emergency medical services

6. Delayed in keeping/ submission of report
7. Lack of support for the higher office
8. Outdated data record keeping system
9. No upgraded system or transition to collect more detailed data

These problems were presented to the personnel of the station through the conduct of a survey and below were identified to be the top five (5) priority and pressing problems of the Bureau of Fire Protection, Tacloban City Fire Station;

1. Outdated Data record Keeping system
2. Old and outdated firefighting apparatus and Investigation tools/ equipment
3. Lack of serviceable fire trucks
4. Insufficiency of fire personnel
5. Unreliable dispatch system for emergency medical services

Each problem is discussed below indicating its importance and the need for the Bureau of Fire Protection Tacloban City Fire Station.

1. Old and Outdated Firefighting Apparatus & Investigation Tools/ Equipment.

Firefighting apparatus has been customized for use during firefighting operations. These vehicles are highly customized depending on their needs and the duty they will be performing. Using outdated apparatus can cause the fire to get even worse and can cause additional damage to life and property. It is therefore important to keep all the firefighting equipment on board ships updated and maintained. Seeing that lack of effective safety equipment in top working condition can cause immense damage to life and property on ships, it is imperative that it be serviced or replaced at regular intervals. This affects the daily and regular operations in the operation section due to its age, repair and maintenance of apparatus. It hinders the fast performance of firefighting operations as well.

2. Unreliable dispatch system for the Emergency Medical Services.

The principal link between the public caller requesting emergency medical assistance and the emergency medical service (EMS) resource delivery system. As such, the EMS plays a fundamental role in the ability of the system in responding to a perceived medical emergency. Correct information is always played an essential role of emergency medical services (EMS). At its most basic, it has been to identify the problem and the location of the patient, and then identify an ambulance that can be sent to the location. In most EMS systems, the telephone remains almost a singular point of access for those needing assistance. Confusion and delays during response and protocols are not followed because of misinformation.

3. Lack Serviceable Firetrucks.

BFP has been spending significantly on the maintenance costs for old fire trucks. Due to the lack of fire trucks, the BFP is forced to use aged units to meet the fire services needs of some areas. BFP could not dispose of fire trucks even if they are beyond economic repair. As mandated by law, there should be one fire truck per city and municipality and the ideal ratio is 1 fire truck for every 28,000 persons. It takes time to have a fire truck repaired because of the procurement law. The fire engine is a first-line attack appliance and the primary purpose include transporting firefighters to an incident scene, providing water and carry other required equipment. When it comes to human safety, specialized vehicles play a very important role. One of such specialized vehicles is a fire truck. The importance of a fire truck is not only

limited to saving lives. It serves multiple purposes like to protect and rescue human beings, animals, natural resources, and other properties from fire. Preventing and suppressing fire from spreading on a massive level, smothering fire caused by natural resources, fire extinguishing at commercial places and chemical industries are part and parcel of our sworn duties and responsibilities as well.

4. Outdated Data Record Keeping /System

The Bureau of Fire Protection Tacloban City Fire Station still uses the old type of data recording manual that uses a logbook to record data, manual computation of fire code fees, slow scanning of record, increase of paper works, slow processing of certification due to unreliable data. They encountered complexity about the manual record keeping of the client who applied for the Fire safety Inspection certificate (FSIC) and Fire Safety Evaluation Clearance (FSEC). The applicants take time in applying because of the manual process.

