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User Experience and Acceptability of the Learner Information System: Basis for Portal Enhancement

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ABSTRACT: This study evaluated users' experiences and acceptance of the Learner Information System (LIS) by applying the Technology Acceptance Model (TAM) to examine how perceived ease of use (PEOU) and perceived usefulness (PU) shape user attitudes and behavioral intentions. Using a structured questionnaire, data were collected from 78 respondents and analyzed through descriptive statistics, ordinal logistic regression ($\alpha = .05$), and the Friedman test. Results indicated that users generally perceived the LIS as easy to navigate and useful, which fostered positive attitudes and strong intentions for continued use. All demographic and access-related predictors—such as age, sex, device used, means of access, and internet provider—yielded non-significant effects, indicating that these factors do not meaningfully alter how users evaluate the system. However, descriptive findings revealed that smartphone users experienced slightly more difficulty compared with other device users, underscoring the need for improved mobile optimization. Users also cited issues such as system crashes, account-creation problems, limited offline features, and training gaps. To address these concerns, the study produced an LIS Portal Enhancement Plan, whose main contribution is a clear, actionable roadmap to improve system reliability, streamline workflows, and strengthen mobile-first usability to enhance overall user experience and long-term adoption.

KEYWORDS: Learners' Information System, Technology Acceptance Model, user acceptance, system usability, user experience, behavioral intention, educational information systems

I. INTRODUCTION

The Department of Education (DepEd) employs the Learners' Information System (LIS) as a centralized digital platform for managing enrollment and learner data across public and private schools in the Philippines. Introduced in 2011 and fully implemented nationwide by 2014, the LIS established the Learner Reference Number (LRN) and aims to enhance transparency, support data-driven decision-making, and improve educational planning. As a mandatory information system, its effectiveness largely depends on the acceptance and sustained use of teachers and school personnel.

Despite its widespread implementation, the LIS continues to face persistent challenges that affect both user acceptance and system performance. Technical issues such as login failures, enrollment errors, duplicate LRNs, system downtime, and slow response times are frequently reported, particularly during peak enrollment periods. In addition, data management concerns—including inaccurate records, inconsistencies in enrollment data, and difficulties in student transfers—further limit usability. These challenges are exacerbated by infrastructural constraints such as limited internet connectivity in rural areas, lack of offline functionality, insufficient user training, and restricted system access, ultimately reducing user confidence and satisfaction.

Previous studies support these observations. Matias and Timosan (2021) identified usability issues, poor system reliability, and inadequate technical support as key barriers to effective LIS utilization. Similarly, Bete and Collera (2025) highlighted infrastructure limitations and the persistent digital divide between urban and rural schools. While these studies provide valuable insights, there remains a need for localized evaluations of user experience to better understand how system quality influences user acceptance in specific institutional contexts.

Grounded in the Technology Acceptance Model (TAM), which posits that perceived usefulness and perceived ease of use significantly influence users' attitudes and behavioral intentions toward technology adoption, this study examines the user experience (UX) of the LIS at DepEd Lapu-Lapu City – Pajo National High School during the School Year 2025–2026. Specifically, it investigates how usability, functionality, and system performance affect user acceptance and aims to provide actionable recommendations to enhance system design, improve user satisfaction, and ensure long-term effectiveness.

II. METHODOLOGY

A. Research Design

This study employed a descriptive research design to evaluate the user acceptance and experience of the Learners' Information System (LIS). The design was appropriate for systematically describing respondents' perceptions, identifying challenges, and examining relationships among variables based on the Technology Acceptance Model (TAM). A structured survey questionnaire was used as the primary data collection instrument.

B. Study Setting

The study was conducted at Pajo National High School, a public secondary school located in Lapu-Lapu City, Philippines. The institution offers both Junior High School (Grades 7–10) and Senior High School (Grades 11–12) programs and utilizes the LIS as part of its administrative and instructional processes.

