

INTEGRATING TAM WITH IDT: FACTORS AFFECTING USERS' INTENTION TO USE NEW SOCIAL MEDIA APPS

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ABSTRACT

Social media applications that continue to grow in society have made many companies innovate new social media applications. Behind this, application developers must know the factors that make their applications popular in order to maintain long-term use. This research aims to measure user intentions in using new social media applications as well as exploring and investigating potential factors that influence users in using new social media applications. The research method used is a quantitative approach by proposing a Technology Acceptance Model (TAM) with Innovation Diffusion Theory (IDT). Data collected was 424 respondents who had used new social media applications. From the results of the analysis of factors that influence users to want to use new social media applications namely Complexity, Observability, Perceived Compatibility, Perceived Enjoyment, Relative Advantage and Perceived Ease of Use. Apart from that, there is the influence of Observability, Perceived Compatibility, Perceived Enjoyment, Trialability, Perceived Usefulness, and the influence of Perceived Usefulness on Behavioral Intention to Use. From the results of this research analysis, it is known that the approach in the TAM and IDT models provides support that there are factors that influence users to use new social media applications. This research suggests further expanding the variables in TAM and IDT to find out more about the factors that influence users to use new social media applications, as well as looking for more indicators from the variables in this study to strengthen the validity and reliability of the research variables.

I. INTRODUCTION

THE use of social media in public life in the modern era has changed the way people interact that forms new patterns of communication. The tradition of social interaction limited by space and time is now undergoing a rather significant shift thanks to advances in information technology. On the other hand, there is the view that social media serves as a tool for expanding social networks and facilitating communication, especially in global scope creating greater communication efficiency. According to Lin (2022) social media is a means of communication and social interaction that utilizes information technology and the Internet, enabling individuals, groups, or organizations to connect, communicate, share information, and participate in online activities interactively and collaboratively [1]. The social media app first appeared in the early 2000s, MySpace was the first social media site with access monthly active users of 1 million users, the achievement reached around 2004 this was the beginning of social media as we know [2]. It was followed by other social media apps like Facebook, YouTube, Twitter, and Reddit that have been around for decades or more. Then in 2016, the emergence of a new social media, TikTok, which managed to reach half a billion users by mid-2018, gained an average of about 20 million new users [2]. From that it can be seen that the enthusiasm of social media users from year to year is quite significant. The use of social media has had an impact on society today. On the one hand, social media has enhanced global connectivity, shaped new communication patterns, enabled individuals to build wider social networks and provided a platform for social movements [1]. On the other hand, the use of social media also leads to social isolation, the spread of harmful or harmful information, and the identity displayed online does not necessarily reflect the true identity [1].

In 2023, the launch of one of the most popular social media applications, Threads, is one of those social media apps under the shadow of a meta that was just released in July 2023 [3], proving that innovation in the social media world is still capable of provoking significant enthusiasm amongst the public. The interface similar to Twitter or Z, as well as the ease of access offered, has expanded the reach of new users to reach 5 million within four hours of launch [4]. This continues to be proved by a fairly significant increase after about a week of launch with a reach

of 100 million users [3] This phenomenon gives a sign that growing enthusiasm for innovation in the social media world. However, even though public enthusiasm for social media applications is quite high, there are both positive and negative impacts of social media presence, even if social media apps do not fully have a positive impact, respon public enthusiasm in the use of both new and old social media programs is still good enough. Facebook, Twitter, and Youtube apps have remained popular amongst the public for years, while TikTok has also achieved a significant increase in users within two years of its launch. In addition, the Threads app is new proof that public interest in the new social media app remains high, reaching 100 million users in a week of its launch. However, behind a significant increase in users, there is complexity for app developers. Many companies are racing to develop innovations, especially in the creation of social media apps because of their popularity as entertainment that is easily accessible to the general public. Developers need to know what social media users need to make their apps more popular. Behind that, the increasing number of users also brings the challenge of optimizing operations that can affect users' reluctance to continue using applications. Application developers must compete to retain users by providing high-quality services and continue to innovate to remain competitive in a competitive market.

The study will explore the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT) approaches. The use of TAM will help to understand how individual perceptions of ease of use and perceived benefits of new social media applications can affect user intentions and behavior [5]. On the other hand, IDT will be used to analyze how characteristics of social innovation can affect the adoption and spread of such applications in society [5]. Both theories are highly relevant in the context of information technology and user behavior. TAM offers insight into the psychological factors that motivate individuals to accept and use new technologies, while IDT provides a framework for understanding social processes and factors that affect how fast and widespread technology is adopted in a community. Thus, both theories provide a comprehensive tool to evaluate the factors that influence the adoption of technology and how the technology is integrated into the everyday lives of users.

