Examining Students' Continuance Intention in Using AI-Chatbot for Academic Assignment

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Abstract

This research aims to investigate the intention of university students in Indonesia to continue using AI chatbot in doing academic assignments. This research modifies the Post-Acceptance of Information System Continuance model with the ECT (Expectation Confirmation Theory) and TAM (Technology Acceptance Model) as constructs to determine what motivate students to continue using the emerging AI chatbot, namely BING. This study conducted data analysis using Partial Least Squares-Structural Equation Modelling (PLS-SEM). Data are collected through an online survey with 185 respondents who met the inclusion criteria and were used for further analysis. The findings revealed a positive and substantial correlation between Perceived Information Quality (PEIQ), Confirmation (CON), Perceived Usefulness (PEU), Perceived Enjoyment (PEE), Satisfaction (SAT), and Continuance Intention (COI). Confirmation (CON) has a significant impact on how usefulness and enjoyment are perceived, which influences Satisfaction (SAT) and Continuance Intention (COI) to use AI-Chatbot. Meanwhile, Confirmation (CON) and Perceived Ease of Use (PEEOU) have no clear correlation with Satisfaction (SAT). As theoretical contributions, this research provides empirical examination on how those variables influence students' intention to continue using AI chatbots to help them complete academic tasks. Practically for AI Chatbot developers, this research provides information based on user perception to improve the quality of their product. This result also provides insight for university to help design effective strategies to support learning.

Keywords: Chatbot, Expectation Confirmation Theory, Continuance usage intention, Technology Acceptance Model, Perceived Enjoyment, Perceived Ease of Use, Perceived Usefulness

Introduction

The internet has become increasingly integrated into daily life due to the fast access to a wealth of information made possible by its widespread use (Maeda-Minami et al., 2023). In line with technological advances, search engines have evolved into increasingly intelligent search engines supported by

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artificial intelligence (AI). An AI chatbot is a system or computer program used to support and interact with humans through conversation. When humans ask questions, AI chatbot can provide answers or relevant information (Rese & Tränkner, 2023). An AI chatbot aims to facilitate conversational engagements with users by offering responses, information, and support based on pre-established algorithms, machine learning models, or large data sets (Traymbak et al., 2024).

One of AI chatbot currently emerging on the market is BING from Microsoft. BING chatbot is an AI-powered search engine chatbot that offers responses together with user information and a written source (Microsoft, 2023). BING combines AI features with search engine functionality to provide users with a more customized and engaged search experience. BING helps users find relevant information from across the web, information for research data, or inspiration for creativity (Microsoft, 2023). Microsoft launched significant changes to BING including chatbot features based on OpenAI's GPT-4 model (Peters, 2023). Currently, Microsoft changed the status of BING from restricted to open but remains available only in the Edge browser or Microsoft's BING mobile apps (Branscombe, 2023). Therefore, popularity of BING has increased with accesses from one hundred million active users daily (Mehdi, 2023).

In education, AI chatbot, including BING, have various benefits, including enhancing learning, providing personalized support, and increasing educational accessibility (Labadze et al., 2023). Previous research states that students like using AI chatbot because it helps by answering questions and providing explanations that are easy to understand (Neo et al., 2022; Ghayoomi, 2023). This study investigates whether students want to continue using AI chatbot, considering that many students have previously embraced the use of technology to aid with their academic work. This research examines students' continuance intention to use BING because it is allowing users to get current information from the search engine results to help them completing their academic works.

Previous research by Neo et al. (2022) focused on assessing how students feel about using AI chatbots for online instruction and how successful they are at enhancing student learning results. Previous research (Strzelecki, 2024) examines acceptance of ChatGPT from university students in Poland using UTAUT2 model but did not explore the continuance intention to use this technology. Research by (Al-Sharafi et al., 2023) combined constructs from expectation confirmation theory and knowledge management to examine factors influence university students to continue using chatbots for learning. The study found that knowledge applications, perceived usefulness, and information acquisition were critical elements affecting the behavior of students while utilizing chatbots. Other studies (Pasupuleti & Thiyyagura, 2024; Shah et al., 2024) investigated intention of students in India to continue using ChatGPT in academic settings. Both studies utilized constructs from Technology Continuance Theory as determinants. These findings suggest more study into the use of AI chatbots in educational settings. As a result, the current study examines additional factors that impact university students' continued intention to utilize AI chatbots, particularly BING, using empirical information from research models and different countries. The research focuses on Indonesia, which has the fourth-largest population and a lot of potential users for AI chatbots.

