

Impact Analysis of EMIS and PIMS 2081



Madan Bhandari Memorial College

New Baneshwor Kathmandu

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CHAPTER-I

INTRODUCTION

1.1 Background of Study

MBMC is a non-profit making educational institution established in 2001. Affiliated with the TU, the college offers altogether eight academic programs: five at the bachelor's level, including BA [with specializations in four different subjects-JMC, Sociology, English and Social Work], BBS, BBM, BCA, B.Sc.CSIT; and three at the master's level which includes Sociology, JMC and English. MBMSS, the fraternity educational institution of the MBMC, offers the classes of Grade XI and Grade XII in the three academic streams (Humanities, Management and Science) within the premises of the college. It is affiliated to the NEB of Nepal.

The Public Information System (PIS) and the Education Management Information System (EMIS) play complementary roles in the functioning of a college, each serving distinct purposes. The PIS acts as a transparent conduit between the institution and external stakeholders, including prospective students, parents, and the community, by disseminating relevant information about the college's programs, achievements, policies, and events through resources such as websites, brochures, and public reports. This system helps build the institution's reputation, fosters public engagement, and supports informed decision-making. In contrast, the EMIS focuses on the internal management of educational data and administrative functions, centralizing information related to student enrollment, academic progress, faculty assignments, and institutional resources. By streamlining administrative tasks, enhancing data accuracy, and providing real-time insights and comprehensive reports, the EMIS supports strategic planning, improves overall efficiency, and aids the college in making data-driven decisions to enhance educational outcomes and operational effectiveness.

1.2 Statement of Problem

Despite the critical role of the Public Information System (PIS) in facilitating transparent communication between a college and its external stakeholders, there is often a lack of comprehensive understanding regarding its effectiveness and areas for improvement. Challenges such as inconsistencies in the quality and accessibility of the information provided, outdated or incomplete content, and insufficient engagement strategies can lead to reduced visibility of the college's offerings, misunderstandings about institutional policies, and a general decline in stakeholder trust and satisfaction. Concurrently, the Education Management Information System (EMIS), essential for the efficient management of the college's internal operations, faces concerns related to its functionality and impact on administrative processes. Issues including data integration challenges, system usability, and accuracy of information can impede effective decision-making and operational efficiency. Furthermore, there may be gaps in the system's ability to support real-time data analysis and reporting, which are crucial for strategic planning and resource allocation. Therefore, the problem is to assess how well the PIS and EMIS currently meet their respective needs, identify gaps in their effectiveness, and develop strategies to enhance their overall performance and user satisfaction.

The study is based on the following research questions:

1. How do faculties, staff and students' perceive the PIS and EMIS of the college?
2. How do faculties, staff and students' view the overall functioning of PIS and EMIS, including their effectiveness in relation to administrative and academic aspects of college?
3. What specific areas of concern or improvement do faculties, staff and students identify in PIS and EMIS?

1.3 Objectives of the Study

The general objective of the study is to explore the students' perception regarding the PIS and EMIS aspects of MBMC. The specific objectives are as follows:

- a. To identify the quality and adequacy of infrastructural aspects of the college,
- b. To access faculties, staff and students' perspectives on the effectiveness of teaching learning activities in the college and
- c. To explore the specific areas of concerns for the improvement of PIS and EMIS of the college.

1.4 Rationale of the Study

The comprehensive survey at MBMC to evaluate the perceptions and satisfaction levels of faculty, staff, and students regarding the college's Public Information System (PIS) and Education Management Information System (EMIS) has yet to be conducted. This gap highlights two significant issues that remain unaddressed. Firstly, there is a lack of systematic collection and analysis of feedback from faculty, staff, and students concerning the college's PIS and EMIS. Without this data, it is challenging to understand the current effectiveness of these systems and how they impact the users. Such feedback is crucial for identifying strengths and weaknesses, thereby guiding future improvements and ensuring that the systems meet the needs and expectations of all stakeholders. Secondly, there is a need to explore specific areas of concern related to the PIS and EMIS to facilitate targeted improvements. A detailed assessment can uncover particular issues affecting system performance and user satisfaction, such as functionality gaps, usability problems, or integration challenges. Addressing these concerns systematically can lead to more effective and user-friendly systems, ultimately enhancing the overall management and operational efficiency of the college. In summary, conducting a thorough survey is essential for gathering actionable insights and ensuring that the PIS and EMIS are effectively supporting the college's objectives and stakeholders' needs. This approach will help in making informed decisions for system enhancements and achieving greater alignment with the college's strategic goals.

1.5 Limitations of the Study

- The survey was purely conducted for academic purpose. The findings of the survey are aimed to be applied to enhance the effectiveness of PIS and EMIS College.
- The study followed descriptive research design and instrument of data collection is survey questionnaire. Majority of respondents were those who were present in the college during the data collection period. Absentee faculties, staff and students were not incorporated in this study. Thus, the result of the study could not be generalized.
- The study incorporated only two aspects that is access and impact of PIS and EMIS.