II. RESEARCH METHODS

The use of research methods is quantitative. The research uses the Innovation Diffusion Theory (IDT) and Technology Acceptance Model (TAM) as its model. According to Sugiyono (2019:16), quantitative research is a type of research based on the philosophy of positivism. This research is used to study a particular population or sample, collecting data through research instruments. The quantitative approach was chosen to test the TAM and IDT models because it allows the testing of hypotheses objectively and empirically, in line with the principles of positivism philosophy that emphasizes scientific verification and statistical data.

A. *Technology Acceptance Model (TAM)*

TAM is a central theory in technology adoption research [6] and was subsequently reinforced by the statements of Elliot and Loebbecke (2000) and Rao Hill (2011) that TAM is the most powerful, simple, and influential model in explaining the behavior of adoption of technology [7]. According to Davis et al. (1989), the goal of TAM is to provide a general model for understanding the factors that influence technology acceptance by users who can explain user behavior towards different types of technology and different groups of users [8]. Some influential factors are:

Perceived enjoyment / PE according to Van der Heijden (2004) different activities or services pleasure them, regardless of the impact that may occur [8].

Perceived usefulness / PU according to E. Rogers (1995) user views that a system can help improve their performance [8].

Perceived ease of use / PEU according to E. Rogers (1995) users see the system as easy or not difficult to use [8].

Behavioral Intention to Use / BIU according to Venkatesh et al. (2012) users will continue to use technology or not and are considered to affect whether the technology will be used or not [8].

B. *Innovation Diffusion Theory (IDT)*

According to Agarwal (2000), Innovation Diffusion Theory explains that each person decides to accept or not accept an innovation based on their belief in the innovation. This means that people choose to use or not use something new based on what they believe or believe about the innovation [6]. Simply put, in the IDT factor, users tend to choose new technology that they consider more useful, easy to understand, suits their needs, the results are visible to others, and can be tried before deciding to use it fully. According to Rogers (2010), 5 main factors influence this innovation [6].

Relative advantage / RA someone thinks that an innovation is better than the old method that is commonly used [8].

Complexity / CO understands the difficulty of an innovation and how easy it is for users to use it [8].
Perceived compatibility / PC users feel that the innovation is by what they expect, the experience they have had, and their desires [8].
Observability / OB is seeing the results of an innovation by other people, it is assumed that someone adopts an innovation, friends, neighbors, and people around them often ask questions about their experiences or opinions regarding the innovation [8].
Trialability / TR measures how far users think they need to try an innovation before deciding whether to use it or not [8].

C. Research Methods

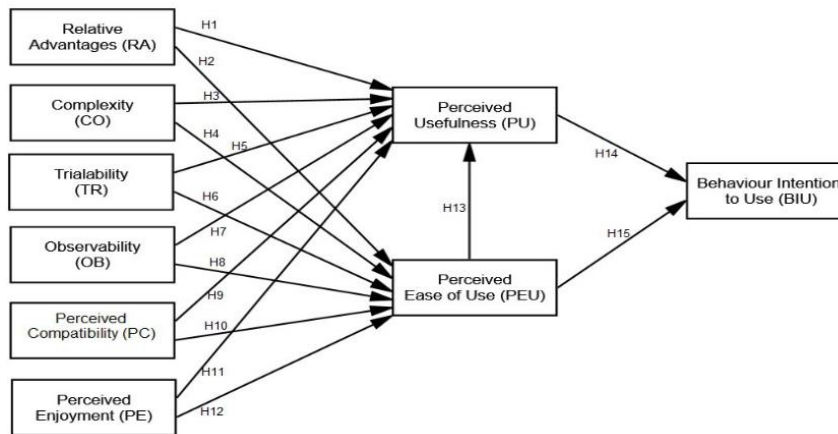


Fig. 1. Research Model

Based on previous research *Integrating Technology Acceptance Model with Innovation Diffusion Theory: An Empirical Investigation on Students Intention to Use E-Learning System* [8], *Determinants of Users' Intention to Use Social Media Apps* [6], *Factors That Influence Employees' Intention to Use Enterprise Social Media as Knowledge Sharing Media* [9], *Pengaruh Behavioral Intention Terhadap Actual Use Penggunaan GO-JEK Indonesia Pendekatan Technology Acceptance Model dan Innovation Diffusion Theory* [5], *Influence of Panoramic Vr Software on Tourists' on-Site Travel Intention: an Integrated Model Based on TAM and IDT* [10], *Do Consumers Care About Aesthetics and Compatibility? The intention to Use Wearable Devices in Health Care* [11], *Understanding the Mediating Effects of Technology Factor on Social Media Acceptance among Budget Accommodations* [12], *Impact of Technology Adoption and Its Utilization on SMEs in Ghana* [7], *The Impact of Social Media Use on Social Interaction in Contemporary Society* [1], *Kombinasi IDT-TAM Untuk Analisis Faktor-Faktor yang Mempengaruhi Penggunaan Aplikasi Perusahaan* [13]. So, the following are temporary hypothesis results based on previous research.

