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Intelligent Futures Begin with Usable Systems: A Dual-Lens Analysis of Learning Management System Usability and Artificial Intelligence Adoption Readiness at the University of the Philippines Open University

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Abstract

As Artificial Intelligence (AI) becomes increasingly embedded in education, understanding user readiness is essential for successful integration. This study examines how perceived usability of the University of the Philippines Open University's learning management system, MyPortal, influences openness to AI-driven innovation. The analysis is guided by the proposed concept of User Readiness for Intelligent Innovation, which links system usability with user attitudes towards emerging intelligent technologies. A predominantly quantitative mixed-methods approach was used, drawing from 73 complete responses across undergraduate, graduate, and non-degree learners, supported by qualitative feedback on usability challenges. Usability was assessed using the System Usability Scale, while AI adoption readiness was measured using the General Attitudes Towards Artificial Intelligence Scale and future-oriented attitude items. The results show that System Usability Scale scores varied but averaged near the benchmark for acceptable usability. Correlation analyses reveal that higher usability ratings correspond with more positive attitudes towards AI in both education and society. In contrast, lower usability ratings are associated with increased scepticism, particularly concerning reliability, ethical use, and concerns about surveillance and control. Qualitative responses further indicate issues related to navigation, layout consistency, and overall interface clarity. These findings affirm that usability is not only a technical requirement but a strategic foundation for intelligent innovation. When systems operate intuitively and reliably, users are more confident and more receptive to AI-enhanced features. Based on these insights, the study offers strategic recommendations that include prioritising usability, integrating AI contextually, strengthening AI literacy, ensuring transparent communication,

and establishing continuous feedback mechanisms to support responsible and learner-centred transformation.

Keywords: artificial intelligence adoption readiness, artificial intelligence, learning management system usability, learning management system, open and distance e-learning, technology acceptance, trust in automation

1. Introduction

A learning management system (LMS) is a cornerstone of modern education, particularly in open and distance education (Chaw & Tang, 2018). Driven by rapid advancements in information and communication technologies, LMS platforms offer advanced functionalities that transform educational delivery. Students can seamlessly access lectures, submit assignments, complete assessments, engage in interactive discussions, and receive feedback – all within a unified digital space (Aldiab et al., 2019). MyPortal, a Moodle-based LMS, serves as a critical academic hub at the University of the Philippines Open University (UPOU), functioning as a virtual classroom and effectively facilitating the delivery of both undergraduate and graduate programs (Borromeo, 2013). The platform fosters collaborative learning environments and streamlines communication among students and faculty members, aligning with the university's goal of accessible and inclusive education. However, as digital technologies continue to evolve, so do learner expectations (Keane et al., 2023). Modern educational platforms are increasingly judged, not only by their technical reliability, but by their usability and capacity for innovation as well (Abuhlfaia & de Quincey, 2018). This shift is further compounded by the emergence of artificial intelligence (AI) and large language models (LLMs) in education. These technologies enable personalised learning and intelligent assistance, raising expectations for what an LMS should deliver (Alotaibi, 2024; Cabrera et al., 2025). Despite the expanding discourse on AI in education, most studies examine LMS usability or AI readiness separately, or discuss AI attitudes without grounding them in actual LMS use. However, LMS usability perceptions and AI adoption readiness are interconnected constructs that warrant joint examination, a relationship rarely explored in existing literature.

LMS usability perceptions reflect whether users find the LMS easy to use, effective, and satisfactory. These also surface existing frustrations and desired improvements. On the other hand, AI adoption readiness examines user attitudes towards AI and their expectations regarding innovative features within the LMS. It likewise reveals how open or sceptical users are about future AI-powered functionalities. Consequently, treating these constructs independently may limit the ability of educational institutions to make informed digital transformation decisions, a concern that is especially important for UPOU. Satisfaction with any current system features influences users' openness or resistance to adopting new technologies (Elias & Lubua, 2024). When users find a system intuitive and reliable, they are more likely to embrace advancements. Conversely, when usability concerns are unresolved, users may perceive such innovations as premature or even disruptive (Nayebi et al., 2023). Gaining this integrated understanding is essential for implementing AI-enhanced LMS platforms that are technically sound and aligned with user and institutional needs. Therefore, this study bridges this research gap by conducting a dual-lens analysis of LMS usability and AI adoption readiness. It formally defines user readiness for intelligent innovation as a broader construct or framework, offering a holistic view of users' current LMS experience and their preparedness to adopt intelligent innovations. The framework offers educational institutions valuable insights for digital transformation, from optimising core usability to fostering user-centred AI integration. Within the UPOU context, it specifically addresses the central question: "Is the MyPortal community of users ready, considering both their satisfaction with the present