CHAPTER-II

METHODOLOGY

2.1 Research Design

The study employed the descriptive research design. Since descriptive analysis aims to identify and describe trends and variation in populations, create new measures of key phenomena, or describe samples in identifying causal effects, description plays a critical role in the scientific process in general and education research in particular (Loeb et al., 2017) it is appropriate for this study. The primary data was collected through survey using a quantitative mode of enquiry. The questionnaire was designed using Google forms and the link was sent to the respondents through the college's EMIS system. The questionnaire consisted of both structured and unstructured questions. A total of 81 faculties, staff and students of the college were the respondents. The sample of the questionnaire is available in Annex I.

2.2 Nature and Sources of Data

The study was largely based on primary data. However, some secondary data were also used to understand the research problems and issue and to conceptualize it. The primary data were collected from the survey questionnaire whereas secondary data were from the published books, articles and internet.

2.3 Mode of Inquiry

- a. **Survey:** The major data collection technique was comprehensive online survey. The survey questionnaire included awareness and usage, effectiveness and satisfaction, impact and improvement (See Annex I). The questionnaire included both structured questions with predefined response options (e.g., Multiple Choice questions, Likert scale questions) and unstructured questions that allowed students to provide open-ended responses. This combination of question types provided a comprehensive view of students' perceptions.
- b. **Distribution Method:** To reach the students, the survey link was distributed through the college's EMIS. This system likely ensured broad access to the questionnaire and facilitated efficient data collection.

2.4 Research Ethics

The research ethics which were considered during this research are as follow:

- The informed consent from the concerned authority of the college was taken before conducting research. The respondents were also duly informed about the purpose of the survey.
- The responses were kept confidential and anonymity was maintained.
- The questions in the survey were made neutral as possible and was not designed to lead or bias responses in terms of gender, culture, community, religion, identity and so on.
- Data were not manipulated while analyzing them and preparing report.

CHAPTER-III

DATA PRESENTATION AND ANALYSIS

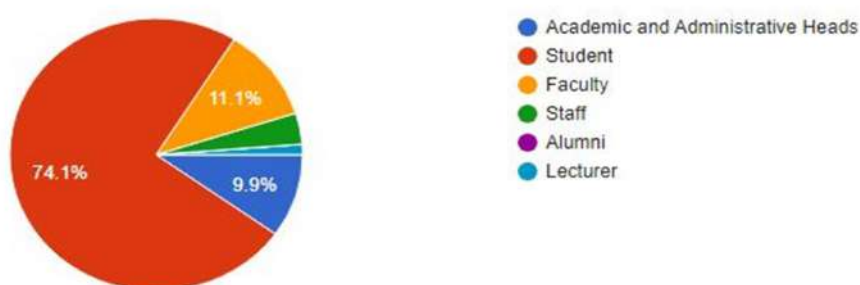
3.1 Demographic Characteristics of Respondents

3.1.1 Respondents' Representation on the Basis of their Role at College

The highest number of respondents were students (74.1%), and other respondents were academic and administrative heads (9.9%), faculty (11.1%), staff (3.7 %), and lecturer (1.2%). None of the Alumni took part in the survey.

Figure 1

Respondents' Representation on Role Basis in the College

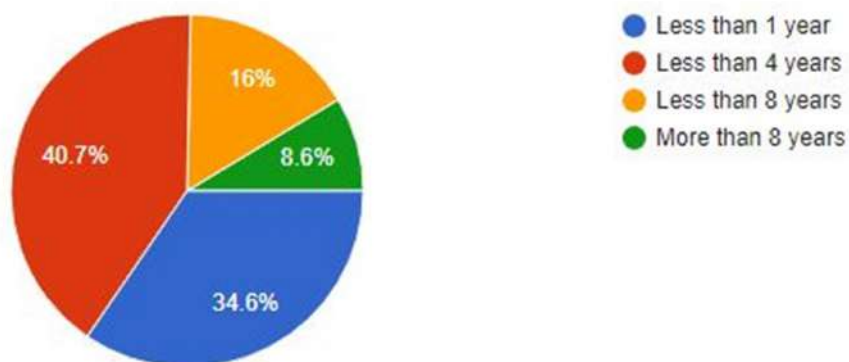


3.1.2 Respondents' Engagement at College on Time Basis

The survey had also taken into account the time duration of respondent's engagement with college. It was found that majority of the respondents (40.7%) are engaged at college for less than four year. Among the respondents, (34.6 %) are engaged at college for less than 1 year while (16 %) respondents have been engaged at college for less than 8 years and least percentage of respondents (8.6%) are engaged at college for more than 8 years.

Figure 2

Time Engagement Representation of the Respondents



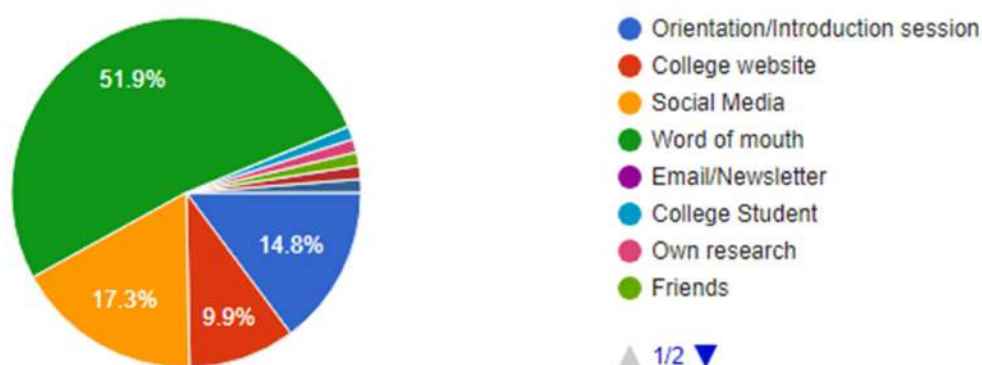
3.2 Awareness and Usage of Respondents

3.2.1 Respondents' Means of Initial Knowledge about the College

The survey showed that (51.9%) of respondents knew initially about the college through word of mouth. (17.3%) respondents knew through social media while (14.8 %) respondents knew about college through Orientation/Introduction session. (9.9 %) respondents acknowledged college through College website while percentage of respondents knowing college through friends, own research, college student is (1.2%).