This study applies a modified version of the Post-Acceptance of IS Continuance model to clarify why users intend to continue using the BING chatbot. The model is combined with TAM (Technology Acceptance Model) and ECT (Expectation-Confirmation Theory). The ECT model elucidates how user expectations and validation of the initial user experience impact users' Satisfaction (SAT) and Continuance Intention (COI) technology going forward (Oliver, 1980). TAM was used to investigate user Satisfaction (SAT) and Continuance Intention (COI) in the BING chatbot by Perceived Usefulness (PEU) and Perceived Ease of Use (PEEOU) (Davis, 1989). Another variable employed in this study is perceived usability, which assesses user impressions of the BING chatbot and identifies characteristics linked with user Satisfaction (SAT) and Continuance usage (Bevan et al., 2016). Perceived Usefulness (PEU), Perceived Ease of Use (PEEOU), and Perceived Enjoyment (PEE) are the three components of usability that influence user Satisfaction (SAT) and desire to continue using information systems. In addition, this study investigates how the quality of information (PEIQ), as a measure of AI chatbot performance Dwivedi et al. (2012), influences the likelihood to continue using it. The quality of information generated by AI chatbots is critical for students to do correctly in their academic assignments.

This research contributes theoretically to provide insight on how these research variables influence students' intention to continue using new technologies, such as AI chatbots. This research provides practical contributions for BING chatbot developers and educational institutions. For developers, it is needed because AI chatbot technology is relatively new and requires information based on user perceptions to improve the quality of their chatbots. Meanwhile, for educational institutions, it can help design effective strategies to support learning.

Literature Review

Post-Acceptance of IS Continuance

Information system (IS) continuance decisions are like consumer repurchase decisions; they follow the same sequence: the decision to use or purchase a product or service, the experience of using that product or service, and the decision to continue or cancel the original decision (Bhattacherjee, 2001). User satisfaction and perceived post-acceptance usefulness influence users' intentions to continue using. User satisfaction results from perceived usability and validation of expectations from previous use. Perceived usefulness is also influenced by confirmation (Oghuma et al., 2016). Post-Acceptance of IS Continuance is a model that is the focus of Continuance Intention (COI) to use information systems (Inan et al., 2023). Expectation-Confirmation Theory (ECT) is the basis of this model.

Expectation-Confirmation Theory (ECT)

ECT is used to understand why individuals continue using the product. This theory states that product use is influenced by Confirmation (CON) of the user's initial expectations of the product (Ambalov, 2021a). The user's decision to continue using a product or service is based on the extent to which the initial use meets the user's initial expectations (Oliver, 1980). Users who feel a product or service is valuable and satisfying will continue using it (Saxena & Doleck, 2023). User satisfaction is influenced by the confirmation or disconfirmation of their expectations before purchase (Inan et al., 2023). This means that to achieve the repurchase goal, customers follow a sequence of processes. This process starts before the purchase, where they create initial expectations about the product or service. After using the product or service for the first time, they make perceptions about the product or service's performance and compare them with their initial expectations Oghuma et al. (2016).

Technology Acceptance Model (TAM)

TAM is perceived as the usability of determining the Continuance Intention (COI) of information systems. Perceived Usefulness (PEU) and Perceived Ease of Use (PEEOU) from TAM are the main factors that influence Satisfaction (SAT), which ultimately leads to Continuance Intention (COI) using information systems (Inan et al., 2023). TAM as perceived usability can determine the level of user satisfaction and user intention to continue using the information system Oghuma et al. (2016). Perceived usability will be high if the product meets or exceeds user expectations. Conversely, perceived usability will be low if the product does not meet user expectations (Bevan et al., 2016). According to Bhattacherjee (2001), perceived usability is the extent to which users believe using an information system will improve their job performance. Perceived Usefulness (PEU) is the main factor influencing user Satisfaction (SAT) after receiving an information system. In the context of chatbots, Perceived Ease of Use (PEEOU) refers to the extent to which a chatbot can achieve a desired result quickly and efficiently. A technology tends to be more valuable if it is easier to use, as it can save users time and effort (Goli et al., 2023). The perceived usability construct consists of three dimensions, namely Perceived Usefulness (PEU), Perceived Ease of Use (PEEOU), and Perceived Enjoyment (PEE).