and their openness to innovation in the future, for a smarter, AI-enhanced learning environment?"

1.1. Objectives of the Study

This study aims to understand user readiness for AI integration within UPOU's LMS, MyPortal, by examining perceptions of current usability and attitudes towards future innovations. Specifically, it pursues the following objectives:

i. To assess user perceptions of the current usability of MyPortal
ii. To examine user attitudes towards AI and its adoption
iii. To analyse the relationship between perceived usability of MyPortal and user openness to AI-driven innovations
iv. To formulate strategic recommendations for enhancing LMS platforms based on insights drawn from the above objectives

Addressing these objectives, the study poses the following research questions:

i. RQ1: What are users' perceptions of the current usability of MyPortal?
ii. RQ2: What are users' attitudes towards the adoption of AI?
iii. RQ3: Is there a relationship between MyPortal's perceived usability and users' openness to AI-driven innovations?
iv. RQ4: How can the study's findings inform strategic recommendations for improving LMS platforms in AI-integrated learning environments?

2. Literature Review

This review explores existing literature on system usability, AI adoption in education, and the emerging interplay between user experience and the uptake of AI-based systems.

2.1. Usability

Usability, a foundational element in the evaluation of information systems, pertains to the extent to which a system can be used by certain users to achieve specified goals effectively, efficiently, and satisfactorily (Al-Fraihat et al., 2020). Ferreira et al. (2023) affirmed that systems designed with usability in mind significantly improve user performance, reduce task completion time, and increase overall satisfaction. In the context of LMS, usability has been consistently linked to user satisfaction, learning engagement, and greater platform adoption (Al-Fraihat et al., 2020; Maslov et al., 2021). As LMS platforms become increasingly complex, the importance of usability continues to grow, particularly in blended or fully online learning models.

Importantly, ensuring high usability in LMS platforms is not merely a technical consideration; it is a pedagogical imperative. Without a strong foundation of usability, the integration of advanced features may exacerbate user frustration rather than enhancing educational value. Common usability issues, including poor navigation, cluttered interfaces, and limited accessibility, can hinder learning performance and contribute to cognitive overload (Ahmad Faudzi et al., 2023). In contrast, well-designed LMS support deeper learning by minimising friction in accessing content while facilitating interactions with peers and instructors (Al-Fraihat et al., 2020; Miya & Govender, 2022).

To systematically assess these usability dimensions, standardised tools have been developed. Among the most widely adopted is the System Usability Scale (SUS), an industry-standard instrument. Developed by Brooke (1996), it has been utilised to measure learner

interaction and user experience across multiple LMS platforms (Gumasing et al., 2023), demonstrating its continued relevance in assessing emerging digital learning technologies. Its versatility enables researchers to track usability trends over time and compare user experience across evolving educational platforms.

2.2. AI Adoption in Education

The integration of AI in education has opened up a range of pedagogical possibilities, such as personalised learning, intelligent tutoring systems, plagiarism detection, automated assessment, and student performance prediction (Holmes et al., 2019; Zawacki-Richter et al., 2019). Within LMS, AI can streamline routine tasks for instructors while providing students with tailored support based on their individual learning behaviours and performance indicators. Other than the technological capability, the adoption of AI in educational settings also depends heavily on users' attitudes and concerns.