C. Participants

The participants of the study consisted of school personnel directly involved in the implementation and use of the LIS, including:

- School Heads
- School Registrar
- LIS Coordinator
- Class Advisers (Grades 7–12)

A purposive sampling technique was employed to ensure that only individuals with relevant experience in LIS usage were included. Total enumeration was applied for key personnel (School Heads, Registrar, and LIS Coordinator), while a proportion of teaching personnel was selected to represent both Junior and Senior High School levels.

D. Instrumentation

The research instrument was a structured questionnaire adapted from the Technology Acceptance Model (TAM) developed by Davis (1989), with modifications to align with the context of the LIS portal. The instrument measured the following constructs:

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)
- Attitude Toward Use
- Behavioral Intention

Responses were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

To ensure validity, the instrument underwent content validation by subject matter experts. Reliability testing was conducted using Cronbach's alpha coefficient to assess internal consistency (insert value if available, e.g., $\alpha \geq 0.70$ indicates acceptable reliability).

E. Data Collection Procedure

Prior to data collection, formal permission was obtained from the school administration. The validated questionnaire was then distributed to the identified respondents. Participants were given sufficient time (approximately two weeks) to complete the survey.

After retrieval, the responses were checked for completeness and accuracy. The collected data were then encoded and prepared for statistical analysis.

F. Data Analysis

The data were analyzed using both descriptive and inferential statistical techniques. Specifically:

- Frequency and percentage were used to describe the demographic profile of respondents.
- Mean and standard deviation were employed to assess the level of LIS acceptability across TAM constructs.
- Ordinal logistic regression was used to determine the influence of predictor variables—demographic factors, perceived ease of use (PEOU), and perceived usefulness (PU)—on ordinal outcome variables such as attitude toward use and behavioral intention. This method was appropriate due to the ordinal nature of the Likert-scale data.
- Friedman's test was applied to evaluate differences in the ranking of challenges encountered by users and to determine whether these differences were statistically significant.

All statistical analyses were conducted using statistical software (e.g., SPSS), with a significance level set at $\alpha = 0.05$.

G. Conceptual Framework

This study was guided by the Input–Process–Output (IPO) model, which structured the research flow.

- Input: Respondents' demographic characteristics, TAM constructs (PEOU, PU, attitude, behavioral intention), and challenges encountered in LIS usage
- Process: Data collection through survey questionnaires and statistical analysis using descriptive and inferential methods
- Output: Findings that informed the development of a proposed LIS Portal Enhancement Plan

H. Ethical Considerations

Ethical principles were strictly observed throughout the study. Participation was voluntary, and respondents were informed of the purpose of the research prior to data collection. Informed consent was obtained from all participants.

Confidentiality and anonymity were maintained by ensuring that individual responses were not identifiable. All collected data were used solely for research purposes and were securely handled throughout the study

III.RESULTS AND DISCUSSION

A. Respondent Characteristics

A total of 78 respondents participated in the study. Demographic variables included age, sex, device used for web access, and mode of internet connectivity.

TABLE 1: DEMOGRAPHIC INFORMATION of RESPONDENTS

Age	frequency (percentage, %)
30 years or younger	10 (12.8)
31 to 40 years	34 (43.6)
41 to 50 years	27 (34.6)
51 to 60 years	6 (7.7)
61 years or older	1 (1.3)
Sex	
Male	7 (9.0)
Female	71 (91.0)

As shown in Table 1, respondents were predominantly within the 31–40 age group (43.6%), followed by those aged 41–50 years (34.6%). The median age was 39 years, indicating a generally mid-career teaching population. The distribution was slightly positively skewed, with relatively fewer respondents aged above 50 years. The sample was largely female (91.0%), reflecting the gender composition typical of the teaching profession.

In terms of technology access (Table 2), laptops (83.3%) and smartphones (67.9%) were the most commonly used devices. Internet access was primarily through WiFi (82.1%) and mobile data (75.6%), while wired LAN was less frequently used (12.8%). These findings indicate a reliance on portable devices and wireless connectivity, which may influence expectations regarding system responsiveness and accessibility.