This study enhanced previous research model from (Inan et al., 2023). Six significant variables in prior research were included in this study, consist of Confirmation (CON), Satisfaction (SAT), Perceived Usefulness (PEU), Perceived Ease of Use (PEEOU), Perceived Enjoyment (PEE), and Continuance Intention (COI). Performance factors which measured through effectiveness, efficiency, and certainty, have been replaced by Perceived Information Quality (PEIQ) since these three factors have no visible impact on Satisfaction (SAT). We employ Perceived Information Quality (PEIQ) to determine if BING

chatbot users share the same viewpoint as previous research (Jo & Bang, 2023; Khan & Saleh, 2023; Y. Liu et al., 2023; Nie et al., 2023; Nilapun & Jensuttiwetchakul, 2023). Moreover, a previous study by Dwivedi et al. (2012) states that one of the performance components to see user expectations is the Perceived Information Quality (PEIQ). Figure 1 describes how those variables correlate each other in the proposed conceptual model.

Perceived Information Quality (PEIQ) is how information produced by information systems meets user needs (Jo & Bang, 2023). Information quality will support informed decision-making and user Satisfaction (SAT) (Goli et al., 2023). The ability of information systems to provide information that meets user needs, namely clear, accurate, timely, and complete (Niu & Mvondo, 2023). If the sensed information quality matches or exceeds user expectations, the level of Confirmation (CON) and Satisfaction (SAT) will be higher (Staples et al., 2002). Previous studies also revealed that Confirmation (CON) and Satisfaction (SAT) are impacted by Perceived Information Quality (PEIQ) (Jo & Bang, 2023; Khan & Saleh, 2023; Y. Liu et al., 2023; Nie et al., 2023; Nilapun & Jensuttiwetchakul, 2023). However, prior studies indicate that Satisfaction (SAT) is not impacted by Perceived Information Quality (PEIQ) (Carissa et al., 2023). These explanations are used to support the following hypotheses.

H1. Perceived Information Quality (PEIQ) has a significant impact on Confirmation (CON)

H2. Perceived Information Quality (PEIQ) has a significant impact on Satisfaction (SAT)

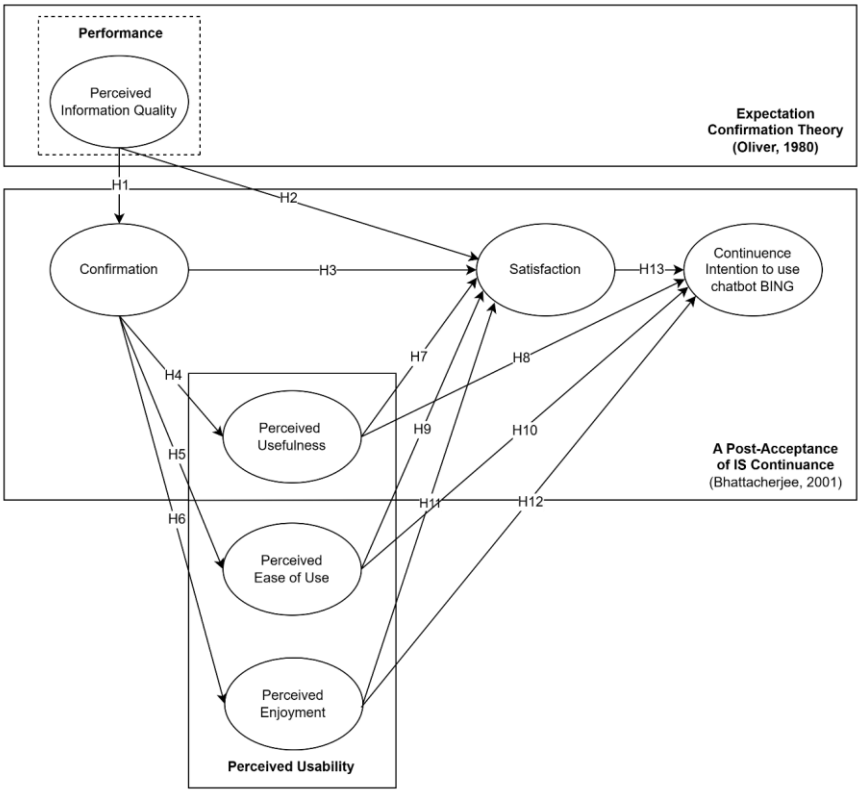

Figure 1. Proposed Conceptual Model

Confirmation (CON) is the conformity between user expectations and information system performance. Disconfirmation is a mismatch between user expectations and information system performance. These two concepts can affect user Satisfaction (SAT) with information systems (Basu et al., 2024). This notion determines how healthy users' expectations are fulfilled when interacting with the BING chatbot in context (Bhattacherjee, 2001). Satisfaction (SAT), Perceived Usefulness (PEU), Perceived Ease of Use (PEEOU), and Perceived Enjoyment (PEE) are impacted by Confirmation (CON) (Inan et al., 2023; Nie et al., 2023; Nilapun & Jensuttiwetchakul, 2023; Oghuma et al., 2016). According to this explanation, we utilize the following hypothesis.

