Assessment of School-Based Payroll System: Basis for Enhancement

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Abstract—"Payroll is a critical operation for every organization to pay employees accurately their salary and emoluments on time and for a big organization, the idea of taking control of employee pay calculations is quite discouraging[1]". This study assessed the payroll system of fourteen (14) schools under the Department of Education, Division of Nueva Ecija which are in the large category. The researchers applied a descriptive research design to best describe the payroll system in terms of Accuracy, Safety & Security, Efficiency, Usability and Timeliness. Based on the gathered data, each school uses Microsoft Excel as its tool in computing employees' monthly pay. The results revealed that three (3) areas: Safety & Security, Efficiency and Timeliness,need an improvement. Additionally, the results revealed that the major problem encountered by the payroll makers is the amount of time required in the preparation of payroll. This indicates that there is a need for development in the system to maximize the use of computers and to yield a more secure, accurate, error-free and faster payroll system.
Keywords –Improvement Plan, Payroll Makers, Payroll System, School-Based Payroll.

I. INTRODUCTION

"Large numbers of employees all over the world require a very effective and efficient payroll management system to ensure smooth operations of government business [2]". Payroll processing refers to the administration of employees' financial records including salaries, additional allowances, deductions, and net pay. Payroll might seem like a simple, straightforward process but in reality, there's a lot more to it. Things can quickly get complicated in just a single error. To ensure accuracy, the payroll process can't be rushed. A new and improved payroll system would be also a great help. While payroll processing is a routine transactional activity, poor design and implementation of a payroll system can cause immense harm to the employee and organizational well-being [2].Payroll processing is one of the first and most frequent automation of HR activities (Thite et al., 2012). "While by itself it adds no value to a firm's competitive advantage, payslips are the most scrutinized documents by employees and therefore, an incorrect payment of pay can lead to intense employee dissatisfaction [3]" but when employee's payroll data is recorded and processed efficiently by the organizations, there is every likelihood that the entire organization will be run smoothly; and it will certainly go a long way in boosting employee's productivity [4].

Payroll processing nowadays has been enhanced through the use of computers. To name a few, first, the Department of Health in the Philippines uses a Computerized Payroll System which is a window based program specially designed to facilitate and simplify the monthly preparation of general payroll and related reports. It is a standard computerized payroll system for use in all DOH offices. The system allows faster and more accurate computation of monthly gross income, deductions and net salary, has a faster and less-resource consuming generation of General Payroll and other payroll-related reports and with security and integrity of payroll data and information [5].

Out of 113 secondary schools under Department of Education (DepEd), Division of Nueva Ecija, 14 have implemented school-based payroll preparation while the remaining 99 are under Regional Payroll Servicing Unit (RPSU) which is responsible for processing, printing, and distributing salary checks of teaching and non-teaching personnel in public secondary. Schools implementing school-based payroll have a number of teaching and non-teaching staff as compared to those who are under RPSU. And continuously increases every year which results in more employees to be included in the payroll. Currently, each school uses a computerized payroll system by means of Microsoft Excel. Preparing payrolls in monthly basis is very crucial and very time consuming for payroll maker and accountants of every school as they strictly abide with the policies stated in [6] DepEd Order No. 30, series of 2011 which entails the strict observance on the minimum net pay requirement as provided by the annual General

Appropriations Act (GAA); and in the compliance with the Automatic Payroll Deduction Scheme (APDS) guidelines on the withholding and prompt remittance of salary deductions and government shares to Government Financial Institutions (GFIs) and accredited Private Lending Institutions (PLIs).

The objective of this study is to assess the current payroll system of each school under DepEd Nueva Ecija which implemented school-based payroll with the end-view of proposing an improvement plan. The researchers described the current system in terms of accuracy, efficiency, usability, timeliness, security &privacy. The findings of the study helped the researchers to point out what specific areas in the system needs improvement.

II. METHODOLOGY

This study used a descriptive research design. According to Dr. Y.P. Aggarwal (2008) descriptive research is devoted to the gathering of information about prevailing conditions or situations for the purpose of description and interpretation. This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationships [7]. The respondents of this study who were chosen purposively based on certain criteria [8] were 50 accountants/bookkeepers and other personnel of each school who are performing and doing payroll works. One set of a questionnaire developed by the researchers was the main tool used in gathering the needed data for this study. The responses to the instrument were interpreted using the scoring scheme below.

Interval	Verbal Description
4.20-5.00	Strongly Agree (SA)
3.40-4.19	Agree (A)
2.60-3.39	Moderately Agree (MA)
1.80-2.59	Disagree (DA)
1.00-1.79	Strongly Disagree (SD)

Descriptive statistics such as mean and weighted mean were used in computing the gathered numerical data of this study.

III. RESULTS AND DISCUSSION

1. Assessment of the School's Payroll System

Table 1. Respondents' Assessments on Accuracy, Safety & Security, Efficiency, Usability and Timeliness of the Payroll System

Item	Accuracy
1	Deducts employees' loans with no error.
2	Adds employees' additional allowances with no error.
3	Computes employees' net take-home pay with no error.
4	Issue pay slips without error.
5	Reduce employee inquiries regarding their salary.
Average	

Item	Safety & Security
1	Maintains back-up file, Cloud-Based using the internet
2	Sets security passwords to maintain confidentiality.
3	Limited Access
4	Number of payments made to an incorrect bank account.
5	Data is accessed by unauthorized persons as it has not been adequately protected.
Average	

Item	Efficiency
1	Generate other reports using the same payroll (such as remittance attachments).
2	Preparation and computation of salaries and deductions made easier.
3	Simplify Operation and saves time.
4	Minimizes Manual Efforts
5	Minimizes Pay Cycles
Average	

Item	Usability
1	Existing payroll system is user-friendly
2	Ease of access without the use of internet
3	Can be used free of charge
4	Customizable
5	Control and access employee financial information whenever you want.
Average	

Item	Timeliness
1	It takes less than one hour to finish payroll.
2	Pays employees' monthly salary on time.
3	Number of payslips issued on or right after the payday.
4	Shorter time spent on double-checking
5	Errors are easily and immediately be corrected.
Average	

Table 1 presents the summary of result on the assessment of payroll system in terms of Accuracy, Safety & Security, Efficiency, Usability and Timeliness.