TABLE 2: DEVICE USED and WAYS to ACCESS the WEB

Device Used	Count (percentage, %)
PC	9 (9.0)
Laptop	65 (83.3)
Smartphone	53 (67.9)
Tablet	12 (15.4)
Ways to Access Web	
Wired LAN	10 (12.8)
WiFi	64 (82.1)
Mobile Data	59 (75.6)

This technological context aligns with prior research suggesting that users operating in mobile and bandwidth-variable environments tend to place greater importance on system efficiency, adaptability, and ease of use, particularly under fluctuating network conditions.

B. LIS Portal Acceptability

1.) Perceived Ease of Use (PEOU)

Table 3 presents the results for perceived ease of use of the LIS portal. The overall mean score (M = 4.21, SD = 0.65) indicates a high level of acceptability.

TABLE 3: PERCEIVED EASE of USE of the LIS PORTAL

	Indicator	Mean (SD)	Verbal Interpretation
1	It is easy to operate LIS portal and get it to do what I want it to do.	4.31 (0.77)	Highly Acceptable
2	The LIS portal uses understandable terms.	4.38 (0.78)	Highly Acceptable
3	I find that the user interface of the LIS portal is clear and easy to understand.	4.36 (0.8)	Highly Acceptable
4	It is easy to find information on the LIS portal.	4.4 (0.7)	Highly Acceptable
5	It is easy to use the LIS portal even without consulting others.	3.13 (1.35)	Neutral
6	It is easy to learn how to use the LIS portal making it worth the effort.	3.28 (1.37)	Neutral
7	The LIS portal allows easy return to previous display pages.	4 (0.89)	Acceptable
	Perceived Ease of Use	4.21 (0.65)	Highly Acceptable

Four indicators—ease of operation, clarity of interface, understandability of terms, and ease of finding information—were rated as highly acceptable, suggesting that respondents generally find the system intuitive and manageable for routine tasks. However, two indicators—independent use without assistance (M = 3.13) and ease of learning (M = 3.28)—were rated neutral.

These findings suggest that while the LIS is usable for experienced users, initial learning and self-directed use may present challenges, particularly for less experienced personnel. This highlights the importance of structured onboarding and user support mechanisms.

This pattern is consistent with existing usability research, which emphasizes that learnability and user guidance significantly influence perceived ease of use and overall user experience. Improvements in these areas may further strengthen user acceptance.

2.) Perceived Usefulness (PU)

Table 4 shows that perceived usefulness of the LIS portal is also high (M = 4.44, SD = 0.66).

TABLE 4: PERCEIVED USEFULNESS of the LIS

	Indicator	Mean (SD)	Verbal Interpretation
1	The LIS portal can increase the effectiveness of performing tasks.	4.17 (0.85)	Acceptable
2	The LIS portal supports the critical part of my tasks.	4.12 (0.81)	Acceptable
3	Using the LIS portal enables me to have more accurate information.	4.33 (0.69)	Highly Acceptable
4	Using the LIS portal gives me access to a lot of information.	4.33 (0.71)	Highly Acceptable
5	I depend on other Web sites (e.g. www.deped.gov.ph) for	3.94 (0.94)	Acceptable
6	The LIS portal provides thorough information for my purposes.	4.1 (0.8)	Acceptable
7	The advantages of LIS portal will outweigh the disadvantages.	4.1 (0.8)	Acceptable
8	Using LIS portal enables me to conduct clerical tasks or information seeking more quickly than using traditional methods.	4.26 (0.76)	Highly Acceptable
9	Overall, using LIS portal will be advantageous.	4.49 (0.64)	Highly Acceptable
	Perceived Usefulness	4.44 (0.66)	Highly Acceptable

Respondents strongly agreed that the system:

- Provides accurate information
- Enhances access to data
- Facilitates task completion

The highest-rated indicator was the overall advantage of using the LIS (M = 4.49). However, the statement regarding whether benefits outweigh disadvantages (M = 4.10) received comparatively lower agreement, indicating that some users still perceive certain operational burdens.

Overall, the results demonstrate that respondents recognize the LIS as a valuable and functional system, although improvements in efficiency and reliability may enhance perceived benefits further.

