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Evaluating Students Acceptance of Zep Quiz as a Digital Student Assessment Tool Using the Technology Acceptance Model

Desi Innanti Wicaya Ningrum
Teknologi Rekayasa Perangkat Lunak Politeknik Sawungggalih Aji
Jl. Wismoaji no. 8 Kutoarjo, Purworejo
Email: wicayaningrum.dinnanti@gmail.com

Abstract

The rapid expansion of digital education has driven the adoption of gamified assessment platforms to enhance student engagement and participation. This study evaluates students' acceptance of Zep Quiz as a digital assessment tool by applying the Technology Acceptance Model (TAM). Utilizing a quantitative, cross-sectional design, data were gathered from a purposive sample of 9 digital business students who are village administrative officer using a structured 15-item questionnaire. Instrument quality was confirmed via validity ($r > 0.666$) and reliability ($\alpha = 0.945$) tests. Multiple and curve-estimation regression analyses were employed to evaluate the structural hypotheses. The results indicate that both Perceived Usefulness ($p = 0.041$) and Perceived Ease of Use ($p = 0.044$) exert positive and significant effects on Behavioral Intention, explaining 47.2% and 46.3% of the variance, respectively. However, Perceived Ease of Use did not significantly influence Perceived Usefulness ($p = 0.934$). These findings show that while ease of use and usefulness independently drive students to adopt a platform, adult learners judge instructional value separately from platform simplicity.

Keywords: *Technology Acceptance Model (TAM), Zep Quiz, Gamified Assessment, Behavioral Intention, Digital Learning.*

1. Introduction

The rapid expansion of digital technology in the 21st century has significantly transformed education, particularly English language teaching, by modernizing assessment methods and shifting the focus toward the ongoing learning process. This technological growth is essential for meeting contemporary demands, as modern education extends beyond traditional teaching to create engaging, interactive, and meaningful learning experiences for students (R. S. Ramadhan et al., 2025; Triyana & Sutarna, 2026). Furthermore, technology supports educators by providing innovative tools to deliver lessons and evaluate student outcomes (Izmala et al., 2025).

By offering easier access to information, fostering learner collaboration, and enabling objective outcome assessments, technology has become crucial for enhancing educational effectiveness and quality (Musrifa & Ayu, 2026). Transcending simple entertainment, gamification has expanded into education as an effective strategy that integrates game elements to boost student enthusiasm and prevent classroom boredom (Martí-parreño et al., 2016; Septrianto et al., 2026). A primary example of this pedagogical innovation is gamified assessment, which incorporates game mechanics such as points, badges, leader boards, and immediate feedback into learning activities. Gamified assessment transforms previously passive learning environments into enjoyable, interactive, and meaningful experiences, thereby significantly increasing student motivation and active participation (Sylvia et al., 2026). Driven by this rapid growth, alternative approaches continue to emerge, with Zep Quiz serving as an interactive online application that empowers teachers to design dynamic and formative evaluations.

Zep Quiz was created by ZEP, a South Korean collaboration between NAVER Z and Supercat that began development in 2021, and officially launched in the Indonesian education market around March 2025 (Ratnawati &

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Wahyuni, 2026). Equipped with features such as adventure modes, customizable avatars, background themes, real-time challenges, and dynamic question types, it fosters an interactive and engaging learning environment for students. Such features in Zep Quiz may reduce test anxiety and encourage students to participate actively and enjoyable learning. Furthermore, digital quizzes can provide instant feedback, which is an essential factor in supporting students' learning progress (Wang & Tahir, 2020). According to (Zahra et al., 2026) As a web-based assessment platform, Zep Quiz integrates gamification elements with interactive features and visually engaging interfaces, offering a promising approach to transform traditional, anxiety-inducing evaluations into active, motivating experiences. Zep Quiz functions as a game-based student response system that temporarily turns the classroom into an interactive game show. Accessible via various Information and Communication Technology (ICT) devices; such as laptops and smartphones; it facilitates student learning by offering multiplayer activities that make exercises more interactive and enjoyable, including adventure-style question answering that distinguishes it from other educational gaming platforms.