H3. Confirmation (CON) has a significant impact on Satisfaction (SAT).

H4. Confirmation (CON) has a significant impact on Perceived Usefulness (PEU).

H5. Confirmation (CON) has a significant impact on Perceived Ease of Use (PEEOU).

H6. Confirmation (CON) has a significant impact on Perceived Enjoyment (PEE).

Perceived Usefulness (PEU) measures how well a BING chatbot influences user decisions and improves work productivity (Meng & Li, 2023). This is because the usefulness of information systems is the most critical factor in influencing users' intention to continue using information systems (Ambalov, 2021). Satisfaction (SAT) and Continuance Intention (COI) are impacted by Perceived Usefulness (PEU) (Jo & Bang, 2023; Meng & Li, 2023; Oghuma et al., 2016; Roslan et al., 2023). Research Inan et al. (2023) states that Perceived Usefulness (PEU) does not significantly affect Satisfaction (SAT). Therefore, we use the following hypothesis.

H7. Perceived Usefulness (PEU) has significant impact on Satisfaction (SAT)

H8. Perceived Usefulness (PEU) has significant impact on Continuance Intention (COI).

According to Davis (1989), Perceived Ease of Use (PEEOU) is the level of a person believing that using information system technology is easy and does not require hard effort from its users. A few outcomes, such as overall Satisfaction (SAT), the likelihood of recommending information systems to others, and the desire to continue using them, are significantly impacted by Perceived Ease of Use (PEEOU) (Lewis & Sauro, 2023). Satisfaction (SAT) and Continuance Intention (COI) are impacted by Perceived Ease of Use (PEEOU) (Alshurideh et al., 2020; Beldad & Hegner, 2018; Jia et al., 2023; Thong et al., 2006). Prior research has shown that, while Perceived Ease of Use (PEEOU) has not impacted Continuance Intention (COI), it does have an impact on their level of Satisfaction (SAT) (Inan et al., 2023). Based on the explanation, the following hypothesis is used:

H9. Perceived Ease of Use (PEEOU) has a significant impact on Satisfaction (SAT).

H10. Perceived Ease of Use (PEEOU) has a significant impact on Continuance Intention (COI).

Perceived Enjoyment (PEE) is an individual's perception of a system that can provide pleasure and satisfaction in addition to its benefits. Perceived Enjoyment (PEE) considers how well a system works and how enjoyable the experience of using the system is (Jo & Baek, 2023). BING chatbot developers can gain essential insights from Perceived Enjoyment (PEE), an important indicator of users' experience with the BING chatbot they use (Caroux, 2023). Satisfaction (SAT) and Continuance Intention (COI) are impacted by Perceived Enjoyment (PEE) (Liu & Huang, 2023; Lu et al., 2017; Meena & Sarabhai, 2023; Mishra et al., 2023). Based on the explanation, the following hypothesis is used:

H11. Perceived Enjoyment (PEE) has a significant impact on Satisfaction (SAT).

H12. Perceived Enjoyment (PEE) has a significant impact on Continuance Intention (COI).

Satisfaction (SAT) is the user's positive perception of the performance of the information system in meeting their needs and expectations (Lee et al., 2023). The primary factor influencing students' motivation to continue using BING chatbots is Satisfaction (SAT) (Khurshed & Aljader, 2023). According to the research, Continuance Intention (COI) is impacted by Satisfaction (SAT) (Inan et al., 2023; Lee et al., 2023; Mao et al., 2023; Meng & Li, 2023; Oghuma et al., 2016). Based on the explanation, the following hypothesis is used:

H13. Satisfaction (SAT) has a significant impact on Continuance Intention (COI).