These findings support established information systems research, where perceived usefulness is closely associated with task efficiency, accuracy, and system reliability.

3.) Attitude Towards using the Portal (ATU)

As shown in Table 5, respondents exhibited a strongly favorable attitude toward the LIS portal (M = 4.50, SD = 0.66).

TABLE 5: ATTITUDE TOWARDS USING the LIS PORTAL

	Indicator	Mean (SD)	Verbal Interpretation
1	I think positively about using the LIS portal.	4.41 (0.68)	Strongly Favorable
2	The LIS portal is a positive tool for the school.	4.47 (0.66)	Strongly Favorable
3	Implementation of the LIS portal is a wise idea.	4.44 (0.7)	Strongly Favorable
4	Using the LIS portal has been a pleasant experience.	4.29 (0.79)	Strongly Favorable
	Attitude Towards Using LIS Portal	4.5 (0.66)	Strongly Favorable

All indicators were rated highly, particularly:

- Viewing LIS as a positive tool (M = 4.47)
- Perceiving its implementation as a wise decision (M = 4.44)

These findings indicate a broadly positive disposition toward the system, suggesting that users not only accept but also support its continued use.

Consistent with the Technology Acceptance Model (TAM), this positive attitude reflects the influence of both perceived ease of use and perceived usefulness, serving as a key determinant of behavioral intention.

4.) Behavioral Intention

Table 6 indicates that respondents demonstrate a very strong intention to use the LIS portal (M = 4.31, SD = 0.79).

TABLE 6: BEHAVIORAL INTENTION in USING the LIS PORTAL

	Indicator	Mean (SD)	Verbal Interpretation
1	Given that I had access to the LIS portal, I	4.31 (0.79)	Very Strong Intention
2	I will make the LIS portal my homepage.	3.83 (0.81)	Strong Intention

3	The LIS portal is worthy of using.	4.30 (0.79)	Very Strong Intention
4	I plan on using the LIS portal on a regular basis in the future.	4.01 (0.99)	Strong Intention
5	I plan on bookmarking the LIS portal.	3.91 (0.99)	Strong Intention
	Behavioral Intention	4.31 (0.79)	Very Strong Intention

Most respondents expressed:

- Willingness to continue using the system
- Intention to use it regularly in the future

Although the intention to designate the LIS as a homepage received relatively lower agreement (M = 3.83), overall behavioral intention remained high.

These results suggest that the LIS is firmly integrated into users' workflow, with sustained usage likely to continue.

Consistent with prior studies, strong behavioral intention is typically associated with systems that offer efficiency, ease of use, and reliable task support.

C. Influence of Demographic Variables

To measure and test the influence of respondent demographics against their Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), ordinal logistic regression was used. The open-source freeware Jamovi was used to run this tool. Level of significance in all tests are set at $\alpha = 0.05$.

Five demographic variables were identified by the researcher: age, sex, device used, means to access, and internet provider. Since true ages were collected, they were classified as covariates in this analysis while the rest are considered factors. For sex, male membership was considered (should female be desired, simply take the negative of β and z while the p-value remains the same).

Ordinal logistic regression models the influence of the respondents to these ordinal variables (PEOU and PU). Generally, three statistics are needed: the estimate coefficient β, its corresponding z-statistic, and the p-value. For the other variables, the estimates are to be interpreted with respect to membership to the given factor.

1.) Influence on Perceived Ease of Use

Ordinal logistic regression analysis (Table 7) revealed that none of the demographic variables significantly influenced PEOU ($p > 0.05$). Although minor variations in coefficients were observed—for example, slightly higher odds for laptop users and lower odds for smartphone users—these effects were not statistically significant.

The estimate coefficient for age is -0.0345 which is extremely minimal and negative. This means that as age increases, there is an extremely slight decrease in perceived ease of use. To illustrate this finding, suppose Teacher A is 10 years younger than Teacher B. Then Teacher A has about 30% higher odds of finding the LIS portal less easy to use. Running z-test for regression coefficients however show that there is not enough statistical evidence to say that this result is significant.