While many acknowledge AI's promise in enhancing learning efficiency, unease arises when such systems are seen as replacing human teachers or making critical academic decisions (Luckin & Holmes, 2016). Learners and educators alike also expressed reservations about data privacy, reduced human interaction, and the potential for over-reliance on automation (Chan & Hu, 2023; Zhai et al., 2024). As such, successful AI integration requires more than just technical effectiveness; it must also build user trust while aligning with the values and expectations of the academic community.

To capture these nuanced perspectives, instruments like the General Attitudes Towards Artificial Intelligence Scale (GAAIS) have been proven essential. Developed by Schepman and Rodway (2020), GAAIS measures user acceptance, perceived benefits, and concerns surrounding AI technologies across various societal domains. Its versatility makes it particularly useful in contexts of higher education, where trust, transparency, and ethics play a central role in technology adoption.

2.3. User Trust

Research examining user trust in AI remains limited, despite its significant connection to prior experiences with system usability. Trust in AI-enabled systems is increasingly recognised as a critical determinant of adoption, with users more willing to engage with AI-driven features when the systems are intuitive, reliable, and user-friendly (Bach et al., 2024). Weitz et al. (2021) emphasised that technical and design factors, both key elements of usability, guide the strategic development of AI-integrated systems. Similarly, Yang and Wibowo (2022) demonstrated that trust in AI is closely linked to core usability aspects, which include ease of navigation and functional reliability. Building on this, Ahmadianmanzary and Ouhbi (2025) highlighted the significant influence of interface elements on user trust in generative AI platforms.

2.4. Synthesis

This paper posits that usability is not merely a technical concern, but also a strategic imperative in intelligent system design. Without a trustworthy, intuitive, and user-centred interface, even the most advanced AI features risk being underutilised, resisted, or entirely rejected. The implication is clear: institutions cannot simply "add AI" onto poorly designed systems and expect meaningful engagement. Instead, a phased approach that is grounded in usability best practices is essential to building trust, strengthening user confidence, and enabling readiness for AI-driven innovation, all of which ultimately contribute to higher adoption rates of AI in education settings.

3. Methodology

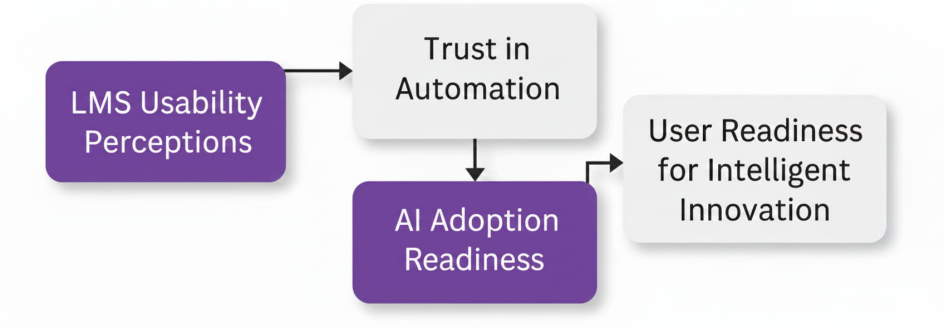
3.1. Guiding Framework

Despite the extensive studies on LMS usability and AI in education as separate domains, there remains a shortage of research investigating their overlap through the lens of user readiness. Specifically, few studies directly link user satisfaction with LMS features to their willingness to adopt AI, particularly within Open and Distance e-Learning (ODeL) environments. This gap limits our understanding of the extent to which usability issues influence the adoption of AI-driven innovations in digital learning platforms. Obtaining such insights is essential for implementing AI-enhanced LMS tools aligned with user and institutional needs.

Therefore, this study adopts a dual-lens framework that integrates two key constructs: LMS usability perceptions and AI adoption readiness, as previously outlined in the Introduction section of this paper. Usability reflects satisfaction with the current system features, while AI-related attitudes capture openness to future innovations. Together, these dimensions define user readiness for intelligent innovation (URII), a state in which learners, educators, and other stakeholders are both satisfied with existing technologies and receptive to emerging AI-driven features.