To gain a deeper understanding of the impact of these digital tools, several previous studies have investigated the effectiveness of gamified platforms and quiz-based applications in language learning. Supporting this perspective, (Nisdayanti et al., 2025) found that fifth-grade students taught using the ZEP Quiz application demonstrated significantly higher learning outcomes compared to those taught through conventional methods. Expanding on this, (Septrianto et al., 2026) evaluated eleventh-grade students' responses to the platform in teaching reading comprehension, concluding that Zep Quiz creates an engaging and supportive learning environment that enhances student participation in vocational education.

Previous research further highlights the distinct benefits of gamified quiz platforms in language education. While (Karika & Budiarta, 2025) observed that Quizizz successfully drives student engagement despite occasional connectivity hurdles, (Putra et al., 2025) established its specific efficacy in expanding vocabulary acquisition through Zep Quiz. Furthermore (Wulandari et al., 2026) investigates tenth-grade students' perceptions of using Zep Quiz for English language learning at SMAN 1 Tanjungpinang based on Technology Acceptance Model (TAM) to measure students' perception of perceived of use, however the research did not reveal about the students' intention in using Zep Quiz. TAM only adopted as source for questionnaire.

Although previous studies have widely acknowledged the general effectiveness of Zep Quiz and similar platforms in boosting motivation and vocabulary, limited empirical research has quantitatively examined how students' perceptions of ease of use and usefulness influence their intention to adopt Zep Quiz as a formal assessment tool. To address this critical gap, this present study positions itself to bridge these limitations by rigorously evaluating the implementation and acceptance of Zep Quiz through the Technology Acceptance Model (TAM). TAM proposed by Davis has been used in various research studies and, as a result, has become quite significant in the literature on technology acceptance.

Furthermore, systematic reviews confirm that the TAM is one of the most widely adopted and effective theoretical frameworks for studying educational technology (Lee et al., 2003). Designed to explain and predict technology usage, TAM investigates how individual perceptions directly influence users' intentions and actual use of information technology across various organizational and cultural contexts. It has been validated and empirically tested in explaining the use of a system in terms of usefulness and ease of use (Andry et al., 2023). Therefore, the TAM model can be used to predict the acceptance and use of an application. (Rafique et al., 2020) demonstrated that Perceived Usefulness (PU)

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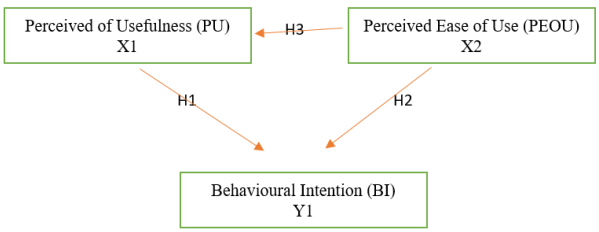
and Perceived Ease of Use (PEOU) significantly and directly predict users' intention to adopt the Mobile Library Application (MLA). (Nursanti et al., 2025) posits that perceived ease of use and perceived usefulness are critical factors in determining whether individuals will accept and use new technologies. According to Davis, as cited in (Ramadhani & Monalisa, 2017), TAM has three main constructs: namely, perceived usefulness, perceived ease of use, and acceptance of information technology which are central to predicting users' attitudes toward IT acceptance. In this study used three indicators they are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) to measure the behavioral intention in use Zep Quiz as assessment.

The primary research questions guiding this study are as follows:

1. Does Perceived Usefulness have a positive effect on Behavioral Intention regarding the use of Zep Quiz as a student assessment tool?
2. Does Perceived Ease of Use have a positive effect on Behavioral Intention regarding the use of Zep Quiz as a student assessment tool?
3. Does Perceived Ease of Use have a positive effect on Perceived Usefulness of the Zep Quiz as a student assessment tool?

These questions aim to empirically evaluate the student acceptance of Zep Quiz as a digital student assessment tool by analyzing the structural relationships between perceived usefulness, perceived ease of use, and behavioral intention using the Technology Acceptance Model (TAM). The model of the relationships among the variables tested in this study is shown in the illustration in Figure 1.