Business and government-related processes can be improved using new technology. It could bring the reliability of the exchange of documents and records from a relatively unsecure and untrusted to a new, more secure, and trusted level in the development of a record information system. The proposed record management information system can be a help in managing the request of the applicant, and monitor the submission for compliance or other certifications, and to print the reports of payments of the applicant. Through the system it provides hands-free work, easy and fast recording data record and increases the number of release certifications and provides reliable fire code fees report. Ensuring that business establishments are fully compliant with the Fire Code before the issuance of Fire Safety

Inspection Certificate (FSIC) for Business Permit (New) within the prescribed period in the BFP Citizen's Charter. The delivery of quality government services is considered as a strategy for the attainment of efficient government. Cumbersome process in securing fire safety inspection certificates, delay in the issuance of fire safety certificates, cumbersome record keeping, and difficulty in informing the applicant about the (a) release date of the fire safety inspection certificate, and (b) notification to renew the fire safety inspection certificates. To adopt automated system as the new process of application for fire safety inspection certificates to solve the weaknesses and shortcoming of the existing process, which will enable the BFP administrators to adequately manage risks by gaining leverage with client's insights to better improve services, and by gaining visibility into their operation to increase the level of effectiveness and provide better services. Compliance with the requirements of the Fire Code of the Philippines (RA 9514) could easily be determined during inspection as a prerequisite for the approval of permits or licenses.

5. Insufficiency of Fire Personnel

One of the performance indicators used to determine whether BFP achieved its goal to modernize and upgrade the governments firefighting capability is sufficiency of personnel to man the fire trucks. Ideally, the BFP needs fourteen (14) firemen working on two (2) shifts to man each fire truck. According to PD 1184 in large/small cities or municipalities the minimum fireman -to -population ratio shall be one fireman for every two thousand inhabitants or 1:2000 inhabitants. The insufficiency of fire personnel affects the delivery of services such as collection of fire codes fees, conduct of training/seminars in different agencies or any public or private establishments, and quick response to fire incidence. Delay or slow response in the suppression of fire may increase cost of fire damages and number of casualties.

In an organization, workers are employed to help the organization continue to interact with its customers for profits. An employee can make a business, or an organization fail or succeed. Insufficient number of workers, workers generally do not need to work a high number of overtime hours. The assigned workload is more appropriate because there are more people to handle tasks. As a result, workers usually are less stressed and more rested and alert. Manpower affects everything in a business from production to client relationships. Without adequate and supportive manpower, a business will never be successful. The staff should be well trained on their tasks while managers should know how to lead. The more staff you must work, the faster the task can be done.

Prioritizing and specifying the problem

The common problems in the Bureau of Fire Protection, Tacloban City Fire Station were identified and prioritize by twenty-six (26) personnel with different designation. Nine (9) Section Chief, seven (7) Operation Personnel, three (3) admin personnel, three (3) fire safety enforcement personnel, two (2) finance personnel and two (2) Emergency medical service

The identification and prioritization of the problem were based on the importance and relevance to work. The respondents ranked the identified issues from one to five (1-5) where five (5) is the most significant issue that need to be addressed while one (1), the least significant issue. Among the five (5) problems identified by the respondents, the most pressing problem of the Bureau of Fire Protection, Tacloban City Fire Station as shown and tabulated in Table 1, by order of priority,

Table 1. Frequency Table on the Prioritization and Selection of Problems

<i>Problem</i>	<i>Frequency</i>	<i>Percentage Frequency (%)</i>	<i>Cumulative Frequency (%)</i>
Outdated Data Record Keeping /System	13	50.00	50.00
Old and outdated Firefighting Apparatus & Investigation Tools Equipment	5	19.23	69.23
Lack of Serviceable Fire Trucks	3	11.54	80.77
Lack of Fire Personnel	3	11.54	92.31
Unreliable dispatch system	2	7.69	100.00
Total	26	100.00	

Table 1 illustrates that outdated data record keeping system is the most frequent problem identified based on the respondent's assessment. It shows that 13 Out of 26 or 50.00% of the total respondents identified it as the top problem that needs immediate concern. Second in line with the frequency of 5 out of 26 or 19.23 % frequency is the old and outdated firefighting apparatus and investigation tools/equipment. Lacking serviceable firetrucks and lack of investigation tools and equipment is in the third rank with a frequency of 11.54% while 3 out of 26 or 11.54% is lack of personnel resources and lastly, on the fifth place with the frequency of 7.69 % or 2 out of 26 is the unreliable dispatch system. The respondent's assessment is plotted using the Pareto Chart as shown in figure 7.