Males also tend to slightly have higher acceptability towards the LIS portal in terms of perceived ease of use. Males are about 22% more likely to accept easier use of the portal than females. However, z-test did not guarantee significant results.

In terms of using different devices, those who access the LIS portal through PCs have 70% higher odds of reporting easier use than PC non-users. Those who use laptop are even more likely to have higher levels of perceived ease of use as they are more than twice likely to accept it than those who do not use laptops. On the contrary, those who use smartphones likely find it more difficult to use the LIS than those who do not use smartphones. Smartphone users are only half as likely to accept the LIS Portal. The results for tablet users are negligible. This could mean that tablet users are just about equally likely to accept or not to accept the LIS portal in terms of ease of use. These coefficient estimates tell us that PCs and laptops are the better devices to use when accessing the LIS portal as smartphones tend to influence negative acceptability among users and as the findings for tablet users are inconclusive.

The influence of the means to access were also studied. For wired LAN users, the results are negligible. That means LAN users and non-users may find it equally easy to use. WiFi and mobile data users have 35% and 45%, respectively, higher odds to find it easy to use the LIS portal than non-users. Thus, there is more certainty that the LIS portal will be accepted by WiFi and mobile data users.

Among internet providers, PLDT-, Globe-, DITO-, and Converge-users all report lower likelihood of finding the use of the LIS portal easy. The only positive responses were from those who use "others" as internet providers as they are more than twice more likely to report higher levels of acceptability.

The model has a coefficient of variation of (McFadden's) $R^2 = 0.0381$ which is interpreted as a weak model fit by statistical standards. Furthermore, z-tests on these coefficient estimates all show p-values greater than 0.05. Therefore, this study is not able to conclude that these results are significant.

TABLE 7 : INFLUENCE of DEMOGRAPHICS to PEOU on the LIS

Predictor	Estimate (β)	Odds Factor	z	p
Age	-0.0345	0.9661	-1.0787	0.281
Sex (Male)	0.1953	1.2157	0.2213	0.825
Device Used				
PC	0.5301	1.6991	0.6259	0.531
Laptop	0.7491	2.1151	0.9690	0.333
Smartphone	-0.6752	0.5091	-0.8685	0.385
Tablet	-0.0269	0.9735	-0.0321	0.974
Means to Access				

Wired LAN	-0.0815	0.9217	-0.0881	0.930
WiFi	0.2965	1.3451	0.3706	0.711
Mobile	0.3693	1.4467	0.4437	0.657
Internet Provider				
PLDT	-1.1328	0.3221	-1.2486	0.212
Globe	-0.4603	0.6311	-0.5063	0.613
DITO	-0.7961	0.4511	-0.7859	0.432
Converge	-1.0427	0.3525	-1.0005	0.317
Others	0.7988	2.2229	1.0131	0.430

The model exhibited a weak fit (McFadden's $R^2 = 0.0381$), further indicating that demographic characteristics are not strong predictors of perceived ease of use.

These findings suggest that system design and usability features, rather than user demographics, play a more critical role in shaping perceptions of ease of use.

2.) Influence on Perceived Usefulness

Table 8 shows the influence of demographics on the PU of the LIS. For each respondent, the mean of the nine PU indicators were used and were recategorized according to the same scale in order to preserve ordinality. Results of ordinal logistic regression are as follows.

Older users are found to report lower levels of perceived usefulness. An odds factor of 0.9661 means that a teacher 10 years younger would report higher level of usefulness of the LIS portal with about 30% more likelihood. Furthermore, males are 22% more likely to find the LIS portal more useful than females.

For devices used, PC users are about 70% more likely to report higher usefulness of the LIS portal than non-users. The results are even better for laptop users who are twice more likely to say that the LIS portal is useful than laptop non-users. Smartphone users remain to report negatively as they are only half as likely to accept the LIS portal's usefulness. Results from tablet users remain inconclusive.