Figure 1. *Technology Acceptance Model*



2. Method

Research Design

The research design of this study is a quantitative approach, cross-sectional survey-based design focused on causal-explanatory analysis. Quantitative relies on numerical data collected by questionnaires and evaluates them using statistical analysis to test hypotheses. Cross-Sectional Survey: relies on data that is gathered from respondents at a single point in time to assess their perceptions and intentions. The causal explanatory goes beyond simple description to explain cause-and-effect (causal) relationships-specifically, how independent variables (Perceived Usefulness and Perceived Ease of Use) influence the dependent variable (Behavioral Intention) using the Technology Acceptance Model.

Population and Sample

The population of this research are students of Business Digital 2B in academic year of 2025/2026 which consist of 9 students who are village officials. The population chosen because they undergo learning activities mostly in online learning activities. This condition causes the lecturer chose online interactive quiz as assessment tool for them. Sample is a purposive sampling technique that select respondents with direct experience using the platform.

Research Instrument and Measurement

The primary data for this study were collected using a structured questionnaire administered to students following their classroom interaction with Zep Quiz. All questionnaire items were adapted from established literature regarding the Technology Acceptance Model (TAM) and tailored specifically to the context of digital student assessments.

Likert scale was employed to measure responses, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument comprises three core latent constructs

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measured by a total of 15 indicators: 1. Perceived Usefulness (PU): Evaluated using 5 items (PU1 to PU5) measuring the extent to which students believe that utilizing Zep Quiz enhances their learning comprehension, assessment efficiency, and academic productivity; 2. Perceived Ease of Use (PEOU): Evaluated using 5 items (PEOU1 to PEOU5) assessing students' perceptions regarding the platform's interface navigability, learnability, operational flexibility, and overall freedom from technical friction; 3.Behavioral Intention (BI): Evaluated using 5 items (BI1 to BI5) capturing students' willingness and readiness to reuse Zep Quiz and recommend it for future academic assessments.

Data Collection Procedures

The questionnaire is distributed digitally to respondents by google form after their interaction with Zep Quiz.

Table 1. The *Questionnaire of Instrument*

Variable	Indicators	Code
Perceived Usefulness **X1**	Using Zep Quiz as an assessment helps me understand the subject matter better.	PU 1
	Zep Quiz makes the evaluation or quiz process in class more interesting and less boring.	PU 2
	Using Zep Quiz improves my productivity and efficiency in completing assessment tasks.	PU 3
	The features in Zep Quiz greatly support my needs in the learning and evaluation process.	PU 4
	Overall, I feel Zep Quiz is a very useful assessment tool for my academic activities.	PU 5
Perceived Ease of Use **X2**	I find it easy to learn and operate Zep Quiz since the first time I used it.	PEOU 1
	The navigation, menus, and interface on Zep Quiz are very clear and easy to understand.	PEOU 2
	I rarely experience technical issues or confusion when doing quizzes via Zep Quiz.	PEOU 3
	Interacting and entering answers in Zep Quiz feels flexible and does not require much physical/mental effort.	PEOU 4
	Overall, I feel Zep Quiz is a very user-friendly assessment platform.	PEOU 5
Behavioral Intention Y	I intend to use Zep Quiz again if the teacher uses it for assessments in the future.	BI 1
	I would recommend classmates to use Zep Quiz in learning activities or quizzes.	BI 2
	I am motivated to explore further the features available in Zep Quiz.	BI 3
	If given a choice, I would prefer assessments using Zep Quiz compared to conventional methods (such as paper or other less interactive platforms).	BI 4
	I plan to remain active in using Zep Quiz if it is applied routinely in class.	BI 5

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Data Analysis Techniques

1. Instrument Quality Testing (Prerequisite Tests)

Before testing the hypotheses, the quality of the research instrument was evaluated to ensure validity and reliability:

Validity Test was evaluated using Pearson's Product-Moment Correlation. An item is considered valid if the calculated significance value (Sig. 2-tailed) is less than 0.05 ($p < 0.05$) when correlated with the total score of its respective construct.