The table shows that the respondents strongly agreed that the system they currently used yields an accurate computation. This denotes that every pay cycle payroll maker makes sure that there will be an error-free computation of employees' pay since the accuracy relies also on the

computation they make and not purely with the system.The table also shows that the respondents strongly disagree in almost all of the items with regards to safety and security. Only item number 3 was answered strongly agree because using and viewing of payroll system is only for payroll makers. This implies that there is a need for improvement in this area.

The table also revealed the average weighted mean for the five items listed under Efficiency was 2.55 with a verbal description of **Disagree**. This finding is an indication that the current payroll system they are using is not capable enough in generating reports related to payroll such as remittances. The result also shows that the system does not save time when it comes to processing because it requires the manual computation of payroll makers.As also shown in the table the average weighted mean for usability is 4.61 with a verbal description of **Strongly Agree.** This finding indicates that using MS Excel in payroll processing is user-friendly to all payroll makers.

As to the overall mean for timeliness was 2.87 which has a verbal description of **Moderately Agree.** This finding strengthens the fact that payroll processing using the current system requires a lot of time especially in double-checking in order to yield accurate computation of employees pays.

2. Problems Encountered

Table 2. Problems Encountered by the Respondents

Rank	Problem(s) Encountered
1	It takes so much time preparing payroll.
2	The current system cannot generate attachments to remittances.
3	Over deduction and under deductions
4	Fail to notice employees' loan term
5	Excel file gets overloaded that causes the system to slow down

It was found out that the major problem encountered by respondents is the time required in preparing payroll. It is considered the most time –consuming work performed each month. The payroll makers see to it that there is no room for error because once an error has been made it affects the reliability of the payroll maker as well as the employee's satisfaction. Another problem is that the current system cannot generate other reports that are why payroll makers will spend another time re-encoding just to produce the required report. Over deduction and under deduction ranked

as the third common problem. According to the respondents, this problem occurs because some of the Private Lending Institution and other Government Financial Institution fail to send loan billings on time. Monitoring employees' loan-term is another job for the payroll makers. According to them, sometimes they over-looked employees' loan-term due to numerous employees included in the payroll. And the last is a technical problem when there are abundant data in excel. This problem must also be solved because surely it will cause delays in making payrolls.

3. Suggestions of the Respondents to Improve the Payroll System

The researchers listed the 3 most common suggestions that the respondents want to improve in the system. These are as follows:

1. There should be one payroll system that the Department of Education will use, a better payroll system that is more effective and efficient as compared to the existing system they're using.
2. There should be a seminar/training to be conducted to payroll makers to enable them to know better strategies to prepare payroll accurately. This seminar also includes the proper process or workflow in preparing payrolls.
3. The payroll system must possess features like it can generate abstract of remittances so that it can be readily available when needed.

IV. CONCLUSIONS AND RECOMMENDATIONS

The payroll system is one of the essential systems in an organization especially the larger ones. This is a tedious process that requires a high level of timeliness, accuracy and efficient financial controls [9]. A great payroll is really one of the most important issues to pay attention to in almost every company. It is impossible to handle payroll responsibilities with a pen, ledger sheet and calculator, but nowadays it is more convenient for the most organization to use computerized payroll software. Though the current system is somehow useful, there's still a necessary improvement and development in the system to be done to yield more secure, accurate and error-free computation of salaries of each employee. A system that can maximize the use of computers, can make the work easier, can save time and effort. This will be a great help to payroll makers and accountants not just in the preparation of payrolls but also to some other paper works like in the preparation of employees' payslip, remittance to Private Lending Institutions (PLIs) and

Government Financial Institutions (GFIs), journal entry vouchers and the like.

The researchers recommend the DepEd Division of Nueva Ecija to introduce a standard computerized payroll system for use in all schools under the division. Because soon those fourteen schools that implemented school-based payroll will increase in number, thus,there should be unique, very effective [10] and more convenient uniform payroll systems. The agency's IT experts can also look to [11] as it can be considered useful in developing a computer-based payroll system. Seminars and trainings on proper handling of payroll and its entire process may be conducted so that payroll makers and others who are involved in the preparation of payrolls will be oriented properly. Besides, there is a need to keep pace with the evolution in the e-governmental system, e-commerce, e-payments, etc., which are all affiliated to a computer system, most employers, especially in relatively large organizations, now prefer to use an in-house computerized payroll system (Natailie 2010,). All the employer has to do is to buy the payroll software and employ a staff to perform the payroll processing [12].

The researchers also recommend to the future researcher who will study the same research topic to interview the teachers and other staff if they receive the rightful amount of pay on time to be able to test the reliability of the result in the assessment since this study focuses only on the payroll makers and not the clients. Thus, it is also recommended that this study must extend its scope and involve other stakeholders of the division[13].Likewise, other researchers may add areas to be assessed such as reliability for emergency case reporting and response in terms of functionality and service [14].

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