- H1: Relative Advantages (RA) has a positive influence on Perceived Usefulness (PU)
- H2: Relative Advantages (RA) has a positive influence on Perceived Ease of Use (PEU)
- H3: Complexity (CO) has a negative influence on Perceived Usefulness (PU)
- H4: Complexity (CO) has a negative influence on Perceived Ease of Use (PEU)
- H5: Trialability (TR) has a positive influence on Perceived Usefulness (PU)
- H6: Trialability (TR) has a positive influence on Perceived Ease of Use (PEU)
- H7: Observability (OB) has a negative influence on Perceived Usefulness (PU)
- H8: Observability (OB) has a positive influence on Perceived Ease of Use (PEU)
- H9: Perceived Compatibility (PC) has a positive influence on Perceived Usefulness (PU)
- H10: Perceived Compatibility (PC) has a negative influence on Perceived Ease of Use (PEU)
- H11: Perceived Enjoyment (PE) has a positive influence on Perceived Usefulness (PU)
- H12: Perceived Enjoyment (PE) has a positive influence on Perceived Ease of Use (PEU)
- H13: Perceived Ease of Use (PEU) has a positive influence on Perceived Usefulness (PU)
- H14: Perceived Usefulness (PU) has a positive influence on Behavioral Intention to Use (BIU)
- H15: Perceived Ease of Use (PEU) has a positive influence on Behavioral Intention to Use (BIU)

D. Data Collection and Analysis Techniques

The use of data analysis techniques in this research involves Structural Equation Modeling (SEM). In SEM

analysis, validity and reliability checks will be carried out, the relationship models between variables will be tested, and suitable models for predictions will be obtained. By using SEM data analysis techniques, this research can test the relationships between the variables in the model and the validity of the indicators for each variable. The choice of using SEM for this research model allows for the exploration of complex relationships between variables in models such as the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT), as well as ensuring that the indicators used are valid in the context of analyzing technology adoption by users. The number of questionnaires obtained was 424 respondents. Of these, 152 respondents, or 36%, were male, and 272 respondents, or 64%, were female. Additionally, 362 respondents, or 85%, were aged 17–28 years, 36 respondents, or 9%, were aged 13–16 years, 25 respondents, or 6%, were over 28 years old, and 1 respondent was under 13 years old.

E. Variables and Attributes

As stated by Sugiyono (2017:39), research variables are characteristics, properties, or values of an object or activity that vary and can be identified by researchers. Below are the operational variables and relevant questions related to the indicators used.

TABLE I
 QUESTIONS BASED ON OPERATIONAL VARIABLES

Variable	Question	Item Code
<i>Relative advantage</i>	Do you agree that better features and functionality in new social media apps can increase your interest in using them?	RA1
	Do you agree that new social media applications must have functional advantages over existing ones to attract user interest?	RA2
	Do you agree that better performance or results from a new social media application are important factors in deciding to use it continuously?	RA3
	Do you agree that new social media applications must provide significant advantages over existing ones to attract user interest?	RA4
<i>Complexity</i>	Do you agree that your perception of the difficulty level of using a new social media application will influence your decision to try it?	CO1
	Do you agree that new social media applications that are difficult to use will discourage users from using them?	CO2
	Do you agree that the level of navigational complexity in new social media applications can be a barrier to continued use?	CO3
	Do you agree that the difficulty in using the interface or menu of a new social media application influences the user's intention to use it?	CO4
<i>Trialability</i>	Do you agree that ease of access to a trial version of a new social media app will increase your likelihood of trying it?	TR1
	Do you agree that the easy availability of trial versions of new social media apps can increase users' interest in trying them?	TR2
	Do you agree that it is important to give users enough time to try a new social media app before making a final decision?	TR3
	Do you agree that giving users enough time to try a new social media app can improve their decision to use the app on an ongoing basis?	TR4
<i>Observability</i>	Do you agree that it is important for you to know whether your activity on social media is visible or accessible to the public when choosing a new social media application?	OB1
	Do you agree that the ability to set the level of public interaction in new social media applications influences your interest in using them?	OB2
	Do you agree that your perception of the ability for active participation in new social media to influence others affects your decision to use the application?	OB3
	Do you agree that the visible influence of active participation in new social media can affect your decision to use those applications on an ongoing basis?	OB4
<i>Perceived compatibility</i>	Do you agree that the alignment of your personal values with using a new social media application influences your intention to use it continuously?	PC1
	Do you agree that it is important for you to use new social media applications that align with your personal values?	PC2
	Do you agree that it is important for you to use a new social media app that fits your lifestyle?	PC3
	Do you agree that your perception of the suitability of a new social media application for your lifestyle influences your decision to use it?	PC4
<i>Perceived enjoyment</i>	Do you agree that a new social media app's ability to provide entertainment or enjoyment to users influences your interest in using it?	PE1
	Do you agree that the entertainment factor is one of the things that makes you interested in trying new social media applications?	PE2
	Do you agree that your views on the relevance of the content available on new social media applications to your interests and preferences influence your decision to use the app?	PE3

