

**PROPOSED e-HRM SYSTEM FOR
ISABELA STATE UNIVERSITY**

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ABSTRACT

Using the descriptive and developmental design, it aimed to expedite the transactions and modernize the documentation processes at Human Resource Management (HRM) office of Isabela State University (ISU). There were 60 participants involved: nine (9) HR personnel, forty-three (43) teaching/non-teaching staff and eight (8) IT experts. Questionnaire and Library/Internet were employed as research instruments. With the use of the weighted mean, the study ascertained that the current processes and services module of HR office were rated efficient. This could further mean that the HR personnel were accustomed with the existing kind of processes at present but aiming for a better way of doing their job. The problems encountered in the current processes and services of HR are: lack of manpower; delay in the issuance of needed reports; lack of system software; traditional/manual way of keeping; organizing and sorting of files; inefficient checking/computation of leave credits; and, inconsistency in the implementation of policy. These maybe the reasons why there were paper documents misplaced. The proposed e-HRM was assessed by the participants as “very efficient”. This further implies that the teachers, who are the majority of the participants, manifest satisfaction in relation to the organization/agency where they belong because they are contented with the services of the HR office. As regards the proposed e-HRM system, the participants expressed apprehensions on the manpower needed, preferably an IT expert, who can use or operate the system. The proposed e-HRM, in terms of the different software quality characteristics was assessed to a “great extent”. This means that the proposed system met most of the users’ requirements and it is in compliance to ISO 9126 standards. Therefore, the developed e-HRM system ensures better processes and services of HR office as compared to the current processes and services.

Keywords: *e-HRM system, human resource management*

INTRODUCTION

Republic Act No. 9485 (s. no 2589 and H. no 3776) – an act to improve efficiency in the delivery of government service to the public by reducing bureaucratic red tape preventing graft and corruption, and providing penalties therefore. This act is known as the “Anti-Red Tape Act of 2007”. Which declares the policy of the state to promote integrity accountability, proper management of public affairs and public property as well as to establish effective practices aimed at the prevention of graft and corruption in government (Section 2). Towards this end, the State shall maintain honesty and responsibility among its public officials and employees, and shall take appropriate measures to promote transparency in each agency with regard to the manner of transacting with the public, which shall encompass a program for the adoption of simplified procedures that will reduce red tape and expedite transaction in government.

Administrative Order (AO) No. 161, Series of 2006 on “Institutionalizing Quality Management Systems in Government” was issued on 5 October 2006 as one of the National Competitiveness Summit (NCS) Action Agenda to effect actual improvements in public governance in recognition of the International Organization for Standardization (ISO) 9000 series which ensures consistency of products and services through quality service processes, One of the strategic goals in the Strategic Plan of Isabela State University for 2012-2017 under Administration and Finance, particularly at the Records and HRM office, is to device and implement automation of all services in the Personnel and Records Management that includes time keeping system, leave administration, Personal Data Sheet (PDS). The HR personnel, in collaboration with the MIS coordinator, submit reports to the main campus at Echague, Civil Service Commission (CSC) and Commission on Higher Education (CHED) as required. What challenges them is that, the process of generating reports in which they are done manually. They do tedious search of the documents or files from the folders, they will sort, copy and paste the needed data which entail a lot of time accomplishing the tasks. In addition, the burden of searching the document inside a loaded filing cabinet, retrieving data one at a time from the different files, the voluminous PDS for each employee

consumes so much space in the cabinet and in the entire office space.

The existing HR function is in need of approach to meet the fast changing digital environment to improve its services in meeting customers' satisfaction. Thus, the proposed e-HRM aims to improve the present processes at the HR Office. The study aimed to modernize the processes at the HRM Office of ISU-Ilagan, implement the paperless communication policy, as well as to respond to citizen's charter or RA 9485 seeking to reduce Anti-Red Tape Act (ARTA) Law and to meet customer satisfaction as stated in the Executive Order No. 605, Institutionalizing the structure, mechanisms and standards to implement the Government Quality Management Program, amending for the purpose of Administrative Order No. 161 s. 2006.

Conceptual Framework

The proposed e-HRM utilized the SCRUM methodology for the development of the system and it would be implemented in Local Area Network (LAN) architecture to be installed at the Human Resource office.

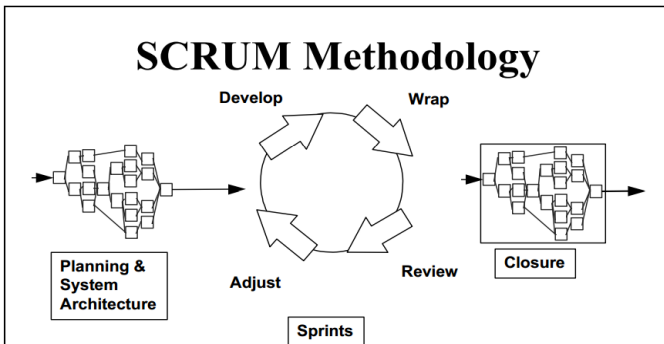


Figure 3 – The SCRUM Process

The SCRUM software development method is appropriate in the development of the proposed e-HRM system, since the SCRUM is suitable for producing prototype or new systems. The SCRUM life cycle includes the pregame, game and postgame. The first phase includes planning and system architecture for the proposed e-HRM system. This phase involves the assessment of the current processes and services of

the HR office, planning the deliverables which include the five modules, namely; recruitment and selection, attendance monitoring, Personal Data Sheet management, leave management and employees' performance evaluation. The second phase involves development where the system was developed in modular approach; each module is coded and tested which results in easy modification of the system whenever an error occurs. As soon as the proposed system meets the entire user's requirement through implementation and testing, the system reaches the closure or postgame phase.

