

## **Users' Perspective on the Utilization of Student Information Management System**

**Marivic D. De Guzman, Jessica L. Arenas, Jenifer M. Gutierrez,  
Jemmel Ann V. Reblora, and Randy Joy M. Ventayen**  
*Pangasinan State University, Lingayen Campus  
Lingayen, Pangasinan, Philippines*

**Abstract** - *The general purpose of this study was to determine the Users' Perspective on the Utilization of Student Information Management System. Especially, it aimed to determine the profile of the respondents in terms of age, sex, year level and course; and the level of users' perspective on the utilization of student information management system in terms of accessibility, user- interface, reliability, timeliness, convenience and privacy and security measures; and the problems encountered of the student pertaining to the utilization of student information management system. This study had a total sample size of 370 based on the formula of the total population of 5931. The descriptive survey method used by the researchers and the instrument that used as a set of the questionnaire through random sampling. Random sampling was used to determine the respondent. The data gathered were organized, analyzed, and interpreted through computing for the average weighted mean, frequency and ranking. After all necessary and essential data gathered, the researchers analyzed and interpreted the data. Based on the result, the users' perspective on the information management system is highly satisfactory. It recommended that the study will be conducted in the following year to determine the perspective and improvement of the system.*

**Keywords** – *information management systems, enrollment systems, MIS*

### **INTRODUCTION**

The progress of information and technologies and the birth of the internet changed by the user experience and environment, in advancement way of delivering information and services. It can now be web-enabled, unlike the traditional stationary information systems. It is a gateway to information and services from multiple sources in a unified way by using a single and unique user interface. Student portal usually features specific functions such as search engine mechanisms, access to the database, user registration and personalization options.

Management Information System (MIS) is a broadly used and applied term for a three-resource system that required effective organization management. The resources are people, information, and technology, from inside and outside the organization, with a top priority given to the people. People often use the internet to fasten transactions, communications and easy

access to information. The internet is a database full of information and offers us a lot of services. It has been the most useful technology of the modern times which helps us not only in our daily lives but also our personal and professional lives of developments.

This PSU Student Portal in Lingayen is a big help especially in enrollment process it is easy for the employees and students to see or check the profile, data and accounts, evaluation of grades, student file master maintenance and syllabus inquiry. Through this portal, you can keep the student record and fast to see it and the other documents needed in the school.

The internet will be a big help to us, achieve things in several ways. The maximum effect of the internet is actually in the daily life of the individuals because indeed there is no aspect of life which is not influenced by the internet and its uses. Life has become drastically smooth and smooth over the internet, while in the previous year seeking for a job required

several visits to the offices and companies and interviews, these days all that is required is you detail resume emailed to the company's analysis division which assures you of any possibilities for getting a job instead of waiting and getting rejected in the end.

This study deals with the Users' Perspective on the Utilization of Student Information Management System. The students can access different information regarding their school records, profile and enrollment procedures. The reason behind I study this is to know if the portals can be a big help in the process of enrollment and what are the benefits to the PSU students? Is it a big help on the access of information for each student or a big help to the enrollment process.

#### *Statement of the Problem*

This study aims to determine the Users' Perspective on the utilization of Student Information Management System.

Specifically, it seeks to answer the following questions: (1) What is the profile of the students in terms of; Age; Sex; Year Level; Course; (2) What is the level of Users' Perspective on the utilization of Student Information Management System in terms of; Accessibility; User-interface; Reliability; Timeliness; Convenience; Privacy & Security Measures; (3) What are the perceived problems of the students pertaining the Utilization of Student Information Management System?

#### *Scope and Delimitation*

This study aims to assess student portal perspective regarding the utilization of Student Information Management System in Lingayen Main Campus. This involves 370 students in the different courses in PSU Lingayen. This study will be conducted using an interview and a set of the questionnaire as an instrument in gathering data. It will be completed by the school year 2017.

## **REVIEW OF RELATED LITERATURE**

### *Management Information System*

Information is the lifeblood of any organizations, commercial or non-profits people require information for many reasons in various ways because of rapid changes in technology. The intelligent decision is about developing new products, creating a marketing strategy and buying raw materials required timely, accurate information. Instance is seeking information for entertaining and enlightenment by viewing television, watching movies, browsing the internet, listening to the radio, reading newspaper, magazines, and books. An information system is software based on solutions use to gather and analyze information, it is a system delivers up to the minute sales data on books to the computer of Amazon.com's president one example of the information system. The database, data warehouse, and data marts are integral parts of IS that make information store and functional, they perform similar functions like example acquiring data, processing, storing, and providing the user a number of output options which contains to a meaningful and useful information. Five categories of information system fall: 1. office support system 2. transaction processing systems, 3. management information system, 4. decision support systems, 5. enterprise resource planning (ERP) systems. Almost type of system involves a use of one or more databases.