Reliability Test was measured using Cronbach's Alpha coefficient. A construct is deemed reliable and consistent if its Cronbach's Alpha value exceeds the threshold of 0.60 (> 0.60).

2. Classical Assumption Test

Prior to running the multiple linear regression analysis for Hypotheses 1 and 2, classical assumption tests were performed:

Normality Test: Assessed using the Kolmogorov-Smirnov test to verify whether the residual data were normally distributed ($p > 0.05$).

Multicollinearity Test: Evaluated through the Tolerance value (> 0.10) and Variance Inflation Factor (VIF) (< 10) to ensure the absence of high inter-correlations among the independent variables.

Linearity Test: Checked to confirm a linear relationship between the independent variables and the dependent variable.

3. Hypotheses Testing

To evaluate the three proposed hypotheses, the following SPSS analytical tools were implemented:

Multiple Linear Regression Analysis (H1 and H2): Conducted to examine the simultaneous and partial effects of Perceived Usefulness (X1) and Perceived Ease of Use (X2) on Behavioral Intention (Y). The evaluation relies on the t-statistic and the significance value (p-value). A hypothesis is accepted if the significance value is less than 0.05 ($p < 0.05$). Additionally, the coefficient of determination (R^2) was analyzed to determine the percentage of variance in Behavioral Intention explained by the independent variables.

Simple Linear Regression Analysis (H3): Conducted to test the direct effect of Perceived Ease of Use (X2) on Perceived Usefulness (X1). Similar to the multiple regression, significance is established if the p-value is less than 0.05 ($p < 0.05$).

3. Result and Discussion

Instrument Quality Testing (Prerequisite Tests)

This test was use to check the validity and reliability of the elements of each question in questionnaire. Construct validity was assessed using Pearson correlation analysis. With a sample size of N = 9 at the 5% significance level, the critical threshold was set at r = 0.666. Items yielding a calculated coefficient below this threshold were deemed invalid, whereas those exceeding 0.666 were accepted as valid. The correlation outcomes generated via SPSS are detailed on table 2:

Table 2. *Validity Test*

Code	R*Correlation*	Rvalue Sig 5% (N=9)	Result
PU 1	0.948	0.666	Valid
PU 2	0.796	0.666	Valid
PU 3	0.978	0.666	Valid
PU 4	0.978	0.666	Valid
PU 5	0.978	0.666	Valid
PEOU 1	0.839	0.666	Valid
PEOU 2	0.948	0.666	Valid
PEOU 3	0.923	0.666	Valid
PEOU 4	0.901	0.666	Valid
PEOU 5	0.808	0.666	Valid
BI 1	0.880	0.666	Valid
BI 2	0.989	0.666	Valid
BI 3	0.989	0.666	Valid
BI 4	0.989	0.666	Valid
BI 5	0.989	0.666	Valid

As presented in Table 2, all 15 questionnaire items across the three constructs: Perceived Usefulness (PU 1–5), Perceived Ease of Use (PEOU 1–5), and Behavioral Intention (BI 1–5) yielded calculated Pearson correlation coefficients (r) exceeding the critical threshold of 0.666 at the 5%

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significance level (N = 9). The correlation values ranged from 0.796 to 0.989. Consequently, all items demonstrated acceptable construct validity.

Reliability testing was conducted using the Cronbach's alpha coefficient. This test was conducted as a one-time measurement using SPSS software. If the reliability test yields a Cronbach's Alpha coefficient (α) > 0.70. As (Palapa & Saifudin, 2021) notes, valid items ensure that the indicators form a reliable, credible measure of the variable. Because all items passed the validity test, the instrument is proven trustworthy for further analysis. Conversely, if the Cronbach's alpha coefficient (α) is < 0.70, the questionnaire items used to measure a variable are considered unreliable. A good variable must be both valid and reliable.