Statement of the Problem

The study entitled "Proposed e-HRM System for Isabela State University" sought to develop a Human Resource Management system that would improve the processes and the delivery of the services of the Human Resource Office.

Specifically, it sought to answer the following:

1. What is the assessment of the participants on the efficiency of the current processes and services of the HR Office in terms of the following:
 - 1.1. Recruitment and selection of applicants;
 - 1.2. PDS management;
 - 1.3. Attendance monitoring;
 - 1.4. Leave card management; and
 - 1.5. Performance Evaluation?
2. What are the problems, issues regarding the current processes and services of the HR Office?
3. What is the assessment of the participants on the developed system in terms of the following:
 - 3.1. Recruitment and selection of applicants;
 - 3.2. PDS management;
 - 3.3. Attendance monitoring;
 - 3.4. Leave card management; and
 - 3.5. Performance Evaluation?

4. What are the problems, issues regarding the implementation of the developed system?
5. What is the extent of compliance of the proposed e-HRM in terms of the Functionality, Reliability, Usability, Efficiency, Maintainability and Portability?
6. What improvements can be incorporated to further enhance the proposed e-HRM?

METHODOLOGY

Research Design

The study made use of the descriptive survey and research systems development to describe the software quality characteristics of the developed e-HRM in order to enhance the HR processes and services at ISU system.

Participants of the Study

There were three groups of participants of the study, the nine (9) HR personnel who comprised the HR Officers/personnel of ISU system who participated in evaluating the proposed e-HRM, the 43 teaching/non-teaching staff of City of Ilagan campus who volunteered to take part of the evaluation as well as the eight (8) IT expert group which includes the IT professional such as the University Software Developer, IT faculty or IT staff. The IT Expert group was composed of the IT faculty and staff. The IT experts were the only group who were asked to evaluate the proposed e-HRM system as to the extent of compliance to software quality characteristics stated under ISO 9126.

Instrumentation

The research instruments used to gather data are the following:

Questionnaire. The combination of self-made questionnaire and ISO 9126 international standard attributes of good software were used to

evaluate the proposed e-HRM. The questionnaire was subjected to tryout and validation. The adviser went over the questionnaire to ensure the content validity of the questionnaire prior to its final administration.

Library/Internet. This is where the researcher searched for the related literatures and studies relevant to the proposed e-HRM and other related information that pertains to the conduct of the study.

Data Gathering Procedure

The researcher asked permission to conduct the study through a letter addressed to the University President, then forwarded to the different HR personnel of ISU system. Interviews with the HR Officer who keeps records of all employees' data and MIS Coordinator who collects data from HR office for consolidation and who prepares reports of ISU-I employees were done to gather information for the conduct of the study. The HR officer and MIS Coordinator were the principal sources of data and information for the feasibility or need for the study. The floating of the questionnaire was done before and after the demonstration of the proposed e-HRM for assessment of the current processes and services of the HR and evaluation of the proposed e-HRM. The proposed e-HRM was pilot tested at the HR office of ISU, City of Ilagan. The pilot testing was done using the black box testing, a software testing method in which the HR officer and the HR staff interact with the system by providing inputs and examining outputs and without knowing how and where the inputs are worked upon without having any knowledge of the interior workings of the application. The tester is oblivious to the system architecture and does not have access to the source code.

Data Analysis

The following were used to analyze the data gathered:

Frequency and Percentage Distribution. It was used for the profiling of the participants.

Weighted Mean. It was used to measure the assessment of participants on the current processes and services of the HR office as

well as the proposed system. It was also used to measure the extent of compliance of the proposed e-HRM using ISO-9126 software quality characteristics as well as the extent of implementation of the proposed system.

RESULTS AND DISCUSSION

Assessment of the participants on the efficiency of the current processes and services of the HR office

On recruitment and selection of applicants, the current processes and services of HR office under the recruitment and selection module were assessed as “efficient” with a category mean of 2.99. This means that the HR personnel may find it easy to retrieve the report, since the file was just saved in Excel file but not the process of preparation of reports.

The PDS management, Under the PDS management module were assessed as “efficient” with a category mean of 2.89. This means that the HR personnel find it difficult to manage the voluminous PDS located in the office cabinet particularly in giving feedback, searching and sorting of employees’ information and preparation of reports.