Methodology

This research uses quantitative methods. The research steps include problem identification, collection of theories and previous research, develop research framework and hypotheses, data collection, validity and reliability tests, data analysis, and drawing conclusions and recommendations. In the problem identification processes, we discover problems from media reports and prior research that describe new technologies, such as chatbot that employ artificial intelligence and are in high demand among students.

Next, a framework and theory are created and used to answer the research problem, the truth of which must be verified empirically based on previous research findings and then developed.

This study uses PLS-SEM (Partial Least Square-Structural Equation Modeling) as a data analysis technique. PLS-SEM was used because of its flexibility for small sample sizes, ability to manage complex models, ease of interpretation of results, and ability to handle formative and reflective constructs (Hair et al., 2021). The measurement model or outer model shows goodness of measurement through reliability tests, convergent, and discriminant. Meanwhile, the inner model or structural model shows the hypotheses testing result through path coefficient value.

The population of this research is university students in Indonesia who have used the BING chatbot for more than three months. By giving the timeframe, we expect that they can objectively assess it by recalling their experience while using the BING chatbot (Indrawati et al., 2021). This study used purposive sampling (Campbell et al., 2020) with minimum sampling size calculated by ten times to maximum number of arrows pointing to latent variables in the PLS path model (Hair et al., 2021). This study has 13 paths; thus, the minimum sample is 130 respondents.

We developed a research instrument adopting indicators from (Inan et al., 2023) for six variables (CON, PEE, PEEOU, PEU, SAT, and COI). We modified the items in the questionnaire from group discussion context into BING usage for academic assignment. Meanwhile, the items for variable PEIQ were adopted from Dwivedi et al. (2012) and adjusted to this research context. The data is collected using questionnaires in Google Forms that are distributed through social media networks. We use 5-Likert scale, ranging from 1 (one) strongly disagree to 5 (five) strongly agree, to score the respondents' responses.

Results

Socio-Demographic Characteristics of Respondents

Data collected from the survey are 227, but only 185 were used for further analysis because 42 respondents did not meet the criteria, namely active students in Indonesia and users of the BING chatbot for more than 3 months. Table 1 displays the information about respondents' characteristics.

Table 1. Respondent's Demographic Characteristics

Profile	Category	Frequency	Percentage
Gender	Male	95	51.35%
	Female	90	48.65%
Age	18 - 24 years	150	81.08%
	25 - 34 years	24	12.97%
	>35	11	5.95%
Education Level	Diploma	41	22.16%
	Undergraduate	103	55.68%
	Graduate & Postgraduate	41	22.16%
Using Frequency	Very Rarely (4 weeks at least 1x)	58	31.35%
	Rarely (3 weeks at least 1x)	67	36.22%
	Frequently (2 weeks at least 1x)	40	21.62%
	Very Often (1 week at least 1x)	20	10.81%

Validity and Reliability Test

CA (Cronbach's Alpha) and CR (Composite Reliability) demonstrate reliability. Convergent can be seen from AVE (Average Variance Extracted) and FL (Factor Loading). Acceptable factor loadings if the values are > 0.70, while AVE is acceptable provided the value is >0.50 (Hair et al., 2021). The Fornell-Larcker Criterion indicates the discriminant validity. If the square shape of a construct's AVE is greater than the square root of the construct with the highest correlation, the construct is considered valid (Hair et al., 2021). If the variable value is more significant than >0.70, composite reliability can be accepted, and if the variable value is more significant than 0.70, Cronbach's Alpha can be accepted (Hair et al., 2021).

Table 2 shows that each construct satisfies the prerequisites, namely FL (Factor Loading) >0.7, and is therefore considered valid. Then, each variable is deemed valid since its AVE (Average Variance Extracted) exceeds the criterion of >0.50. Table 3 shows that the square shape of AVE for every construct is more significant than the construct with the strongest correlation. Each construct is recognized as legitimate. According to Table 2, all constructs in this study exhibit good reliability and fulfill the requirements, with CA and CR values for each variable or construct more than 0.7.