Picture 1. *All Variable Reliability Scale*

Cronbach's Alpha	N of Items
.945	15

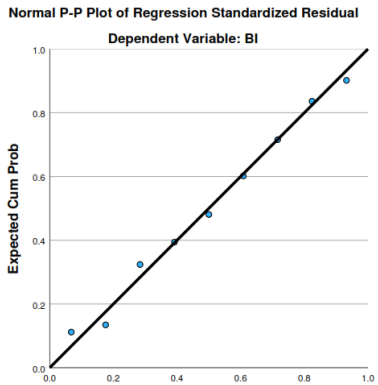
Picture 1 showed that all items of variable in questionnaire are reliable, the Cronbach's alpha coefficient (α) reaches 0.945 or more than 0.70 thus it categorized as reliable.

Classical Assumption Test

a. Normality Test

The normality of the data can be assessed using a histogram and a normal P-P plot generated with SPSS. If the histogram shows a distribution pattern that does not deviate significantly, the data is considered to be normally distributed; and if the points on the normal P-P plot approach the diagonal line, it can be concluded that the data is normally distributed (Palapa 2021).

Picture 2. *P-P Plot Regression*



The P-P plot shows that the points form a pattern close to the diagonal line, which means the data is normally distributed.

The researcher also used Kolmogorov-Smirnov test to verify whether the residual data were normally distributed (p > 0.05) that can be seen on Picture 3.

Picture 3. Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			9
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		1.03251548
Most Extreme Differences	Absolute		.121
	Positive		.121
	Negative		-.093
Test Statistic			.121
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.965
	99% Confidence Interval	Lower Bound	.961
		Upper Bound	.970

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

The SPSS output indicates an Asymp. Sig. (2-tailed) value of 0.200, which exceeds the 0.05 significance threshold. Therefore, the data is normally distributed

b. Multicollinearity Test

Multicollinearity occurs when two or more independent variables in a multiple linear regression model are highly correlated with one another. According to Nufal (2025), this overlap in shared variance makes it difficult to isolate and determine the distinct, individual effect of each predictor on the dependent variable. It can be evaluated through the Tolerance value (> 0.10) and Variance

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Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	PU	.999	1.001
	PEOU	.999	1.001

a. Dependent Variable: BI

Picture 4 shows that the Tolerance values for PU (0.99) and PEOU (0.99) are all greater than 0.10, and the VIF values of PU (1.01) and PEOU (1.01) those are all below 10. Therefore, it can be concluded that no multicollinearity exists among the independent variables, confirming that the regression model is statistically stable and reliable for hypothesis testing.

c. Linearity Test

Linearity is a fundamental assumption in regression analysis, which assumes a linear relationship between the independent and dependent variables (Naufal et al., 2025). The criterions of linearity are Sig. Deviation from Linearity > 0.05 and F value < F table. The linearity of Perceived of Use and Behavioral Intention is presented on Picture 5.

Picure 5. *Linearity of Perceived of Usefulness and Behavioural Intention*

ANOVA Table

			Sum of Squares	df	Mean Square
BI * PU	Between Groups	(Combined)	53.556	4	13.389
		Linearity	42.925	1	42.925
		Deviation from Linearity	10.631	3	3.544
	Within Groups		37.333	4	9.333
	Total		90.889	8	

ANOVA Table

			F	Sig.
BI * PU	Between Groups	(Combined)	1.435	.368
		Linearity	4.599	.099
		Deviation from Linearity	.380	.774
	Within Groups			
	Total			

Based on the linearity test results, the relationship between the variables is confirmed to be linear. This is supported by two main findings: first, the significance value of 0.774 is greater than the 0.05 threshold (0.774 > 0.05); and second, the calculated F-value of 0.380 is lower than the critical F-table value of 6.59 (determined using 3 and 4 degrees of freedom at a 5% significance level), indicating that there is no significant deviation from linearity.

Further, the linearity of Perceived of Ease of and Behavioral Intention is presented on Picture 6.