Figure 3

Respondents' Means of Initial Knowledge About the College

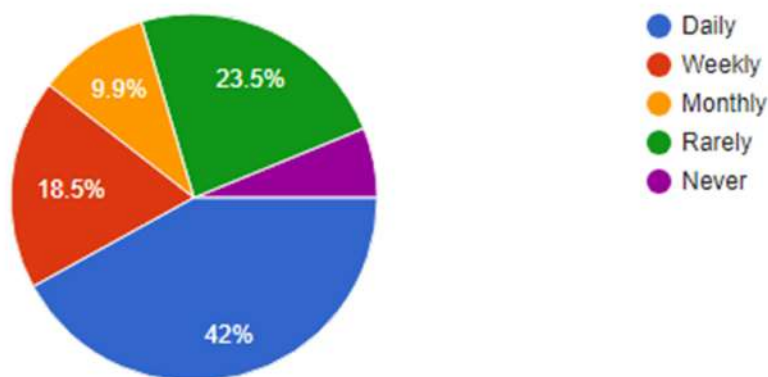


3.2.2 Frequency of Usage

According to the poll, (42%) of participants regularly use the PIS of the college. Only (18.5%) of the respondents reported using PIS once a week, compared to (23.5%), (9.9%), and (6.2%) who reported using them rarely, monthly, and never.

Figure 4

Respondents' Frequency of Usage

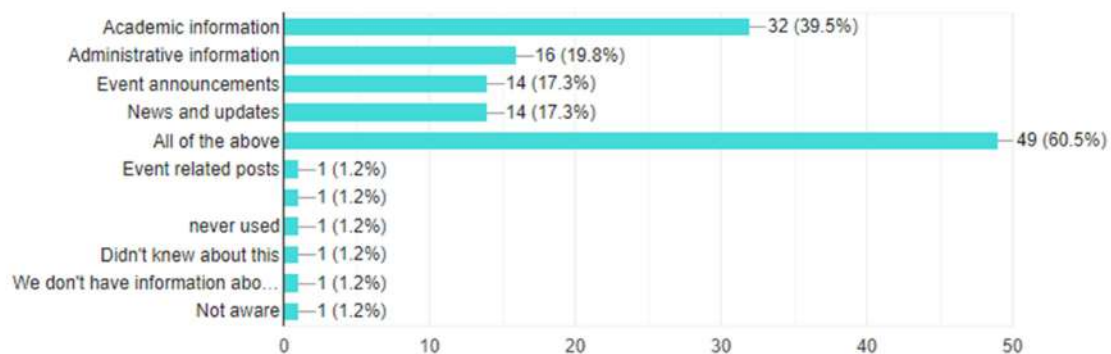


3.2.3 Primary Purpose of Usage of PIS

It was reported that (60.5%) of the respondents primarily used PIS for overall academic and administrative information, event announcement, news and updates. Out of these usage too academic information seems to have highest usage. While (6.1 %) respondents reported that they are unaware of the usage of system.

Figure 5

Respondents' Primary Purpose of Usage of PIS

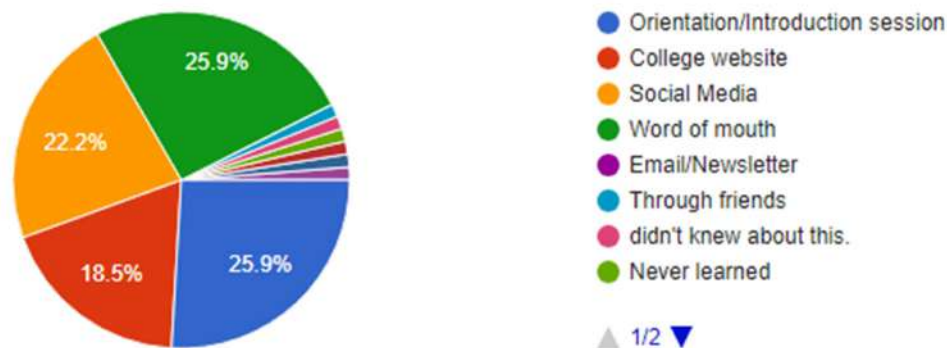


3.2.4 Knowledge of PIS

It was found that percentage of the respondents that knew about the system through orientation/introduction session and word of mouth was equal (25.9%). (22.2%) of the respondents were aware through social media. While (18.5%) respondents knew about system through college website.