Table 2. Convergent and Reliability Test

Research Variable	Code	FL	CA	CR	AVE
Perceived Information Quality (PEIQ)	PEIQ1	0.731	0.710	0.711	0.534
	PEIQ2	0.726			
	PEIQ3	0.753			
	PEIQ4	0.713			
Confirmation (CON)	CON1	0.701	0.701	0.701	0.527
	CON2	0.718			
	CON3	0.723			
	CON4	0.761			
Perceived Usefulness (PEU)	PEU1	0.735	0.750	0.750	0.571
	PEU2	0.757			
	PEU3	0.773			
	PEU4	0.758			
Perceived Ease of Use (PEEOU)	PEEOU1	0.782	0.737	0.745	0.555
	PEEOU2	0.737			
	PEEOU3	0.712			
	PEEOU4	0.747			
Perceived Enjoyment (PEE)	PEE1	0.746	0.783	0.785	0.607
	PEE2	0.844			
	PEE3	0.753			
	PEE4	0.769			
Satisfaction (SAT)	SAT1	0.822	0.791	0.797	0.615
	SAT2	0.754			
	SAT3	0.725			
	SAT4	0.832			
Continuing Intention (COI)	COI1	0.818	0.774	0.777	0.597

Research Variable	Code	FL	CA	CR	AVE
	COI2	0.745			
	COI3	0.778			
	COI4	0.747			

Table 3. Discriminant Test

	CON	COI	PEEOU	PEE	PEIQ	PEU	SAT
CON	**0.726**						
COI	0.653	**0.773**					
PEEOU	0.633	0.648	**0.745**				
PEE	0.660	0.771	0.673	**0.779**			
PEIQ	0.703	0.728	0.729	0.723	**0.731**		
PEU	0.695	0.757	0.667	0.724	0.783	**0.756**	
SAT	0.660	0.760	0.671	0.760	0.742	0.756	**0.785**

Data Analysis

Bootstrapping is used in hypothesis testing using a 5,000 subsample and a 5% significance level (Inan et al., 2023). A two-way test with a 5% significance level is used in this investigation. Path coefficients can be classified into two groups based on their proximity to +1, which signifies strong positive relationships, and −1, which indicates strong negative relationships. Relevance is reflected in these ranges (Hair, Hult, et al., 2021). The P-value represents the possibility of getting a conclusion as extreme as or more significant than the actual data if the independent and dependent variables do not correlate. The hypothesis is assumed to be statistically significant if the p-value is under 0.05. (Hair, Hult, et al., 2021). Since the developed hypothesis does not require direction, the measurement uses a two-tail evaluation.

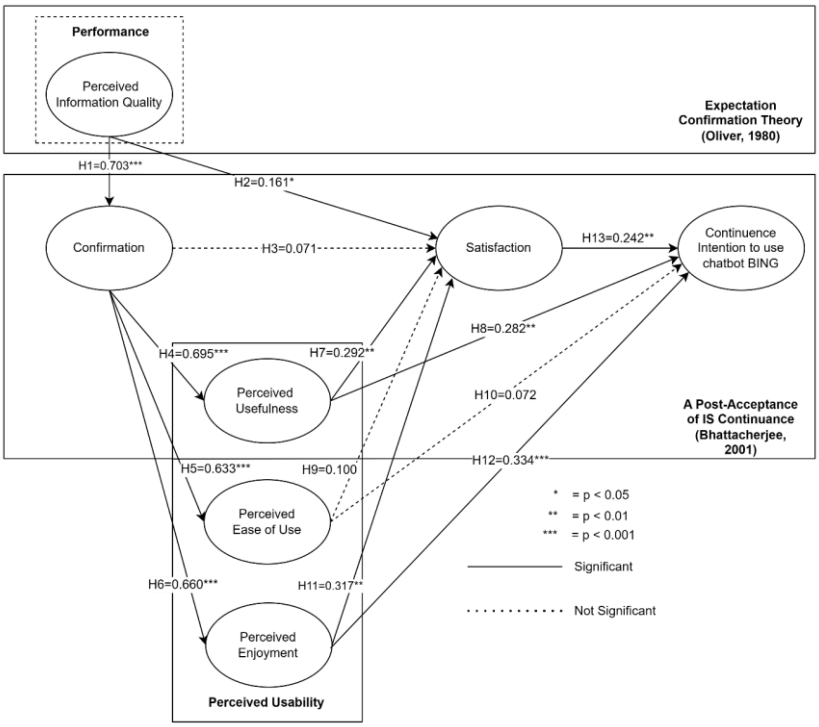

Figure 2. Evaluated Research Model

Figure 2 and Table 4 show that all the hypotheses have positive path coefficient values. The result implies that all accepted hypotheses have a positive correlation between related variables. Every hypothesis suggests that the independent and dependent variables have a unidirectional relationship. Ten of the thirteen hypotheses are accepted based on the hypotheses testing result. However, H3, H9, and H10, are rejected since the p-value are less than 0.05. The hypothesis test results suggest that user willingness to continue using the BING chatbot is highly impacted by Perceived Enjoyment (PEE) with a path value of 0.334. Perceived Usefulness (PEU) is in the second rank with a path value of 0.282, while Satisfaction (SAT) is in the third rank with a path value of 0.242.