The Pareto Chart pointed out five (5) major problems recognized by the employee- respondents. Each problem is grouped from highest to lowest in a form of a vertical bar graph.

As illustrated, it reflects that 50.00 % of the employee-respondents identified outdated data record keeping /system as the most frequent problem experienced in the Bureau of Fire protection Tacloban City Fire Station; second is the old and outdated firefighting apparatus & investigation tools/equipment with 19. 23 %; third is lack of serviceable firetrucks and fourth is the lack of personnel resources both with 11.54 % office and field supplies and unreliable dispatch system with 7.69%.

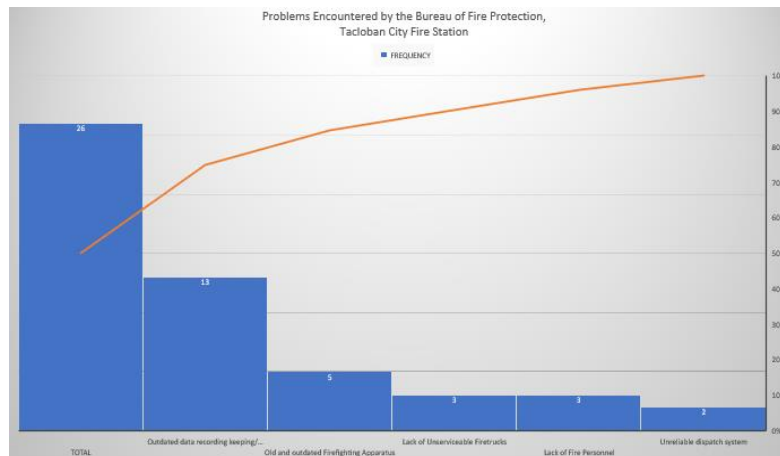


Figure 1. Pareto Chart on the prioritization and selecting the problem

Analyzing the Problem

In analyzing the problem, conducting a study is necessary to determine the underlying factors and situations surrounding it. Specifying the problem, generating its possible causes, and categorizing the problems are the steps involved. For this study, the Ishikawa/Fishbone Diagram is used.

Specifying the Problem

Outdated Data Record Keeping System is considered as one of the top issues which is encountered by the Bureau of Fire Protection, Tacloban City Fire Station, Tacloban City that needs to be addressed immediately. Thus, the problem statement and desired goal for this study are as follows:

Problem Statement

The Bureau of Fire Protection, Tacloban City Fire Station needs a new updated record management information system. It implies that the BFP Tacloban Central Fire Station encountered complexity about the manual record keeping of data, they use old types of recording using logbooks, increase the number of paper works, slow scanning of records, manual computation of fire code fees and slow in processing of certification due to unreliable data. The records are either lost or redundant and the applicants takes much time in applying because of the manual process.

Desired Goal

To automate the record management and to propose a record management information system.

Generating Possible Causes of the Problem

After gathering the survey materials from the respondents, there are identified possible causes for the chosen most recurring problem in the Bureau of Fire Protection, Tacloban City Fire station. The possible causes of the problem were identified to serve as a basis for the record management information system development that will automate the record management. The following possible causes are determined through brainstorming, interviews, informal discussion, and observation, to wit:

1. Limited budget.
2. Lack of support from management.
3. Lack of skilled and capable fire personnel.
4. No commitment between management and fire personnel
5. Long process of procurement.
6. Delayed submission of reports

Categorizing the Possible Causes

The possible causes of the problem were identified to serve as a basis for the record system development and implement a web based information system are classified in line with the four (4) Ms of management which includes;

- a. Money – indicates the availability funds or fiscal resources
- b. Manpower – which refers to the human resources of the organization that are engaged in the job as required.

c. Methods – are the processes and procedures necessary for the achievement of the system development and implemented web-based system.

d. Materials or Machines – refers to supplies, equipment methods and vehicles needed.

