Chapter 5

COST AND BENEFITS ANALYSIS

The Systems Specification

Hardware Specification

Processor : Intel Core i5 3245 3.2 GHz

Hard Drive : SEAGATE 500 GB 7200 rpm

Motherboard : ASUS P8H67-M LX LGA 775

Memory : KINGSTON PC – 1333 DDR4 4GB

Monitor : Samsung s16A100N Wide LED 16’

Mouse : A4 TECHOP – 720d USB OPTICAL MOUSE

Keyboard : A4 TECH KRS – 85 PS KEYBOARD

Chassis : Orion ATX PC Casing 600W

AVR : Secure AVR 4 outlet with 110V socket

Camera : A4 TECH PK – 925H FULL HD 1080P

Software Specification

Windows 10 Professional

Deployment Cost of the System

Hardware ₱ 17,780.00

Software ₱ 8,640.00

Total System Requirement Cost ₱ 26,420.00

Operating Cost of the System

Current Operating Cost of System

Supplies ₱ 9,520.00

Total Operating Cost of the Current System ₱ 9,520.00

Proposed Operating Cost of System

Hardware ₱ 17,780.00

Supplies ₱ 9,520.00

Software ₱ 8,640.00

Total Operating Cost of the Current System ₱ 35,940.00

Payback Period

Future Value (FV) = Proposed Operating Cost – Current Operating Cost

= ₱ 35,940.00 - ₱ 9,520.00

= ₱ 26,420.00

Present Value (PV) = FV / (1 + i )n

Where: i = interest annual rate of n

n = number of years

Thus: PV (year 1) = ₱ 26,420.00 / (1 + 0.10)1

= ₱ 26,420/ 1.10

= ₱ 24,018.18

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Future Value | (1+1)n | Present Value | Accumulated Value |
| 1 | ₱ 26,420.00 | 1.10 | ₱ 24,018.18 | ₱ 24,018.18 |

Payback Period = Total Cost (System Requirements) / Average Accumulated Value

= ₱ 26,420.00 / ₱ 24,018.18

= 1.10

= 1 year and 1 month

Benefits

A cost and benefit analysis are done to determine how well, or how poorly, a planned action will turn out. It is a quick and simple technique that can use for non-critical financial decisions. It provides the researcher or the planner with a set of values that are useful to determine the feasibility of the study.

Reliability

* Records are secure by have access rights to authorized personnel only; and
* Information is accurate

Convenience

* It will give quicker respond of the inquiries;
* It will improve the productivity of the personnel; and
* System has a friendly user interface.

Efficiency

* Records are stored in a Database which can stored large numbers of data.

Time Management

* Less time consume in recording information
* Searching of data and record are less effort and faster

Cost

* The system does not require high-end computers to operate