A Management Information System (MIS) is a broadly used and applied term for a three- resource system that required effective organization management. The resources are people, information, and technology, from inside and outside the organization, with a top priority given to the people. This system is a collection of information management methods involves computer automation (software and hardware) or supporting and improving the quality and efficiency of business operation and human decision making. MIS is the study of people, technology, and organization. You are enjoying technology like iPhones, iPods, and Facebook, it

takes to major information systems. An interesting technology you need is the desire using to improve people's lives, they think that MIS is all programming. Programming is a small part of the curriculum and there are many jobs in MIS where you don't program. The MIS students learn how to create a system for finding and storing data and learn about the computer databases, networks, computer security and many more. [1] [2]

#### *Student Information System*

The Student Information System (SIS) is a web-based application software designed to introduce a conducive and structured information exchange environment for integrating students, parents, teachers, and administration of a college school. There is another software package available purpose include Student Management System (SMS), Student Information Management System (SIMS) and Student Records System (SRS). The SIS may handle course management, scheduling, personal records, grades/ comments, room/ resource management etc. It can be used to run complex enrollment reports, admissions, course schedules, grades, and others. SIS allows for a quick and accessible flow of information that can provide teachers and administrative staff with useful tools to automate the daily routine tasks. SIS also allowing access from any computer with an internet connection without additional software installation. They are more centralized and easier to keep updated, implementing SIS to manage daily school, teachers and administrators needs can save time and has immediate access to a variety of a student data. From this software, the parents and teachers have faster access to keep updated on what is doing to their children and student in performing inside the room or even outside the school campus. The teachers receive automated grade-books, reports, links to parent's information etc., while the student can access to watch and maintain their grades updates. [3]

#### **METHODOLOGIES**

The researchers will use the descriptive survey method of research and a set of questionnaires to be used as a tool for gathering data. A descriptive survey by contrast typically seeks to ascertain respondent's satisfaction of experience on a specified subject in a predetermined structured manner. Each student will be given value and emphasis on their ideas.

The descriptive survey method of research will be employed by the students of the Pangasinan State University to determine the User's Perspective of the Utilization of Student Information Management System. [4]

A set of the questionnaire will be used as an instrument in gathering data. It is a set of question which filled in and answered by a required number of selected respondents to complete the research study.

By using the questionnaire, the respondents can answer freely and more accurately. This study will be conducted in the different courses of Pangasinan State University - Lingayen Campus. In this study, a random sampling technique used to select a sample size of the student respondents. It represents 5931 total population of the officially enrolled students in the school campus as of this 1st semester year 2017. This probabilistic approach ensures every element in the population has an equal chance of being included in the study. The sample population was calculated using the statistical formula of sample determination and the result is three hundred seventy (370).

#### *Data Gathering Instrument*

The researchers will use a questionnaire checklist as the major instrument for the needed data in determining the Users' Perspective on the Utilization of Student Information Management System. The first part of the questionnaire will deal with the profile of the students in terms of their; age, sex, year level, and course, and preferred issues and concerns to be reported regarding student portal.

The second part deals about the level of Users' Perspective on the Utilization of Student

Information Management System in terms of accessibility, user-interface, reliability, timeliness, convenience and privacy & security measures.

The third part deals on the perceived problems of the students pertaining to the utilization of Student Information Management System. It is in a checklist form and shall be ranked accordingly.

After the questionnaire was drafted, it will be validated by the members of the panel and the MIS Director of the student portal.

#### *Data Gathering Procedure*

The researchers will prepare and present a letter of request noted by the thesis adviser to the program chair of the selected courses to seek permission for the floating of a questionnaire to the students. A written letter sent to every course department head asking them permission for the conduct of the said study regarding the Users' Perspective on the Utilization of Student Information Management System. Upon the approval of the request, the researchers will distribute the questionnaire and collect the data pertinent to the study. These data will be analyzed, tabulated and presented.

The researchers prepared a set of questionnaires that will be administered to the respondents and ensure the confidentiality of the subject's responses. Confidentiality will be maintained to the security of each individual and never publicly divulged. Afterwards, this was retrieved from the respondents and the results were tallied and interpreted.

#### *Statistical Treatment of Data*

After the data collection, the researchers will carefully tabulate and analyze said data and arrive at the proper interpretation using proper statistical methods. Frequency counts and percentage distribution will be used for Part 1 of the study to describe the profile background of the students and their preferred issues and concerns to be reported in the student portal.

For the part 2 of the study, average weighted mean (AWM) will be utilized to determine the Users' Perspective on the

Utilization of Student Information Management System in terms of accessibility, user-interface, reliability, timeliness, convenience and privacy & security measures.

#### **RESULTS AND DISCUSSION**

Most of the respondents with the frequency of 238 or 64.32% which belongs to the age bracket of 19-20 years old while the frequency of 13 or 3.51 belongs to the age bracket of 24-28 years old. This result shows most of the respondents belong to the age bracket 19-20 years old which is the most common age bracket of the third-year students.

The profile of the respondents in terms of their sex shows that 254 or 68.65% are female while 116 or 31.35% are male. It means, most respondents are female compared to male because based on the experience of the researchers in distributing the survey questionnaire. Female students are most approachable than male students.