The researcher utilized Ishikawa or Fishbone Diagram because it shows the relationship of all factors, which are the cause, that leads to the given situation or the effect. A visual explanation on the patterns and relationships among the identified possible causes and effects can be determined by the diagram.

Money

Limited budget. Budgetary requirement is important for procurement of technology such as surveying instruments and licensed software. The budget given is only limited since the procurement of aforesaid is not really prioritized.

Manpower

Lack of support from top management. Top management is one of the life bloods of an organization. Lack of management support results in poor stakeholder management. Management should be at the forefront in supporting changes especially if it would result in more effective and efficient production of output.

Lack of skilled and capable fire personnel. The fact that the new technology is not yet carried out and upgraded in the survey division, there is a lack of employees who can use the advanced technology.

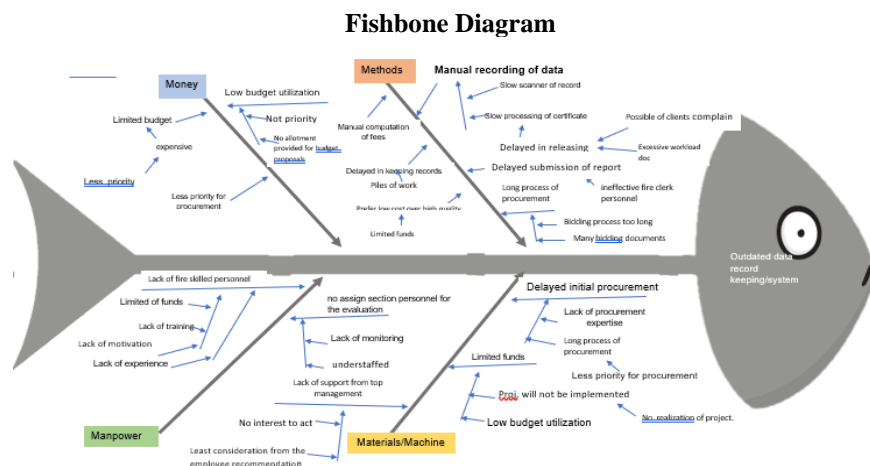
Lack of commitment between management and fire personnel. Harmonization within the organization will really help the achievement of its desired goal. Lack of coordination in the organization could decrease accomplishments and cause delay in the completion of tasks. The top management is sometimes not interested in listening to the recommendations and suggestions of the employees concerned regarding the request of acquiring new technology.

Methods

Long process of procurement. BFP failed to fully utilize its budget. One major reason for such is it lacks expertise to conduct its own procurement. The BFP did not have a functioning Bids and Awards Committee (BAC). As an alternative, BFP secured the services of the Department of Budget and Management -Procurement Services (DBM-PS) and the Philippine International Trading Corporation (PITC) for its procurement needs. However, even with outsourcing, the BFP still encountered delays in procurement. There are several causes why the procurement takes too long, such as: delay in preparing technical specifications, scope of work or terms of reference; failure to start the procurement process on time; extension of bid or proposal submission date; long bidding process; a contractor, supplier or service provider challenges the procurement process; etc. Prefer low cost over high quality. The advanced technology is indeed quite expensive, that’s why the low cost and fewer advanced instruments are procured. However, preferring low cost over high quality will surely acquire sub-standard instruments that have a short life span and easily be damaged.

Materials and/or Machines

Record Management Information Systems make it easier to provide access to real-time information. The paper reports that might take days to prepare and distribute can be replaced on online reports and digital dashboards. That can improve the quality and the speed of decision making, right across an organization. Systems development is the process of defining, designing, testing and implementing a new software application or program. It can include the internal development of customized systems, the creation of database systems. It aims to produce high quality systems that meet or exceed customer expectations, based on customer requirements, by delivering systems which move through each clearly defined phase, within scheduled timeframes and cost estimates.