Figure 6

Respondents' Knowledge on PIS of the College



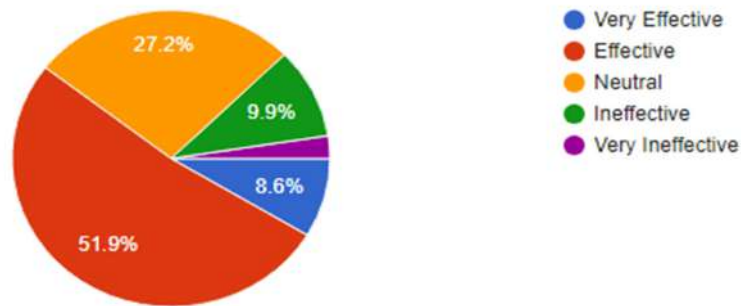
3.3 Effectiveness and Satisfaction

3.3.1 Effectiveness of the System

The poll shows that (51.9%) of the respondents found the system effective. (27.2 %) respondents stayed neutral. While (9.9%) respondent felt the system ineffective.

Figure 7

Respondents' View on Effectiveness of the System

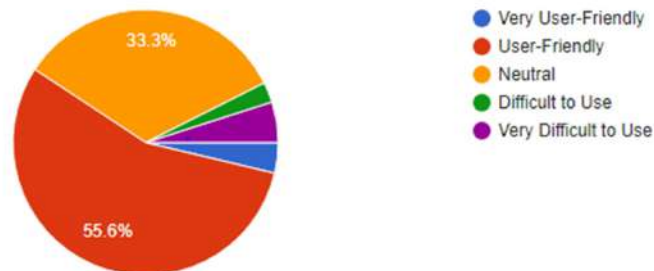


3.3.2 User Friendliness of the System

The data of the survey reflects that (55.6%) of the respondents found the system user friendly while (33.3%) of the respondents stayed neutral. (4.9%) respondents found it very difficult to use and (3.7%) respondent stated the system as very user friendly.

Figure 8

Respondents' View on User Friendliness of the System

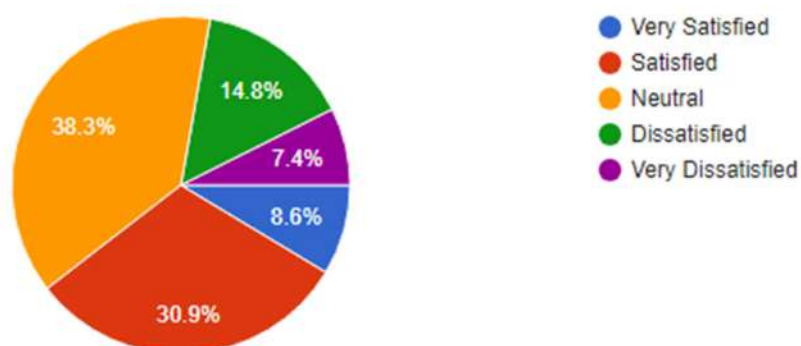


3.3.3 Timeliness of the System

It was found that major percentage of the participants (38.3%) stayed neutral in the question of timeliness of the information at system. (30.9%) respondent were satisfied while (14.8%) of respondent seemed unsatisfied.

Figure 9

Respondents' View on Timeliness of the System

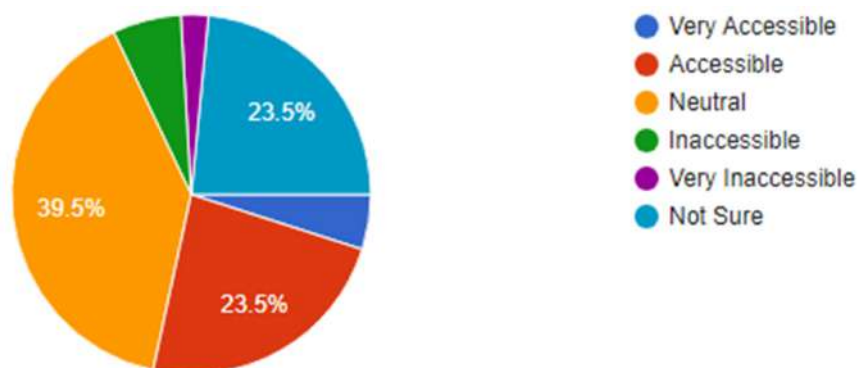


3.3.4 Accessibility to Disables

It was found that major percentage of the participants (39.5%) stayed neutral in the question of accessibility of the system to disables. (23.5%) respondent found accessible while (23.5%) of respondent voted 'Not Sure'.