TABLE 8: INFLUENCE of DEMOGRAPHICS on PU of the LIS

Predictor	**Estimate (β)**	**Odds Factor**	***z***	***p***
Age	-0.0345	0.9661	-1.0794	0.280
Sex (Male)	0.1951	1.2154	0.2211	0.825
Device Used				
PC	0.5300	1.6989	0.6258	0.531
Laptop	0.7492	2.1153	0.9691	0.332
Smartphone	-0.6752	0.5091	-0.8684	0.385
Tablet	-0.0271	0.9733	-0.0324	0.974
Means to Access				
Wired	-0.0824	0.9209	-0.0891	0.929
WiFi	0.2965	1.3451	0.3706	0.711
Mobile	0.3692	1.4466	0.4436	0.657
Internet Provider				
PLDT	-1.1331	0.3559	-11.2489	0.212
Globe	-0.4601	0.6312	-0.5060	0.613
DITO	-0.7956	0.4513	-0.7854	0.432
Converge	-1.0424	0.3526	-1.0002	0.317
Others	0.7966	2.2180	0.7863	0.432

In terms of means of access, wired LAN users are very slightly less likely to report usefulness of the LIS portal. WiFi and mobile data users, on the other hand, have 35% and 45% higher odds of reporting higher levels of usefulness.

Users of all internet providers considered in this study report negatively on the usefulness of the LIS portal. Only those who are using "others" have more likelihood of saying higher levels of usability.

The estimated coefficient of determination for this model is about (McFadden's) $R^2 = 0.132$. This is a good fit with respect to the standards of statistical practice. Also, p-values corresponding to the coefficient estimates are all greater than $\alpha = 0.05$ which imply that these results are not statistically significant.

D. Technology Acceptance Model Relationships

1.) Influence on Attitude Toward Using

As presented in Table 9, both perceived ease of use ($\beta = 2.18$, $p < 0.001$) and perceived usefulness ($\beta = 1.54$, $p = 0.005$) were found to be significant predictors of attitude.

TABLE 9: INFLUENCE on ATTTUDE TOWARDS USING the LIS

Predictor	**Estimate (β)**	**Odds Factor**	***z***	***p***
Ease of Use	2.18	8.8463	4.46	< 0.001
Usefulness	1.54	4.6646	2.83	0.005

Respondents with higher perceived ease of use were nearly nine times more likely to report a more favorable attitude, while those with higher perceived usefulness were approximately five times more likely to do so. The model demonstrated a strong fit (McFadden's $R^2 = 0.375$).

This confirms core TAM assumptions that perceptions of usability and usefulness significantly shape user attitudes toward system adoption.

2.) Influence on Behavioral Intention

Table 10 indicates that attitude toward using the LIS significantly predicts behavioral intention ($\beta = 3.36$, $p < 0.001$).

TABLE 10: INFLUENCE on BEHAVIORAL INTENTION in USING the LIS

Predictor	Estimate (β)	Odds Factor	z	p
Attitude Towards Using	3.36	28.79	5.74	< 0.001

Respondents with more favorable attitudes were nearly 29 times more likely to exhibit stronger behavioral intention. The model showed an excellent fit (McFadden's $R^2 = 0.372$).

This finding strongly supports the TAM framework, demonstrating that positive user attitudes translate directly into sustained system use intentions.

3.) Challenges in Using the LIS

Table 12 presents the ranking of challenges encountered by users; and are arranged in order of severity based on their corresponding mean ranks. The mean ranks were used to determine the relative severity of the identified challenges, such that lower mean rank values indicate higher levels of severity. Mean ranks were not classified into predefined categories; instead, the challenges were interpreted based on their ordinal positions, wherein the level of severity was determined by their relative ranking. The most prominent issues were:

- Frequent system crashes and server errors
- Limited user account creation capability
- Lack of offline functionality

Other notable concerns included:

- Insufficient training
- Data entry errors and duplication
- Limited IT support

Friedman's test indicated a statistically significant difference in rankings ($\chi^2 = 55.7$, $p < 0.001$), although the effect size was small ($W = 0.079$), suggesting relatively minor differences among ranked challenges.