Decision Making

Decision making is not very easy. It is choosing between possible solutions to a problem. It is also a major part in planning wherein the process of selecting among several alternatives should be taken into consideration so that the best one can address the problem. The best alternative should be consistent with the overall goal of the organization.

Stating the Purpose

The purpose of this study is to establish the best solution to the problem so that the proposed record management information system will be utilized in the office where the adoption of advanced technology would make the job faster, easier and more reliable than before.

Identifying Possible Alternative Course of Action

Having identified the problem, the researcher and the employee-respondents identified possible solutions on how to address this issue. These solutions resulted from brainstorming sessions, observation and experiences.

The following are the possible alternative solutions identified:

A. Allocate funds for the proposed record management information system. Technology has made a great contribution to society over the years. New technologies are constantly invented for each generation where it plays a big role in human daily living and meeting the needs of humans. New technology has the biggest progress within society every year, addressing the need for easy and accessible types of information. Using technology, a lot of accessible resources help people today to lessen that are usually faced every day. The new technology helps to reduce managerial cost and human cost and make the work more accurate and faster; retrieving of the information which helps the organization to provide services faster, and market more accurate and easier, which also affect the level of performance. It plays a critical role in building a competitive advantage from reliability of information to make accurate decisions. Innovation, creativity, goal setting and long and short-term planning get great benefits and it can increase the productivity and effectiveness of organizations. Speed of having all necessary information on time, usefulness of making tasks easier and reliability being trustable and helping decision making raise the importance of forcing organizations to use more sophisticated and comprehensive methods. It provides a hands-free work, easy and fast recording data record and increases the number of release certification and provides reliable fire code fees report. On one side, the BFP are looking into a new tool to help in adjusting the work environment

B. Provide a record management information system training for the staff and personnel. It can reap the rewards of providing training for the employee because well-trained workers help increase productivity and profits. Investing in employee training should improve worker retention rates, customer satisfaction and creativity for new product ideas. Effective training saves labor by reducing time spent on problem-solving and saves money in the long run by producing a better workforce. Training can improve an office's financial standing. Poor performance often results when employees don't know exactly what they're supposed to do, how to do their jobs or why they need to work a certain way. Training can help solve these performance problems by explaining the details of the job. It helps to reduce duplication of effort in the workplace, the time spent correcting mistakes and the problem solving necessary to correct bad performances. Improved performance from employee training can reduce staff turnover, lower maintenance costs by reducing equipment breakdowns and result in fewer customer complaints. Better performance from employees typically creates less need for supervision and brings increased worker output.

It provides a hands-free work, easy and fast recording data record and increases the number of release certification and provides reliable fire code fees report. To improve the services offered through online application of fire safety inspection permit that requires internet connectivity. Collecting data digitally allows for much larger sample sizes and improves the reliability of the data. It costs less and is faster than in-person data, and it removes any potential bias or human error from the data collected.

C. Provide a Records Data Storage Facility. Records should be transferred to the record center when you no longer need them to support current business and/or they are taking up space that you need for more current records. Transfer needs to be controlled for accountability purposes and so that the records can be efficiently located and returned to the office if required. Controlled transfer also facilitates identification of records due for further disposal. The process which is outlined in the box below begins in the record creating office and is completed by the records storage facility. Giving boxes numbers means they can be used as addresses for files and giving files numbers means they can be used as addresses for records. When storing boxes, their location also needs to have an address and it needs to be as simple and systematic as the others. You will probably have aisles, bays and shelves in your storage facility, all of which can be numbered to produce a unique identifier. All boxes should indicate which aisle, bay and shelve they occupy.

Developing a Set of Criteria

Developing a set of criteria is creating a guide on how valid and suitable the interventions are to be implemented and how effective and efficient can this address the identified problem.