Figure 10

Respondents' View on Accessibility to Disables

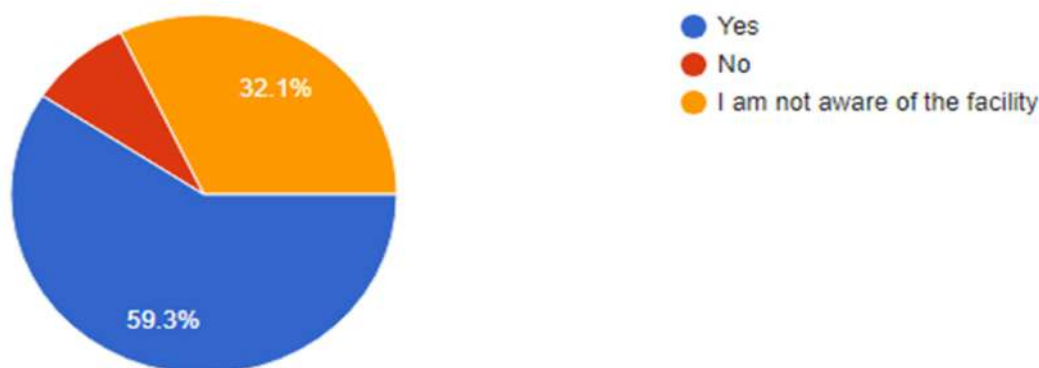


3.3.5 Room for Comments and FEEDBACKS

The data reflects that major percentage of respondents (59.3%) were aware of the means provided by the college to give feedbacks/ comments on publicly disseminated information to the users. (32.1%) respondent expressed their unawareness of the facility while (8.6%) percentage of respondent Voted 'No' to the means.

Figure 11

Respondents' View on room for Comments and Feedbacks



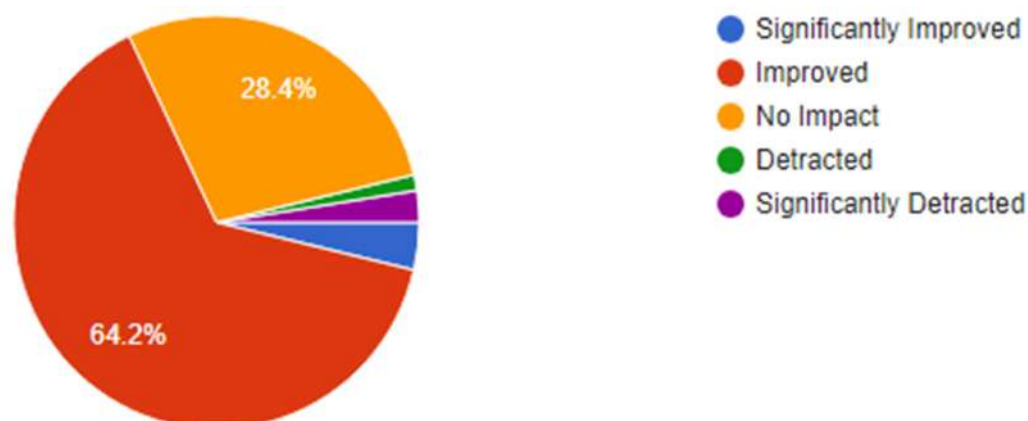
3.4 Impact and Improvement

3.4.1 Impact of PIS

It was found that (64.2%) of the respondents had been positively impacted with the system while (28.4%) respondent noted no impact on them.

Figure 12

Respondents' View on Impact of IPS



3.4.2 Most Valuable Feature

It was reported that most of the respondents were happy with timely and effective information flow through the system.

3.4.3 Challenges Encountered

It was reported that most of the respondents encountered the challenges of security and the issues of data filtration.

3.4.4 Suggestion

Respondents suggested to aware the stakeholders about the system, to speed up the software, assure security issues, timely and friendly flow of information and tech friendly updates, feedback responses.

3.4.5 Additional Features

Respondents suggested to add some of the features like emergency alert, feedback space and

3.4.6 Significant Effects on Academic Leaders

Respondents among academic leaders found the system significant as it helped them in better resource utilization, enhanced communication and effective availability of event resources, time and task management.

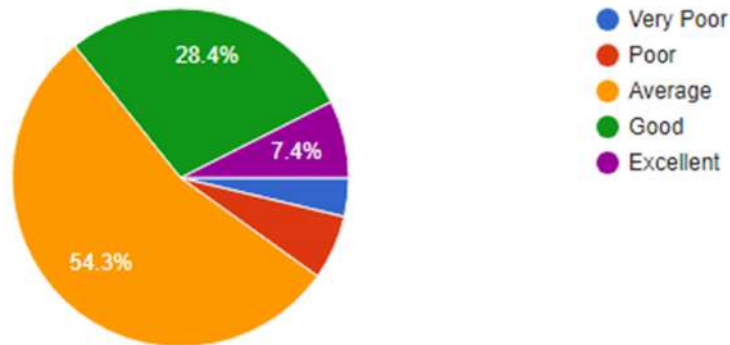
3.5 Impact Analysis of Educational Management Information System (EMIS)

3.5.1 User-Friendliness

It was found that (54.3%) of the respondent found the user-friendliness of EMIS. (28.4%) of the respondents found it good while responses as excellent, poor and very poor are (7.4%), (6.2%) and (3.7%) respectively.

Figure 13

Respondents' View on Impact of IPS

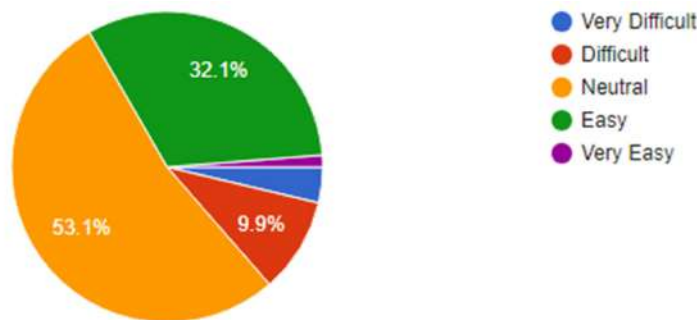


3.5.2 Navigate the EMIS Interface

The poll showed that (53.1%) of respondents stayed neutral at the question of navigation of interface of EMIS while (32.1%) found it Easy. Likely, the percentage of respondents finding it difficult is (9.9%).