Figure 1

Conceptual Model of User Readiness for Intelligent Innovation



The URII conceptual model in Figure 1 indicates that perceived usability affects trust, which subsequently influences openness to AI adoption. Together, these interrelated factors then determine users' readiness to engage with intelligent features. The model draws on a blended framework combining the Technology Acceptance Model (TAM) by Davis (1989) and the Trust in Automation theory by Lee and See (2004).

While TAM highlights perceived usefulness and ease of use as key predictors of technology acceptance, it does not fully account for trust-related concerns that emerge when users interact with AI-driven systems. Trust in Automation theory addresses this by emphasising reliability, transparency, and prior user experience, which are critical to building trust in intelligent technologies, particularly in educational settings.

Furthermore, to strengthen the model's conceptual grounding, insights from TAM3 (Venkatesh & Bala, 2008) are also considered. TAM3 highlights the influence of system design features and perceived control on technology acceptance, aligning with the role of usability in shaping AI-readiness. Integrating these perspectives provides a focused understanding of user readiness by capturing both functional satisfaction (via TAM/TAM3) and confidence in system reliability (via Trust in Automation theory).

Thus, this paper examined the underexplored intersection of LMS usability and AI-related attitudes within ODeL contexts. It investigated how current user experiences shape readiness for innovation, positioning usability as both a technical foundation and a psychological gateway. The findings underscored the need for systems to be functional and trusted before AI features can be meaningfully and sustainably adopted. In other words, usability builds the trust necessary for adoption.

3.2. Research Design

This study employed a predominantly quantitative mixed-methods approach to address four research questions. RQ1 to RQ3 were explored primarily through quantitative analyses, drawing on the LMS Usability Assessment and the AI Adoption Readiness Assessment. The quantitative findings for RQ1 were complemented by qualitative insights derived from two open-ended items, thereby completing the mixed-methods design.

Meanwhile, RQ4 was addressed through a reflective synthesis, drawing from the findings of RQ1 to RQ3 to formulate strategic recommendations for LMS enhancement. While not empirical, this final component offered contextual insights that inform practical and policy-level implications. Seventy-three respondents participated in the study, comprising both current students and alumni from undergraduate and graduate programs at UPOU.

3.3. LMS Usability Assessment

This study employed SUS to evaluate the usability and acceptability of an LMS such as MyPortal. SUS is a widely adopted tool for assessing perceived usability across digital systems, including websites, applications, and learning platforms (Bangor et al., 2008). It consists of ten statements rated on a five-point Likert scale, capturing quantitative insights into usability dimensions such as ease of use, complexity, confidence, and learnability. The statements were as follows:

i. I think that I would like to use the system frequently.
ii. I found the system unnecessarily complex.
iii. I thought the system was easy to use.
iv. I think that I would need the support of a technical person to be able to use the system.
v. I found the various functions in the system were well-integrated.
vi. I thought there was too much inconsistency in the system.
vii. I would imagine that most people would learn to use the system very quickly.
viii. I found the system very cumbersome to use.
ix. I felt very confident using the system.
x. I needed to learn a lot of things before I could get going with the system.

To compute the SUS score, responses to odd-numbered items were adjusted by subtracting 1 (Score – 1), and even-numbered items by subtracting the score from 5 (5 – Score). The adjusted values were summed and multiplied by 2.5 to yield the final SUS score. While not expressed as a percentage, the SUS score functions as a standardised indicator of overall perceived usability. A global average of 68 is widely recognised as the benchmark for acceptable usability (Bangor et al., 2009); scores above 80 reflect excellent usability, while scores below 60 often signal usability concerns.

Although the SUS offers a standardised usability score, it does not reveal specific user challenges. To address this gap, two open-ended questions were included to capture more insights:

i. Are there any features or tools that you find most challenging to use or that have affected your progress?

ii. What are your suggestions to improve MyPortal?

3.4. AI Adoption Readiness Assessment

To assess user readiness for AI, this study utilised the AI Adoption Readiness Assessment. The instrument was primarily based on the validated GAAIS by Schepman and Rodway (2020), comprehensively capturing both positive and negative sentiments. Items were rated on a five-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree).