TABLE 11: CHALLENGES in USING the LIS

Mean Rank	Rank	Challenge
4.54	1	LIS crashes and server errors are frequently experienced especially during peak enrollment periods.
4.78	2	LIS cannot create new account for additional users of the system.
4.95	3	LIS lacks offline functionality since it requires internet access
4.96	4	Lack of printed or accessible manuals in using LIS effectively
5.06	5	Inadequate training like navigating the system and understanding the features of LIS
5.22	6	Mistakes in encoding and duplicate entries are common since learner's records are not properly updated especially when learners transfer between schools
5.72	7	LIS-related tasks are an additional workload leading to little time for proper data management.
6.10	8	Lack of dedicated IT personnel to assist LIS-related issues
6.46	9	LIS interface is complex and difficult to
7.21	10	Limited computers and digital tools; and unreliable internet necessary for LIS operations

These findings indicate that challenges are primarily technical and infrastructural, rather than user-related. Issues such as system instability, connectivity dependence, and limited support mechanisms hinder optimal use of the LIS.

Consistent with prior studies, effective system adoption depends not only on user acceptance but also on reliable infrastructure, adequate training, and accessible technical support.

E. Findings

The results indicate that the respondents were predominantly aged 31–40 years, with a median age of 39, and were largely female. In terms of technology use, most participants accessed the web using laptops and smartphones, primarily through Wi-Fi and mobile data connections, reflecting a reliance on portable devices and wireless connectivity.

In relation to system acceptance, the Learner Information System (LIS) demonstrated a high level of acceptability across all Technology Acceptance Model (TAM) constructs. Respondents rated the system highly in terms of perceived ease of use and perceived usefulness, exhibited a strongly favorable attitude, and expressed a very strong behavioral intention to continue using the system.

The analysis further revealed that demographic characteristics did not significantly influence either perceived ease of use or perceived usefulness. Variables such as age, sex, device type, mode of access, and internet provider yielded no statistically significant effects ($p > 0.05$), indicating that system acceptance is generally consistent across user groups. Although minor variations were observed—particularly slightly lower ratings among smartphone users—these patterns were not statistically significant and should be interpreted with caution. Nonetheless, they suggest potential usability considerations for mobile platforms.

Consistent with the Technology Acceptance Model, perceived ease of use and perceived usefulness were found to be significant predictors of attitude toward using the system, which in turn significantly influenced users' behavioral

intention. These relationships confirm that positive user perceptions of system usability and utility are critical drivers of sustained system adoption.

Despite the overall positive evaluation, respondents identified several operational challenges affecting LIS utilization. The most critical issues included frequent system crashes and server errors during peak enrollment periods, limitations in account creation, and the lack of offline functionality. Additional concerns involved insufficient training resources, data quality issues such as duplicate entries, increased workload pressures, limited technical support, interface complexity, and constraints in infrastructure such as device availability and internet reliability.

IV. CONCLUSIONS

This study concludes that the Learner Information System (LIS) is widely accepted and positively perceived by its users, as evidenced by consistently high ratings across all constructs of the Technology Acceptance Model (TAM). The absence of statistically significant relationships between demographic variables and user perceptions indicates that the system's effectiveness is broadly applicable across different user groups, supporting its role as a scalable and inclusive platform within the education sector.

The findings further confirm that perceived ease of use and perceived usefulness are key determinants of user attitude, which in turn strongly predicts behavioral intention to use the system. This provides empirical support for the core assumptions of TAM and underscores the importance of designing systems that are intuitive, efficient, and aligned with users' professional needs.

However, despite strong overall acceptance, the study identified several critical challenges that limit optimal system performance. Persistent issues such as system instability, limited offline capability, insufficient training, data management concerns, and inadequate technical support highlight areas requiring immediate attention. These challenges suggest that while the LIS is conceptually effective, its operational reliability and user support mechanisms require further improvement.

Addressing these issues through system optimization, enhanced infrastructure, improved user training, and strengthened technical support is essential to sustain user satisfaction, improve performance, and ensure the long-term effectiveness of the LIS. Continuous system refinement, particularly in relation to mobile accessibility and network resilience, will be critical in maintaining its relevance and usability in diverse educational contexts.

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