Picture 6. *Linearity of Perceived of Ease of Use ana Behavioural Intention*

ANOVA Table

			Sum of Squares	df	Mean Square
BI * PEOU	Between Groups	(Combined)	90.222	6	15.037
		Linearity	42.095	1	42.095
		Deviation from Linearity	48.127	5	9.625
	Within Groups		.667	2	.333
	Total		90.889	8	

ANOVA Table

			F	Sig.
BI * PEOU	Between Groups	(Combined)	45.111	.022
		Linearity	126.286	.008
		Deviation from Linearity	28.876	.034
	Within Groups			
	Total			

The results confirm that the relationship between the variables is not linear. This conclusion is supported by two main findings from the test for linearity: first, the significance value of 0.034 is less than the standard threshold of 0.05 ($p < 0.05$); and second, the calculated F-value of 28.876 exceeds the critical F-table value of 19.33 (28.876> 19.33, determined using 5 and 2 degrees of freedom at a 5% significance level). Together, these metrics indicate a statistically significant deviation from linearity.

Because real-world data often contain curvilinear or complex interactions, linear models can yield misleading results. Consequently, techniques like scatterplots, residual plots, and curve estimation are utilized to assess data linearity (Martaningtyas et al., 2024).

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Based on the result and the data above, the researcher changed to measure linearity into curve estimation.

The regression analysis evaluating the effect of Perceived Ease of Use (PEOU) on the dependent variable indicates a statistically significant relationship ($F = 6.039$, $p = 0.044$). The correlation coefficient (R) of 0.681 demonstrates a strong positive linear association between PEOU and the dependent variable. Furthermore, the coefficient of determination (R^2) is 0.463, meaning that PEOU explains 46.3% of the variance in the dependent variable, while the remaining variance is attributed to other factors outside this model.

Picture 7. *Curve Estimation of Perceive of Usefulness and Behavioral Intention*

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.681	.463	.386	2.640

The independent variable is PEOU.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	42.095	1	42.095	6.039	.044
Residual	48.793	7	6.970		
Total	90.889	8			

The independent variable is PEOU.

The last, the linearity of Perceived of Ease of and Perceived of Use is shown on Picture 8.

Picture 8. *The linearity of Perceived of Ease of and Perceived of Use*

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
PU * PEOU	Between Groups	(Combined)	73.556	6	12.259	36.778	.027
		Linearity	.077	1	.077	.232	.677
		Deviation from Linearity	73.478	5	14.696	44.087	.022
	Within Groups		.667	2	.333		
	Total		74.222	8			

The assumption of linearity fails. The Deviation from Linearity is statistically significant ($p < 0.05$), proving that the relationship between PU and PEOU is non-linear (curved) rather than a simple straight line. Consequently, a standard linear regression model is insufficient, necessitating the application of a non-linear or alternative curve estimation model to accurately capture the pattern of the data. The researcher measured the non-linearity by use curve fit, the component that the researcher used were linear, logarithmic, quadratic, and exponential. The data displayed on table 3.

Table 3. *Non-Linear Measure*

Criterions	R Square	F	Sig.
Linear	0.01	0.07	0.934
Algorithmic	0.00	0.00	0.995
Quadratic	0.106	0.35	0.714
Exponential	0.03	0.22	0.885

Based on the table 3 the researcher concluded that:

Significance Levels (Sig.): All models yield significance values far above the standard threshold of 0.05 ($p > 0.05$). The values are 0.934 for Linear, 0.995 for Algorithmic, 0.714 for Quadratic, and 0.885 for Exponential. This indicates that none of the models achieve statistical significance.

Coefficient of Determination (R^2): The explanatory power across all models is exceptionally weak. Although the Quadratic model shows a marginally higher R^2 of 0.106 (indicating it explains 10.6% of the variance) compared to Linear (0.01), Algorithmic (0.00), and Exponential (0.03), its F-statistic (0.35) and significance level (0.714) confirm that the fit is still statistically unreliable.