The GAAIS Positive Subscale assesses the degree of enthusiasm, optimism, and perceived benefits associated with AI. It includes the following items:

i. For routine transactions, I would rather interact with an AI system than with a human.
ii. AI can provide new economic opportunities for this country.
iii. AI systems can help people feel happier.
iv. I am impressed by what AI can do.
v. I am interested in using AI systems in my daily life.
vi. AI can have positive impacts on people's well-being.
vii. AI is exciting.
viii. An AI agent would be better than an employee in many routine jobs.
ix. There are many beneficial applications of AI.
x. AI systems can perform better than humans.
xi. Much of society will benefit from a future full of AI.
xii. I would like to use AI in my own job.

In contrast, the GAAIS Negative Subscale measures negative attitudes towards AI and reflects how wary or sceptical a person is about AI's expanding presence in society through the following items:

i. Organisations use AI unethically.
ii. I think AI systems make many errors.
iii. I find AI sinister.
iv. AI might take control of people.
v. I think AI is dangerous.
vi. I shiver with discomfort when I think about future uses of AI.
vii. People like me will suffer if AI is used more and more.
viii. AI is used to spy on people.

Moreover, this AI Adoption Readiness Assessment includes supplemental items reflecting future-oriented sentiments, rated also on a five-point Likert scale from 1 (strongly negative) to 5 (strongly positive):

i. How do you feel about the future of AI in general for the world?
ii. How do you feel about the future of AI in education?

3.5. Reliability of Instruments

The instruments used in this study are grounded in extensive validation within the existing literature. The SUS has consistently demonstrated strong reliability across a wide range of domains (Nault & Ruhi, 2023), with foundational studies affirming its construct validity and stable factor structure (Bangor et al., 2008; Lewis, 2018). Likewise, GAAIS was validated by Schepman and Rodway (2020), who reported high internal consistency for both its positive and negative subscales, as well as robust convergent and discriminant validity. Based on these established psychometric properties, these instruments were selected as the measures for this paper.

3.6. Correlation Analyses

To examine the potential relationship between users' current experiences with the LMS and their attitudes towards AI, a series of nonparametric correlation analyses was conducted. These analyses investigated whether perceived LMS usability is associated with openness to or scepticism towards AI. This step tested a key assumption of the study's framework, which argued that usability is the foundational precursor to intelligent innovation readiness.

Given the ordinal nature of Likert-scale data, Spearman's rank-order correlation (ρ) was selected as an appropriate method for assessing the strength and direction of monotonic relationships between variables. A significance level of $\alpha = 0.05$ was applied to determine statistical relevance. While Spearman's rho identifies meaningful associations, it does not imply causation. Therefore, the following four correlations were examined:

- SUS score and user optimism about "the future of AI in general for the world"
- SUS score and user optimism about "the future of AI in education"
- SUS score and the GAAIS Positive Subscale
- SUS score and the GAAIS Negative Subscale

These correlations helped determine whether users who reported higher satisfaction with LMS usability were also more open or cautious to AI integration.

4. Results and Discussion

4.1. Demographic Profile of Respondents

Table 1

Summary of Respondent Demographics

Attribute	Category	Frequency	Percentage (%)
Age	18–25	18	24.7
	26–35	22	30.1
	36–45	19	26.0
	46 and above	9	12.3
	Not specified	5	6.8
Gender	Female	37	50.7
	Male	36	49.3
Program Level	Undergraduate	22	30.1
	Graduate	40	54.8
	Non-degree	6	8.2
	Not specified	5	6.8
Role	Current Student	66	90.4
	Former Student	7	9.6