Figure 14

Respondents' View on Impact of IPS

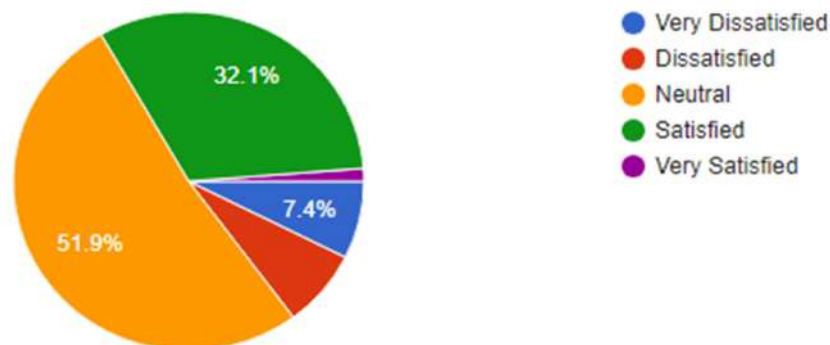


3.5.3 Training for the Use of EMIS

The survey reflected that majority percentage of respondents (53.1%) stayed neutral at the question of satisfaction level for the training provided for use of EMIS. (32.1%) of respondents were satisfied while (7.4%) of the respondents seem dissatisfied.

Figure 15

Respondents' View on Impact of IPS

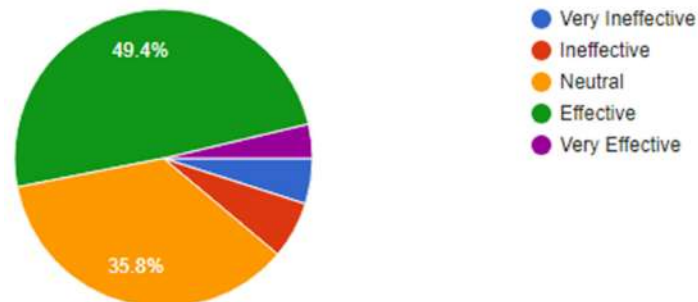


3.5.4 Effectiveness of EMIS in Academic and Administrative Information

The poll showed that (49.4%) of respondents found EMIS effective in academic and administrative information while (35.8%) stayed neutral. Likely, the percentage of respondents finding it ineffective is (6.2%).

Figure 16

Respondents' View on Impact of IPS

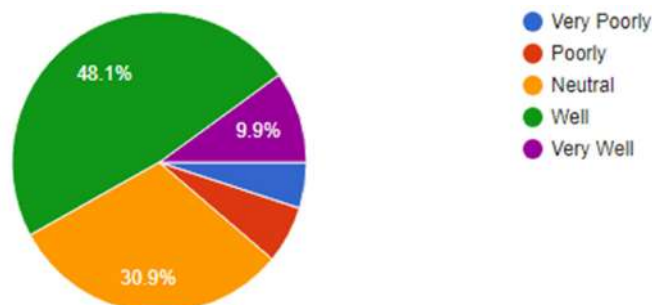


3.5.5 Support Academic and Administrative Tasks

It was found that (48.1%) of the respondent found EMIS supporting academic and administrative task at well level. (30.9%) of the respondents stayed neutral. 9.9% found it very well.

Figure 17

Respondents' View on Impact on Support academic and Administrative Tasks

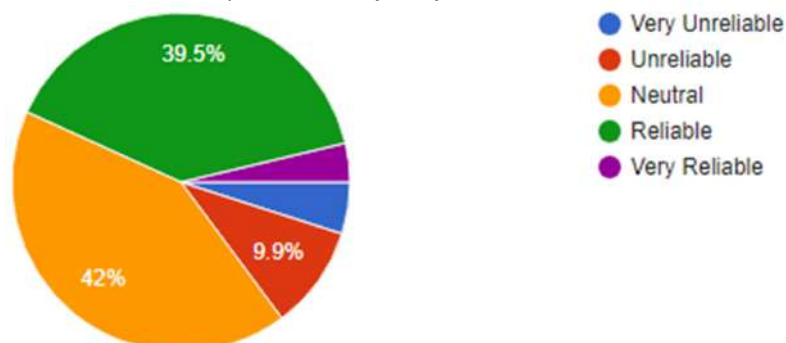


3.5.6 Reliability in Terms of Performance

The poll showed that (42 %) of respondents stayed neutral while (39.5%) found EMIS performance reliable and (9.9%) found it unreliable.