3. Hypotheses Testing

To address the research objectives and test the proposed hypotheses, statistical evaluations

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were performed to determine the significance and magnitude of the effects.

a. Perceived Usefulness exerts a positive and significant effect on students' Behavioral Intention to use *Zep Quiz* as a digital assessment tool

Picture 9. *The Result of Hypothesis Testing PU on BI*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.687[a]	.472	.397	2.618	.926

a. Predictors: (Constant), PU
b. Dependent Variable: BI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.925	1	42.925	6.265	.041[b]
	Residual	47.964	7	6.852		
	Total	90.889	8			

a. Dependent Variable: BI
b. Predictors: (Constant), PU

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance
1	(Constant)	4.719	6.607		.714	.498	
	PU	.760	.304	.687	2.503	.041	1.000

Coefficients[a]

The R Square value of 0.472 indicates that 47.2% of the variance in Behavioral Intention (BI) is explained by Perceived Usefulness (PU). The remaining 52.8% is influenced by other variables outside this model.

The t-statistic for the predictor PU is 2.503, which exceeds the standard critical threshold of 2.365 (t-table for df 7) for a two-tailed test at a 5% significance level, showing a strong t-value magnitude.

The significance value for PU is 0.041, which is less than the threshold of 0.05 (0.041 < 0.05). This confirms that the effect of PU on BI is statistically significant. It can be concluded that the hypothesis proposing that Perceived Usefulness significantly influences Behavioral Intention is accepted.

b. Perceived Ease of Use exerts a positive and significant effect on students' Behavioral Intention to use Zep Quiz as a digital assessment tool

Picture 10. *The Result of Hypothesis Testing PEOU on BI*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.681[a]	.463	.386	2.640	2.843

a. Predictors: (Constant), PEOU
b. Dependent Variable: BI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.095	1	42.095	6.039	.044[b]
	Residual	48.793	7	6.970		
	Total	90.889	8			

a. Dependent Variable: BI
b. Predictors: (Constant), PEOU

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance
1	(Constant)	3.342	7.284		.459	.660	
	PEOU	.855	.348	.681	2.457	.044	1.000

Coefficients[a]

The linear regression analysis examining the effect of Perceived Ease of Use (PEOU) on Behavioral Intention (BI) demonstrates a statistically significant positive relationship with t = 2.457, p = 0.044 and df = 7. The model yields an R Square of 0.463, indicating that PEOU accounts for 46.3% of the variance in BI. Since the calculated t-statistic exceeds the critical threshold for df = 7 at the 5% significance level (2.457 > 2.365). Meanwhile, the Sig. value of PEOU is 0,044 which is less than 0.05. The conclusion of the result is the hypothesis proposing that Perceived Ease of Use significantly influences Behavioral Intention is accepted.

c. Perceived Ease of Use exerts a positive and significant effect on students' Perceived Usefulness to use Zep Quiz as a digital assessment tool

Picture 11. *The Result of Hypothesis Testing PEOU on PU*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.032[a]	.001	-.142	3.255	3.418

a. Predictors: (Constant), PEOU
b. Dependent Variable: PU

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.077	1	.077	.007	.934[b]
	Residual	74.145	7	10.592		
	Total	74.222	8			

a. Dependent Variable: PU
b. Predictors: (Constant), PEOU

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance
1	(Constant)	20.793	8.979		2.316	.054	
	PEOU	.037	.429	.032	.086	.934	1.000

Coefficients[a]

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The result of R Square of 0.001 indicating that PEOU fails to account for any meaningful variance in PU. The t-statistic for the predictor PEOU is 0.086 is less than 2.365 (df 7 two tailed test at 5%). Then, the significant value for PEOU is 0.934 that bigger than threshold 0.05 (0.934 > 0.05). the hypothesis proposing that Perceived Ease of Use significantly influences Perceived Usefulness is rejected.

Discussion

Hypothesis 1 is accepted. Perceived Usefulness significantly drives students' willingness to adopt Zep Quiz ($t = 2.503$, $p = 0.041$), accounting for 47.2% of the variance ($R^2 = 0.472$). The acceptance of Hypothesis 1 indicates that students perceive the Zep Quiz application as highly useful because it significantly enhances their academic efficiency. Key features such as immediate feedback on errors, competitive elements like leader boards and point tracking, and real-time score reporting allow students to engage in self-evaluation without the delay of traditional grading. This efficiency is particularly vital for these students, who are village administration officials balancing rigorous coursework with demanding professional responsibilities. According to Amin cited in (Narayan et al., 2025) particular system will improve their performance, thereby positively influencing their intention to use it. Furthermore, the findings of this study reinforce previous research by (Bagus et al., 2022; Suki & Suki, 2011; Sumardi & Andreani, 2021), which demonstrates that perceived usefulness has a positive effect on behavioral intention to use.