Table 4. Hypothesis Testing

Hypothesis	Path Coefficient	T Statistics	P Values	Description
H1: PEIQ → CON	0.703	16.239	0.000	H1 Accepted
H2: PEIQ → SAT	0.161	2.081	0.037	H2 Accepted
H3: CON → SAT	0.071	0.843	0.400	H3 Rejected
H4: CON → PEU	0.695	15.028	0.000	H4 Accepted
H5: CON → PEEOU	0.633	12.686	0.000	H5 Accepted
H6: CON → PEE	0.660	13.889	0.000	H6 Accepted
H7: PEU → SAT	0.292	3.443	0.001	H7 Accepted
H8: PEU → COI	0.282	3.328	0.001	H8 Accepted
H9: PEEOU → SAT	0.100	1.530	0.126	H9 Rejected
H10: PEEOU → COI	0.072	1.015	0.310	H10 Rejected
H11: PEE → SAT	0.317	3.037	0.002	H11 Accepted
H12: PEE →COI	0.334	4.065	0.000	H12 Accepted
H13: SAT → COI	0.242	2.919	0.004	H13 Accepted

By focusing on the statistical significance of these explanatory variables, R-Square is utilized as a metric to gauge how successfully the regression model achieves the study's goals, which include determining how predictor variables affect the dependent variable (Ozili, 2023). If some or most predictor variables have statistically essential effects on the dependent variable, R-Squared values between 0.10 and 0.99 (or between 10% and 99%) are deemed acceptable (Ozili, 2023). Table 5 demonstrates the determination coefficient value that is acceptable for all variables. Our research findings indicate that Continuance Intention (COI) has a coefficient of determination of 0.494. The determination coefficients for all usability variables are similar, with values of Perceived Enjoyment (0.435), Perceived Usefulness (0.483), and Perceived Ease of Use (0.401). This suggests that Confirmation (CON) is moderately influenced by perceived usability among students using BING. Meanwhile, Satisfaction (SAT) and Confirmation (CON) exhibit higher determination coefficient values of 0.698 and 0.702, respectively. In this study, we only examined Perceived Information Quality (PEIQ) as a determinant of Confirmation (CON) and found it to be a significant measure of AI Chatbot performance.

Table 5. Determination Coefficient

Factor	R-Square
COI	0.494
SAT	0.698
PEE	0.435
PEU	0.483
PEEOU	0.401
CON	0.702

Discussion

These findings validate Bhattacharjee's concerns, who made a distinction between his work and Oliver's about IS Continuance (Inan et al., 2023). This study contradicts previous research that found that Satisfaction (SAT) and Continuance Intention (COI) are impacted by Perceived Ease of Use (PEEOU) (Alshurideh et al., 2020; Beldad & Hegner, 2018; Jia et al., 2023; Thong et al., 2006). Nonetheless, Inan et al. (2023) assert that Continuance Intention (COI) is not impacted by Perceived Ease of Use (PEEOU). It could be happened because students in Indonesia consider ease of use, learning, mastery, and interaction cannot affect their intention to use the technology as represented by Continuance Intention (COI) variable. Moreover, the results are not supported by earlier research, which showed Satisfaction (SAT) is impacted by Confirmation (CON) (Inan et al., 2023; Nie et al., 2023; Nilapun & Jensuttiwetchakul, 2023; Oghuma et al., 2016). This finding is like several previous studies that found Satisfaction (SAT) and Continuance Intention (COI) are impacted by Perceived Enjoyment (PEE) (Liu & Huang, 2023; Lu et al., 2017; Meena & Sarabhai, 2023; Mishra et al., 2023). Students in Indonesia perceive the enjoyment of using tools, the satisfaction derived from completing tasks, the assistance these tools provide, and their practicality as factors influencing their Continuance Intention (COI). Perceived Enjoyment (PEE) encompasses an information system's benefits or functionality and an individual's experience of happiness and contentment from utilizing it (Jo & Baek, 2023). Perceived Enjoyment (PEE) is mediated by Confirmation (CON), which is also mediated by Perceived Information Quality (PEIQ) to impact Continuance Intention (COI) significantly. The second highest factor that affects Continuance Intention (COI) is Perceived Usefulness (PEU). Previous research revealed that Continuance Intention (COI) is impacted by Perceived Usefulness (PEU) (Jo & Bang, 2023; Meng & Li, 2023; Oghuma et al., 2016; Roslan et al., 2023). Students in Indonesia believe that the speed of information, the benefits gained, their needs, and performance improvement can influence their Continuance Intention (COI). Perceived Usefulness (PEU) and Perceived Enjoyment (PEE) are also mediated by Confirmation (CON), which is also influenced by Perceived Information Quality (PEIQ) to impact Continuance Intention (COI) significantly. The third highest factor is Satisfaction (SAT). Prior research has demonstrated that Satisfaction impacts Continuance Intention (COI) (SAT) (Inan et al., 2023; Lee et al., 2023; Mao et al., 2023; Meng & Li, 2023; Oghuma et al., 2016). Students in Indonesia perceive that usage satisfaction, convenience, and the information provided influence their Continuing Intention (COI). User Satisfaction (SAT) is mediated by Perceived Enjoyment (PEE), Perceived Usefulness (PEU), and Perceived Information Quality (PEIQ) to impact Continuance Intention (COI) significantly.