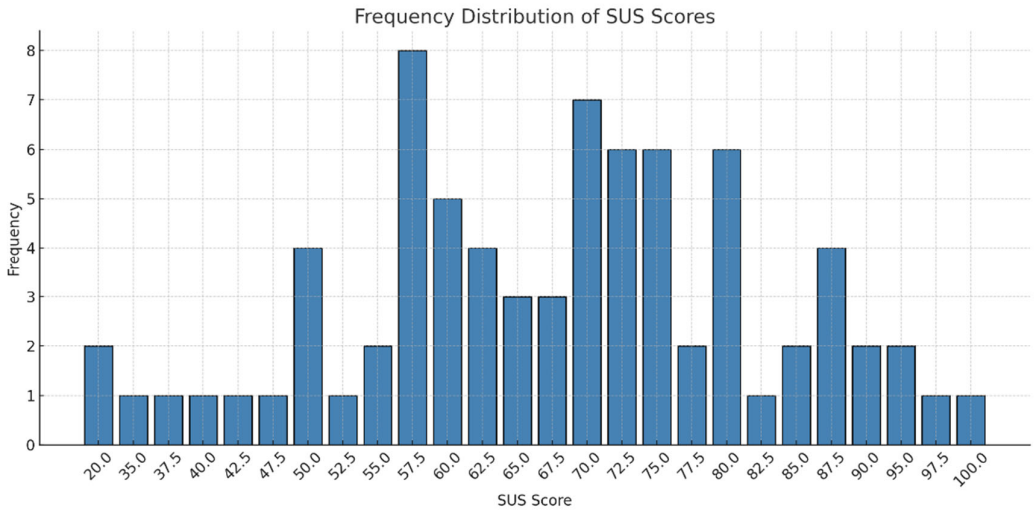
The demographic results in Table 1 indicated a diverse group of respondents representing various age brackets, academic levels, and roles within the university. The balanced gender distribution and the strong presence of learners in both undergraduate and graduate programs suggested that the dataset reflects a broad cross-section of the MyPortal user community. The inclusion of non-degree learners and former students further added depth to the sample, providing perspectives from individuals with varied levels of exposure to the LMS. Consequently, this varied demographic context helped frame the generalisation of the findings on usability perceptions and AI adoption readiness.

4.2. LMS Usability Perceptions

SUS scores from the respondents ranged from 20 to 100, with a mean of 67.43, positioning the overall usability rating close to the commonly referenced benchmark of 68. As shown in Figure 2, while some users rated the platform highly, many scores fell within the 50–60 range, with some scores even falling below 50. The results indicated a mixed perception of usability, suggesting that although the system was viewed as marginally acceptable, there is clear room for improvement.

Figure 2

Frequency Distribution of SUS Scores



This interpretation is supported by the qualitative feedback gathered. Many users found MyPortal functional; however, the clustering of scores near the acceptability threshold suggested that it did not exhibit the level of refinement expected of highly usable systems. Open-ended responses consistently pointed to recurring pain points, particularly the inefficient navigation structure that led to additional effort in accessing frequently used features – an issue closely tied to broader concerns in interface design. This finding reflected underlying limitations that hindered users' ability to interact efficiently and confidently with the platform.

One user shared, "It takes me several clicks to get where I need to go…." Another reported, "I have a hard time accessing my grades. For the life of me, I forget the route where to find it." Additional comments included, "Traversing course content can be pretty annoying…" and "The layout definitely needs work. The site is dated and not intuitive." These remarks not only underscored navigation challenges but also an outdated and unintuitive interface design. Though not severe enough to render the system unusable, they were impactful enough to undermine the overall user experience.

Similar concerns echoed in the second open-ended question, where users directly called for improvements in user interface personalisation and visual design clarity. Strikingly, none of the responses mentioned AI, suggesting that for most users, foundational usability improvements remained a more immediate concern than the addition of intelligent features. Taken together, these findings highlight the need for enhancements that move beyond basic functionality. Strengthening MyPortal's usability and overall user experience provides the groundwork crucial for any meaningful future innovation.

4.3. AI Adoption Readiness

The analysis of the GAAIS Positive Subscale, as shown in Table 2, revealed generally favourable attitudes towards AI. The highest-rated item was "I am impressed by what AI can do" (M = 3.94, SD = 0.82), suggesting strong appreciation for AI's capabilities. This statement was closely followed by "There are many beneficial applications of AI" (M = 3.86, SD = 0.72) and "AI is exciting" (M = 3.68, SD = 0.75), indicating high levels of curiosity and perceived value. These responses reflected a strong interest in AI's potential with a generally positive view of its capabilities and societal impact.