In terms of attendance monitoring, result unveiled that the current processes and services of HR office were assessed as “efficient” with a category mean of 2.98. This may mean that the participants assessed the processes as fairly efficient because the existing attendance monitoring through face recognition biometric will only produces report such as employees DTR once a month.

With respect to leave management, result unfolds that the current processes and services of HR office were assessed as efficient with a category mean of 2.84. This mean that the HR personnel find it more difficult to compute and update leave credits of employees manually especially so that there are a lot of leave types, such as sick leave, vacation leave, special privilege leave, mandatory leave, etc. Not all these types of leave are applicable to all the employees since the leave depends on the type, designation and function of the employees. Furthermore, a certain type of leave is applicable in a case to case basis.

On performance evaluation, result revealed that the current processes and services of HR office were assessed as efficient with a category mean of 2.96. This means that the HR personnel being incharge of collecting, computing, sorting and ranking employees' individual performance rating or evaluation and preparing reports, find the processes as tedious and require a lot of effort and time.

Problems and Issues on the current processes and services of the HR office

The participants' common problems and issues on the current processes and services of the HR office include lack of manpower preferably IT expert or professional, delay in the issuance of needed information and the extent of implementation of HR policies. Other issues also emerged such as lack of a system or software that helps HR office enhance their productivity in terms of speedy preparation of structured or unplanned reports anytime they are needed by the campus and other agencies such as CSC or CHED, and traditional way of keeping, organizing and sorting data, files and reports, and space for storing paper documents.

Assessment of participants on the proposed e-HRM

Along recruitment and selection, result showed that the proposed e-HRM was assessed as "very efficient" with a category mean of 4.11. This reveals that most of the ISU-I employees were satisfied with the performance of the system in terms of the "promptness in identifying qualified applicants", "checking and verification of recorded scores for applicants" and "retrieving, sorting and searching of information about the applicants".

In terms of PDS management, result revealed that the proposed e-HRM was rated as "very efficient" with a category mean of 4.11. This implies that the PDS management module records and keeps vital employees information which results to easy retrieval, searching and sorting of needed information or reports when needed.

On attendance monitoring, result revealed that the proposed e-HRM was assessed as "very efficient" with a category mean of 4.25.

This implies that the attendance monitoring through DTR conforms to the CS ruling in accomplishing DTR since the proposed system produces format of DTR required by the CS called the CS form 48.

For leave management, result unveiled that the proposed e-HRM was rated as “very efficient” with a category mean of 4.16. This may mean that despite the complexity in updating and computing of leave credits, the HR personnel is confident with the performance of the proposed e-HRM system in terms of promptness in computing, updating of used and unused leave credits, and producing of user-defined reports such as employees’ leave card. The system also allows easy retrieval and searching of information that result in prompt production of reports when needed.

Along performance evaluation, result showed that the proposed e-HRM was rated as “very efficient” with a category mean of 4.33. This reflects that the two groups of participants were satisfied with the performance of the module in terms of promptness specifically on giving feedback to concerned employee, producing reports, maintaining accuracy and consistency of reports and searching and sorting of required information. This is because the system provides a data bank of the employees’ performance rating every semester for three consecutive years which is considered as one cycle for NBC 461 evaluation.

Problems and issues on the Proposed e-HRM System

As regards the proposed e-HRM system, the participants expressed apprehensions on the manpower needed, who is preferably an IT expert who can use or operate the system.

Extent of compliance of the proposed e-HRM in terms of the different software quality characteristics

The proposed e-HRM was assessed by the IT expert/professional/teaching/non-teaching participants as compliant to a “very great extent” in terms of its maintainability and portability with category means of 4.63 and 4.66, respectively, while great extent in terms of functionality, usability, efficiency, and reliability with category means of 4.40, 4.17, 4.38 and 4.31, respectively.

Improvements to further enhance the proposed e-HRM

The participants recommended that the system should produce Leave Service Credits, PDS and other reports based on the required format and be implemented not only in LAN but also in WAN to allow the employees to retrieve their leave credits and other personal information anytime and anywhere.

CONCLUSION

Based on the findings, the researcher arrived at the following conclusions:

The proposed e-HRM system will certainly expedite the transactions at the HR office since it will collect and organize data, information and produce reports when needed. The proposed system helps top level management in their decision making specifically on recruitment, ranking and promotion. It also enables administrators to easily identify recommendees for seminars/trainings and study leave based on available data provided by the e-HRM system. The developed e-HRM system ensures better processes and services of HR office as compared to the current processes and services specifically in terms of recruitment and selection of applicants, management of PDS, attendance monitoring, management of leave credits and employees' performance evaluation.

RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are derived:

The school may support the implementation of the developed e-HRM system in order to expedite the transactions at the HR office in response to citizens' charter and Administrative Order (AO) no. 161 series of 2006.

Further studies may be conducted by future researchers to include the recommendations of the participants, which the system should produce a hard copy of LSR and PDS and other needed reports based on the prescribed format.

The HR office may implement the developed e-HRM system not only in a LAN but also in WAN to reduce administrative cost as well as to minimize administrative task.

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