Figure 18

Respondents' View on Reliability in Terms of Performance

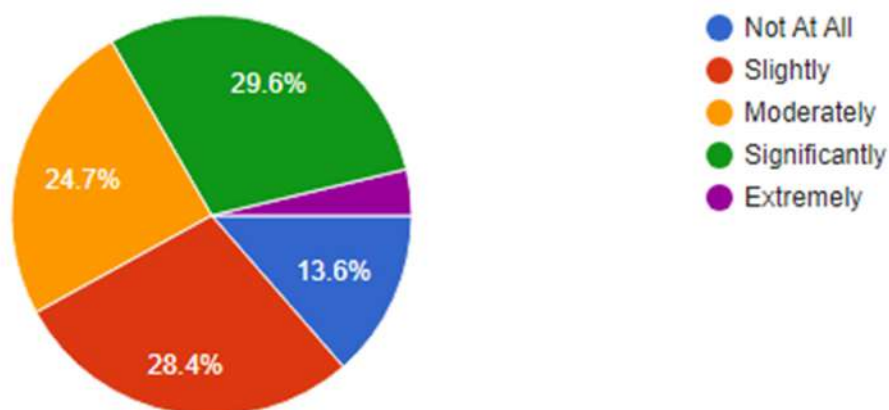


3.5.7 Improvement in the Efficiency of Academic and Administrative Record-Keeping

It was found that (29.6%) of the respondent found EMIS contributing in improving academic and administrative records significantly. (28.4%) of the respondents voted 'slightly', (24.7%) voted moderately while (13.6%) of the respondents felt is as 'Not at all'.

Figure 19

Respondents' View on Improvement in the Efficiency of Academic and Administrative Record-Keeping

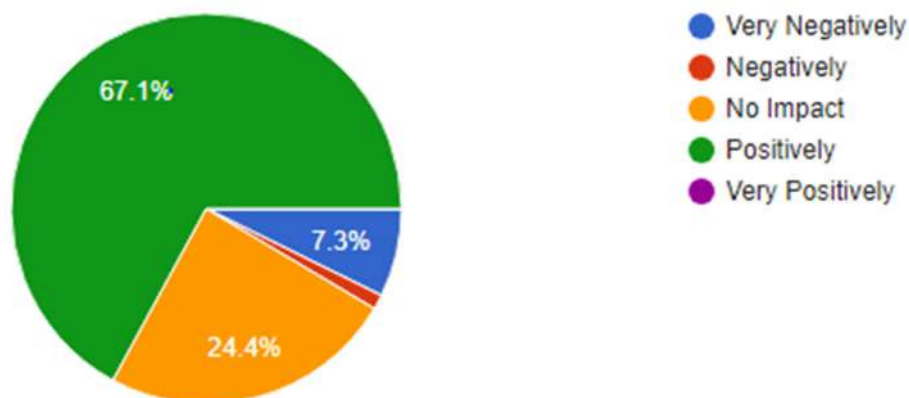


3.5.8 Impact of EMIS in Communication between Academic Leaders, Students, Faculty, and Administration.

The poll showed that (67.1 %) of respondents found EMIS impacting in communication between academic leaders, students, faculty, and administration in a positive way whereas (24.4%) found no impact and (7.3%) of them found very negative impact.

Figure 20

Respondents' View on Impact of EMIS in Communication between Academic Leaders, Students, Faculty, and Administration

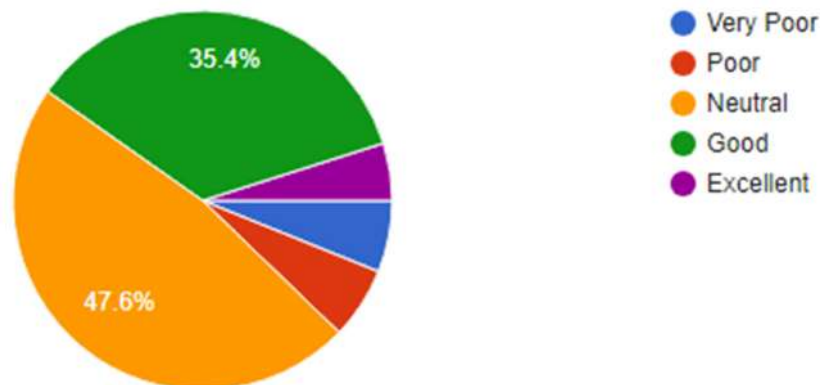


3.5.9 Technical Support Provided to EMIS

It was found that (47.6%) of the respondent stayed neutral at the question of technical support provided to EMIS while (35.4%) of the respondents found good technical support for the EMIS.

Figure 21

Respondents' View on Technical Support Provided to EMIS

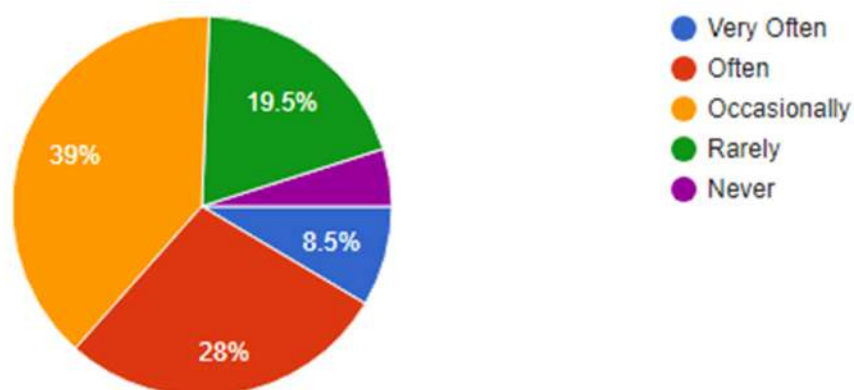


3.5.10 Technical Issues or Glitches with the EMIS

It was reported that (39%) of the responded faced technical issues or glitches with the EMIS occasionally, while (28%) of respondent faced it often and the percentage of facing it rarely is (19.5%) and (8.5%) of the responded had very often faced the issues.