Table 2

Descriptive Statistics for the GAAIS Positive Subscale

Item Statement	Mean	SD
I am impressed by what AI can do.	3.94	0.82
There are many beneficial applications of AI.	3.86	0.72
AI is exciting.	3.68	0.75
AI can provide new economic opportunities for the country.	3.57	0.89
AI can have positive impacts on people's well-being.	3.49	0.72
I would like to use AI in my own job.	3.18	1.08
I am interested in using AI systems in my daily life.	3.09	0.96
Much of society will benefit from a future full of AI.	3.05	1.07
AI systems can help people feel happier.	2.87	0.94
For routine transactions, I would rather interact with an AI system than with a human.	2.52	1.12
An AI agent would be better than an employee in many routine jobs.	2.35	1.11
AI systems can perform better than humans.	2.29	0.97

However, the lowest-rated items showed a different pattern. Statements such as "AI systems can perform better than humans" (M = 2.29), "An AI agent would be better than an employee in many routine jobs" (M = 2.35), and "For routine transactions, I would rather interact with an AI system than with a human" (M = 2.52) garnered the weakest support. These findings implied a notable reluctance to accept AI in roles traditionally filled by humans, particularly in personal or transactional contexts, reflecting a nuanced form of AI optimism. While participants held a broadly positive view of AI's potential, impact, and societal benefits, they remained cautious about its direct, personal integration, especially where it might replace human interaction or judgment. This highlights the need for trust-sensitive designs in future AI implementations.

Subsequently, the GAAIS Negative Subscale (Table 3) revealed a complex pattern of user concerns about AI. The most strongly endorsed item, "I think AI systems make many errors" (M = 3.32, SD = 0.80), established perceived unreliability as a key issue. This was followed by "Organisations use AI unethically" (M = 3.04, SD = 0.82) and "AI is used to spy on people" (M = 3.00), reflecting moderate concerns over ethical misuse and surveillance. In contrast, items expressing more dystopian fears – such as "AI is dangerous" (M = 2.92, SD = 1.05), "AI might take control of people" (M = 2.65, SD = 1.05), and "I shiver with discomfort when I think about future uses of AI" (M = 2.68, SD = 1.02) – illustrated lower ratings with greater variability. This suggests that while some users harbour apprehensions, overall sentiment was not marked by widespread fear or alarm.

Table 3

Descriptive Statistics for the GAAIS Negative Subscale

Item Statement	Mean	SD
I think AI systems make many errors.	3.32	0.80
Organisations use AI unethically.	3.04	0.82
AI is used to spy on people.	3.00	0.96
I think AI is dangerous.	2.92	1.05
I find AI sinister.	2.68	0.83
I shiver with discomfort when I think about future uses of AI.	2.68	1.02
People like me will suffer if AI is used more and more.	2.68	1.04
AI might take control of people.	2.65	1.05

Therefore, it was concluded that user scepticism was shaped more by practical concerns such as reliability, ethical use, and user control than by dystopian fears. This underscores the need to prioritise AI oversight and transparency in educational contexts, where accountability and credibility are essential for responsible integration and sustained learner confidence.

4.4. Correlation and Empirical Validation

The results of the nonparametric correlation analyses provided strong empirical support for the study's central proposition: system usability is a foundational condition for fostering trust in and readiness for intelligent innovation. The four key correlations were summarised below:

A moderate positive correlation was observed between SUS scores and "How do you feel about the future of AI in education?" ($\rho = 0.322$, $p = 0.004$), suggesting that users who found MyPortal more usable were more optimistic about the role of AI in educational settings. A moderate positive correlation was also exhibited between SUS scores and "How do you feel about the future of AI in general for the world?" ($\rho = 0.278$, $p = 0.014$), indicating that positive usability perceptions were also associated with more hopeful views of AI in society at large.