This study aims to find out if Indonesian students will continue using the BING chatbot to help them with their schoolwork. In this study, we implement the Post-Acceptance Model to investigate the BING chatbot's Continuance Intention (COI) (Inan et al., 2023). We believe that the Post-Acceptance Model can determine the Continuance intention on IS. However, Satisfaction (SAT) is not impacted by Confirmation (CON), but Perceived Usefulness (PEU) and Perceived Enjoyment (PEE) will function as mediators to raise Satisfaction (SAT). The findings of this study also show that to find user motivation to continue using information systems not only by using TCT (Nurdin et al., 2023), TAM (Hariguna & Akmal, 2019), and ECM (Oghuma et al., 2016). Combining ECT and post-acceptance models can clarify students' Continuance Intention (COI). This study highlights the importance of Perceived Information Quality (PEIQ) when using the BING chatbot. However, this study has results different from previous studies that used the TAM model to determine student motivation to continue using information systems. Previous research, Continuance Intention, was impacted by Perceived Ease of Use (PEEOU), while this study did not.

As theoretical contribution, these findings suggest that students' continuance usage intention for accomplishing academic works is significantly influenced by their perceived enjoyment, perceived usefulness, and satisfaction. Future research can explore other variables or factors that have the potential to influence users' intention to continue using information systems, such as perceived intelligence (Huang & Yu, 2023). Furthermore, future research should use other respondents in academic environment, such as the lecturer, to get different perspectives and experiences when using AI chatbots (Bettini et al., 2020; Shahzad et al., 2024). Practically, to improve Perceived Information Quality (PEIQ), Confirmation (CON), and Perceived Usefulness (PEU), developers can implement Natural

Language Processing (NLP) technology to improve chatbot performance in understanding user questions and expanding the knowledge base to improve answer accuracy (Jo & Bang, 2023; Saxena & Doleck, 2023). Furthermore, to increase Perceived Enjoyment (PEE) and Satisfaction (SAT), the BING chatbot developer can improve the UI/UX of the BING chatbot. So that users can feel even better comfort and enjoyment (Sundar et al., 2015).

Conclusion

According to the findings, students will continue to be motivated to use the BING chatbot for enjoyment, usefulness, and satisfaction. However, Perceived Ease of Use (PEEOU) does not impact students' desire to continue using the BING chatbot. The study's findings can help developers attract new users and maintain existing ones, particularly by enhancing users' Perceived Enjoyment (PEE). This study solely looks at Perceived Information Quality (PEIQ) about performance. DeLone and McLean define the efficacy of information systems as perceived information quality, service quality, and system quality. We propose further research to include system quality and service quality variables to be investigated. There are several limitations in this study. First, we examined BING chatbot users in one country. Since each country has unique customs and laws, extra caution should be used when extrapolating the study's conclusions. However, we strongly recommend that future research examine BING chatbots in different countries. Secondly, most of respondents were undergraduate students. Due to this situation, we cannot extrapolate the findings to all degree. Thirdly, we limited our research to Indonesian college students who use the BING chatbot. Each career has unique responsibilities and activities. Compared to college students, professionals in other fields may value various attributes. Moreover, they may use other AI chatbot programs. Future studies can examine the usage patterns differences among users of different professional categories.

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