Hypothesis 2 is supported ($R^2 = 0.463$, $t = 2.457$, $p = 0.044$). The results indicate that Perceived Ease of Use exerts a strong, direct, and positive effect on Behavioral Intention, explaining 46.3% of the variance. Despite Zep Quiz's immersive, game-like architecture which includes custom avatars, adventure themes, and real-time multiplayer layouts its intuitive navigation successfully minimizes cognitive load for users. Zep Quiz also offers clear advantages through its visual appeal and simple navigation, enabling students to use it effortlessly without complex guides. Accessible across multiple devices (smartphones, tablets, and laptops) for both in-class and independent home use, the platform ensures low effort in technology adoption. According to (Narayan et al., 2025), perceived ease of use refers to the degree to which an individual believes that using a specific system or technology will be free of effort. In the context of information and communication technology, perceived ease of use plays a vital role in influencing users' intention to adopt that technology.

This study aligns with (T. K. Ramadhan & Saputro, 2024), who found that Perceived Ease of Use has a significant impact on Behavioral Intention. When users find a system easy to use, their willingness to adopt it increases. Furthermore, when users feel comfortable and encounter no difficulties, their loyalty to the system tends to grow, leading them to utilize the offered technology more frequently (Narayan et al., 2025).

Hypothesis 3 that about Perceived Ease of Use significantly influences Perceived Usefulness is rejected. The statistical results reveal an R^2 value of 0.001, indicating that Perceived Ease of Use fails to account for any meaningful variance in Perceived Usefulness. This reflects prior research by (Pratista & Marsasi, 2024), which suggests that perceived ease of use may have a minimal or negative impact. This outcome can likely be attributed to the profile of the participants, a significant proportion of whom are regular technology users with strong competencies in information technology. The statistical independence observed between PEOU and PU aligns with the theoretical distinction proposed by (Sagnier et al., 2020), who noted that users look to goal achievement when assessing ease of use, but look to need fulfilment when evaluating usefulness. In the context of Zep Quiz, students may easily grasp the operational mechanics for achieving immediate interaction goals, but this interface simplicity operates separately from whether they believe the gamified platform fulfils their complex learning objectives or need fulfilment. In this research the respondents are tech-competent adult learners or village administrative officials, handling a simple application interface (ease of use) is second nature to them. They don't equate "easy

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navigation" with "it makes me more productive." An application can be very easy to use, but that doesn't automatically mean it solves their heavy academic workload or fulfils their deeper study needs. They keep goals (usability) and needs (usefulness) separate.

4. Conclusion

In response to the limited empirical research on how students' perceptions drive the adoption of gamified platforms, this study applied the Technology Acceptance Model (TAM) to evaluate Zep Quiz as a formal digital assessment tool among digital business students. The findings offer a clear picture of what actually motivates learners to embrace or question these tools.

This study applied the Technology Acceptance Model (TAM) to evaluate Zep Quiz as a digital assessment tool among adult vocational learners, such as village administration officials, who balance heavy workloads with academic studies.

First, the results confirm that Perceived Usefulness plays a vital direct role in shaping students' willingness to adopt the platform (H1). Students embrace Zep Quiz because it genuinely boosts their academic efficiency through features like instant feedback, score tracking, and gamified elements that eliminate the delays of traditional grading.

Second, Perceived Ease of Use also strongly drives behavioral intention (H2). The platform's multi-device accessibility and intuitive, game-like interface successfully minimize effort and cognitive load, making it seamless for students to use across various devices without complex guides.

However, the study also uncovered an interesting deviation from classical TAM: Perceived Ease of Use did not significantly drive Perceived Usefulness (H3). In practice, this means students evaluate a platform's instructional value (usefulness) separately from its navigation simplicity (ease of use)—recognizing that an interactive interface does not automatically guarantee deep academic benefit.

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