To develop and come up with a best alternative course of action, the researcher made use and applied a set of criteria with respective weights to the research respondents. Such was carried out through the brainstorming process and discussions together with the research respondents. The defined criteria and corresponding weights that will be used in selecting the best alternative course of action is shown in table 2.



Table 2. *Defined Criteria and Corresponding Weights*

Criteria	Defined as	Weight
Effectiveness of solution	How effective would be the solution in addressing the root cause of the problem?	50%
Easy implementation	How easy would it be to implement the solution?	20%
Probability of success	How likely is that the solution itself could be successfully implemented?	20%
Relatively low resistance	How much resistance might there implementing this solution?	10%
Total		100%

Applying Criteria

The five (5) sets of alternatives were rated based on the set of criteria (Table 3). Each criterion was provided with a corresponding score. In a scale of 1-10 wherein ten is the highest while one (1) is the lowest, the alternatives were rated. The rated score was multiplied by the weight of each criterion and summed up to get the total weighted points. The alternative solution that has the highest points was selected as the best alternative solution to the problem.

Table 3.

Criteria	Weight (%)	Alternative Solutions		
		Rating Scale: 1 (lowest) to 10 (highest)		
		A	B	C
		<i>Proposed of Record Management information systems</i>	<i>Provide a record management information system training for the staff and personnel.</i>	<i>Provide a Records Data Storage Facility.</i>
Effectiveness of Solution	50%	9 (4.5)	7 (3.5)	5 (2.5)
Easy implementation	20%	8 (1.6)	7 (1.4)	5 (1.0)
Probability of Success	20%	5 (1.0)	4 (0.8)	2 (0.4)
Relatively low Resistance	10%	5 (0.5)	5 (0.5)	4 (0.4)
Total	100%	7.6	6.2	4.3

Table 3 shows that an alternative solution proposed by the Record Management Information system turned out to be the best solution with the highest score of 7.6 points. This was determined by the employee-respondents during the interview, open forum, and sharing of ideas and opinions. Record management information system will be a great proposal since it will help the BFP to identify the most efficient means of generating consistent and optimum results. Various offices need this kind of approach for them to equip employees with enough knowledge and resources to achieve the targets and goals. It also promotes a better quality of work results and a high level of productivity. In implementing a systematic approach, it is important to have the right knowledge and training to carry on with the job or work required. The procedure for the systematic approach is methodical, repeatable and can be learned step-by-step.

Action Plan

This section presents the plan for the specific actions to achieve the desired goals. A series of tasks with their corresponding timeline, persons responsible, resources needed, budgetary requirement, and expected output are included in this kind of plan which is called the action plan.

An action plan refers to the steps that must be undertaken or activities that must be performed for strategies to succeed. It serves as a roadmap and an assessment mechanism to ensure that required steps and activities are done as scheduled and an effective guide to determine measures in adapting potential problems.

Planning the Course of Action

An alternative course of action was finally decided after a thorough analysis of the problems faced by the Bureau of Fire Protection, Tacloban City Fire Station. An action will be formulated to provide a step-by-step process for the implementation of the best solution. Based on analysis made, the record management information system may be solved through budget allocation.

Goal

To acquire Record information management System at Bureau of Fire Protection, Tacloban City Fire Station, Tacloban City and improve the quality of service.



Objective

To propose a Records Management Information System that could address the problem regarding the outdated data record keeping system at Bureau of Fire Protection Tacloban City Fire Station, Tacloban City.

References

Baruyaga, A. A. et.al 2015 BFP OPERATIONAL PROCEDURES MANUAL

Memorandum Circular Number 2016-003 (Subject: Implementing Guidelines for the Adoption of BFP's New Vision and Mission Statements)

Merriam-Webster (1828). Android Application

The Five M's of Management Explained (2018, August 16). Retrieved from <https://commerceforward.blogspot.com/2018/08/the-five-ms-of-management-explained.html>

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