Figure 22

Respondents' View on Technical Issues or Glitches with the EMIS

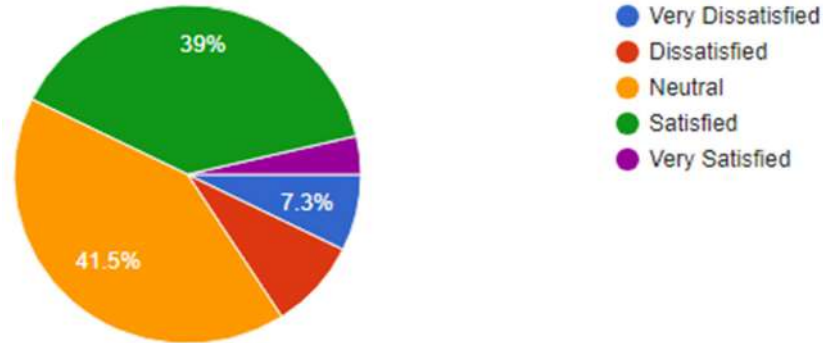


3.5.11 Satisfaction with EMIS

The poll showed that (41.5 %) of respondents stayed neutral with the satisfaction level of EMIS while (39%) of the respondent found it satisfied, (7.3%) found it very dissatisfied, (7%) found it dissatisfied and (3.7%) found it very satisfied.

Figure 23

Respondents' View on Satisfaction with EMIS



3.5.12 Features Missing

The respondents figure out the lack of feedback system, its unavailability at iOS, mobile optimization, real time data, customization options, payment integration, and user interface.

3.5.13 Suggestions

The respondents suggested to introducing notification system, arranging repository system for storing and accessing reading materials more conveniently, and personal space for notes and data store.

CHAPTER-IV

CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The survey conducted to assess the perception of stakeholders regarding the Public Information System (PIS) and the Education Management Information System (EMIS) at our college has yielded insightful feedback. Overall, the findings indicate that the current systems are satisfactory and have met the core needs of users to date. The positive reception underscores the effectiveness of the systems in managing and disseminating critical information. However, the survey also highlighted several areas for potential improvement. Respondents have expressed a desire for new features that could enhance functionality and user experience. These suggestions reflect a keen interest in advancing the systems to better support academic and administrative processes. Specifically, stakeholders have recommended incorporating additional tools and features that align with contemporary technological advancements and user expectations.

A significant theme emerging from the feedback is the need for comprehensive orientation and training. Many respondents emphasized that improved guidance on using the systems could substantially boost their effectiveness and user satisfaction. Ensuring that all users are well-acquainted with the systems' capabilities will be crucial in maximizing their benefits and efficiency.

In conclusion, while the PIS and EMIS are functioning well and are valued by the college community, there is a clear mandate for ongoing development. By addressing the proposed enhancements and investing in better training and support, the college can further optimize these systems to meet evolving needs and expectations. Moving forward, it will be essential to implement these improvements thoughtfully and systematically to ensure that the systems continue to serve the college effectively and efficiently.

4.2 Recommendations

4.2.1 Promotional Aspect

It is noteworthy that many respondents engage with the PIS and EMIS infrequently or only for specific purposes. This limited engagement suggests a need for increased awareness and utilization of the systems. To address this, it is highly recommended that the college invests in a robust promotional strategy to elevate the visibility and perceived value of these systems. Effective promotional activities could include targeted campaigns, success stories from current users, and demonstrations of the systems' benefits. By raising awareness and showcasing the practical advantages of the PIS and EMIS, the college can encourage broader and more frequent use among stakeholders.

4.2.2 Orientation and Training

A significant portion of the survey respondents indicated a lack of awareness regarding the features and functionalities of the PIS and EMIS. To bridge this gap, it is imperative for the college to organize comprehensive orientation and training programs. These programs should be designed to provide stakeholders with a clear understanding of how to effectively use the systems and leverage their full range of capabilities. Regular training sessions, hands-on workshops, and easily accessible online resources could significantly improve user competence and confidence, leading to a more productive use of the systems.

4.2.3 Data Security

Concerns regarding data confidentiality and security were also prominently voiced by respondents. The assurance of data security is crucial for maintaining stakeholder trust and ensuring compliance with privacy regulations. It is strongly recommended that the college adopts highly secure systems and implements robust security measures to protect sensitive information. Additionally, transparent communication about the steps taken to safeguard data and assurances of confidentiality will help reassure stakeholders and foster greater confidence in using the systems.

4.2.4 Addition features and advancement

Respondents have also suggested incorporating additional features and advancements to further enhance the PIS and EMIS. These suggestions include notification system, emergency alert, feedback spaces, integrating new tools, improving user interfaces, and expanding functionalities to better meet the evolving needs of the college community. Implementing these advancements will not only address current limitations but also position the systems as cutting-edge solutions that can adapt to future requirements. By prioritizing these enhancements, the college can ensure that the PIS and EMIS remain relevant, efficient, and aligned with the latest technological trends.