Out of three hundred seventy (370) respondents, 143 or 38.65% of the respondents come from the third-year students, 124 or 33.51% are the fourth-year students and 89 or 24.05 are the second-year students while the 14 or 3.78 is the lowest who are in the first year students. It means the majority of the respondents comes from the third-year students because according to the official list of Registrar office, and having a bigger enrolled student are at the third-year level.

To determine the users' perspective on the utilization of student information management system, the 370 identified the students – respondents were asked to answer a self-constructed questionnaire. The result is hereby presented.

	AWM	Interpretation
Accessibility	4.00	Highly Satisfactory
User Interface	3.76	Highly Satisfactory
Reliability	3.63	Highly Satisfactory
Timeliness	3.70	Highly Satisfactory
Convenience	3.75	Highly Satisfactory
Privacy / Security	3.82	Highly Satisfactory

Table 1: Overall Perspective Result

In the Level of Users' Perspective on the Utilization of the Students Information Management System with regards to the accessibility. The indicator "The students' online portal is accessible in viewing the grades of the students got the highest average weighted mean of 4.18 with the descriptive rating of highly satisfactory while the indicator "The students' online portal helps parents to keep updated and to follow the progress of their children got the lowest average weighted mean of 3.85 with the descriptive rating of highly satisfactory. This means that the students are satisfied with viewing their grades using the student's portal.

With regards to user interface, the indicator "The students are able to find student ledger of account got the highest average weighted mean of 3.87 with the descriptive rating of highly satisfactory while the indicator "The students portal creates an enjoyable user experience got the lowest average weighted mean of 3.51 with the descriptive rating of highly satisfactory. This means that the students are satisfied with finding their student ledger of account on the student portal.

In terms of reliability, the indicator "The system provides online viewing and verification of grades got the highest average weighted mean of 3.82 with the descriptive rating of highly satisfactory while the indicator "The system functions for a long time without crashing or service interruptions got the lowest average weighted mean of 3.45 with the descriptive rating of highly satisfactory. This means that the students are satisfied with the system that

provides online viewing and verification of grades of the student portal.

With regards to timeliness, the indicator "The students are able to use the portal within a few seconds to see their grades, balance, receipt, and others got the highest average weighted mean of 3.85 with the descriptive rating of highly satisfactory while the indicator "The information in the student portal is always updated got the lowest average weighted mean of 3.48 with the descriptive rating of highly satisfactory. This means that the students are most satisfied with using the portal to be able to see their grades, balance, receipt, and others than the information of the students in the portal are updated.

With regards on the convenience, the indicator" The students are able to save time, distance and effort in the enrollment process got the highest average weighted mean of 3.83 with the descriptive rating of highly satisfactory while the indicator" The students are able easily connected to the student portal services got the lowest average weighted mean of 3.71 with the descriptive rating of highly satisfactory. This means that the students are most satisfied with saving their time, distance and effort during the enrollment using the student portal than the connecting easily to the student portal.

With regards to the privacy and security measures. The indicator "The students are able to access account with their own personalized password got the highest average weighted mean of 4.03 with the descriptive rating of highly satisfactory while the indicator "The students are able to get alert about unrecognized log in got



the lowest average weighted mean of 3.49 with the descriptive rating of highly satisfactory.

This means that students are most satisfied in accessing their account with on their personalized password than to get alert about the unrecognized login.

The most experienced problem of the student in using portal is not easy to log in due to technical reason (no signal, system down and others), which has the frequency of 250 or 67.56%. Based on the problems encountered by the students according to them it is the usual thing that they have been experienced.

### **CONCLUSION AND RECOMMENDATION**

While the Pangasinan State University initially implements the student portal, it is observed that student perspective on the usage of the student portal was highly appreciated. There is always a room for improvement, reliability was seen as the lowest compared to other variables. While this study is limited on the initial years of implementation, it is recommended to continue assessing the student perspective in the future.

Despite the high level of acceptance of the portal, this study was limited to Lingayen Campus, it is recommended that the study should be conducted to the other campus where student portal is being used.

### **ACKNOWLEDGMENT**

Thank you to Pangasinan State University,

Lingayen Campus for allowing us to present this paper internationally. To the family of College of Business and Public Administration, thank you for your support.

### **REFERENCES**

- [1] What is a Management Information System (MIS)? - Definition from Techopedia. (n.d.). Retrieved December 06, 2017, from <https://www.techopedia.com/definition/8240/management-information-system-mis>
- [2] What is MIS? | Management Information Systems. (n.d.). Retrieved December 06, 2017, from <https://mays.tamu.edu/departments-of-information-and-operations-management/management-information-systems/>
- [3] Classroom Technology News | Educational Apps | Bloom's Taxonomy | techlearning.com. (n.d.). Student Information Systems. Retrieved December 06, 2017, from <http://www.techlearning.com/student-information-systems>
- [4] Salaria, N. (2012). Meaning of the term descriptive survey research method. *International journal of transformations in business management*, 1(6), 161-175.