Meanwhile, a moderate negative correlation emerged between SUS scores and the GAAIS Negative Subscale ($\rho = –0.340$, $p = 0.002$), showing that users who rated the LMS as less usable were more likely to hold sceptical views of AI (e.g., concerns about control, ethical misuse, or surveillance). The final correlation between SUS scores and the GAAIS Positive Subscale ($\rho = 0.336$, $p = 0.003$) was moderately positive, indicating that users with more favourable perceptions of MyPortal's usability were also inclined to express greater interest, excitement, and optimism about the benefits of AI.

Overall, these findings reveal a consistent pattern: positive usability experiences correspond with greater openness to AI, emphasising the vital role of usability in shaping user confidence towards AI integration. Consequently, the results highlight practical steps that institutions can consider when preparing for more advanced learning technologies. The next section outlines strategic implications and recommendations to guide UPOU and similar institutions as they transition towards AI-enabled learning environments.

4.5. Implications and Recommendations

Based on the evidence presented in the preceding sections, several strategic actions are recommended to support UPOU and similar institutions in preparing for and guiding AI-enabled learning.

4.5.1. Prioritise Usability as a Strategic Imperative

A usable LMS is the foundation for innovation. Institutions must regularly refine the consistency, navigation, accessibility, and responsiveness of their digital platforms. Usability is not just a technical concern; it is essential for building trust and enabling meaningful AI adoption. Layering AI onto outdated or inefficient systems risks deepening usability issues and eroding learner confidence.

4.5.2. Adopt a Contextual Integration of AI Features

AI tools such as chatbots, intelligent feedback systems, and predictive analytics should be introduced incrementally and purposefully. Rather than treating AI as a plug-and-play solution, universities must align its implementation with real user needs and specific learning contexts. This approach ensures that AI enhances, rather than disrupts, the educational experience.

4.5.3. *Build AI Literacy Across Stakeholders*

AI readiness requires informed confidence. Universities should provide targeted training for students, faculty, and staff to build foundational AI literacy, dispel misconceptions, strengthen technical skills, and promote ethical awareness. This ensures responsible and empowered use across the institution.

4.5.4. Ensure Transparent Communication on AI Use

To address concerns about surveillance, errors, and control, institutions must clearly communicate what AI features are implemented, how data is managed, and where human oversight applies. Transparency should be embedded as a core design principle to reduce uncertainty, which subsequently supports informed consent, strengthens institutional accountability, and fosters user trust in AI-enabled systems.

4.5.5. Establish Continuous Feedback Mechanisms

AI integration should be an ongoing, user-informed process. Therefore, institutions must create channels for learners and educators, enabling them to regularly provide feedback on usability and AI features. Involving users in co-design not only improves system relevance and responsiveness but also fosters a sense of ownership, trust, and shared responsibility in innovation.

5. Conclusion

Answering the central question – “Is the MyPortal community of users ready, both in terms of satisfaction with the present and openness to future innovation, for a smarter, AI-enhanced learning environment?” – the findings revealed a nuanced yet encouraging outlook. The community was broadly receptive to AI integration, but this openness was conditional: users expected such enhancements to simplify and enrich their learning experience, not complicate it. At UPOU, learners who found the LMS more functional and user-friendly were significantly more receptive to AI-driven features. High usability fosters trust, optimism, and engagement, whereas usability challenges may heighten scepticism even towards well-intentioned technological advancements. Crucially, readiness for AI is shaped not by hype or fear, but by day-to-day interaction with existing systems. Hence, usability must be seen not as a static technical goal but as a strategic foundation for innovation. Future research should involve a broader lens by including faculty, staff, and administrators to develop a more holistic

understanding of institutional readiness. Longitudinal studies could examine how user perceptions shift as AI features are implemented, while comparative research between open and traditional institutions could contextualise UPOU's findings within the broader higher education landscape.

5.1. Limitations

This study acknowledges certain limitations. The sample size of 73 respondents provided useful insights, yet it may limit how far the findings can be generalised to the wider population. As participation was voluntary, the sample reflected individuals who were available and willing to take part, which may introduce self-selection bias. Furthermore, the demographic profile indicated uneven representation across programme levels, potentially influencing the distribution of experiences and attitudes captured in the findings. Future studies with larger and more diverse samples would improve representativeness and strengthen generalisability.

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