	Do you agree that content relevant to your interests and preferences is an important factor in choosing a new social media app?	PE4
<i>Perceived usefulness</i>	Do you agree that it is important for you to have features in new social media applications that can significantly support your activities?	PU1
	Do you agree that platform functionality in new social media applications influences your decision to use them?	PU2
	Do you agree that using new social media applications can increase your efficiency or productivity in various online activities?	PU3
	Do you agree that increasing productivity is a factor that influences your decision to use a new social media app?	PU4
<i>Perceived ease of use</i>	Do you agree that ease of navigation in new social media applications influences user experience?	PEU1
	Do you agree that ease of navigation within a new social media application is important to you when choosing to use it?	PEU2
	Do you agree that it is important for you to be able to interact with the features and functions within a new social media application easily?	PEU3
	Do you agree that the ease of interaction in a new social media application influences your interest in using the application?	PEU4
<i>Behavioral intention to Use</i>	Do you agree that you are curious to try every new social media application?	BIU1
	Do you agree that there is an interest in trying every new social media application that appears?	BIU2
	Do you use new social media apps consistently?	BIU3
	Do you use new social media applications on an ongoing basis?	BIU4

III. RESULT AND DISCUSSION

A. Outer Model

The outer model measurement will assess the validity of each indicator for each variable, measure the relationships between variables, and determine the reliability of survey consistency [14]

According to Peter (1981:13), convergent validity is based on the relationship between responses obtained from the measurement method used [15]. To measure the validity of indicators, one can examine the outer loading of each variable indicator [15]. According to Sarwono (2014), an indicator is considered to have good reliability if the outer loading value is above 0.70, but according to Ghazali (2015), the outer loading value can still be tolerated down to 0.50 [16]. The following is an analysis of convergent validity.

TABLE II
 CONVERGENT VALIDITY ANALYSIS

Item Code	Outer Loading	Result
RA1	0.711	Valid
RA3	0.567	Valid
RA4	0.708	Valid
CO1	0.662	Valid
CO2	0.523	Valid
CO3	0.620	Valid
CO4	0.660	Valid
TR1	0.565	Valid
TR2	0.643	Valid
TR3	0.564	Valid
TR4	0.703	Valid
OB2	0.677	Valid
OB3	0.691	Valid
OB4	0.686	Valid
PC1	0.650	Valid
PC2	0.682	Valid
PC3	0.640	Valid
PC4	0.717	Valid
PE1	0.664	Valid
PE2	0.567	Valid
PE3	0.619	Valid
PE4	0.583	Valid
PU2	0.561	Valid
PU3	0.745	Valid
PU4	0.746	Valid
PEU1	0.604	Valid
PEU2	0.574	Valid

PEU3	0.649	Valid
PEU4	0.658	Valid
BIU1	0.817	Valid
BIU2	0.790	Valid
BIU3	0.785	Valid
BIU4	0.818	Valid

Then, to test reliability, Straub et al. (2004) describe a reliability test as a method to assess the consistency of a construct and evaluate the extent of a variable's reliability. To determine reliability, one can look at Cronbach's Alpha (CA) and Composite Reliability (CR) [17]. According to Hair, Black, Babin, and Anderson (2010), Cronbach's Alpha (CA) and Composite Reliability (CR) values for each factor are considered good if the value is above 0.70 [18]. Schmitt (1996) notes that there is no universal level (such as 0.70) at which an alpha value is deemed acceptable; rather, instruments with a relatively low alpha value can still be useful [14]. Thus, a Cronbach's Alpha value in the range of 0-1 can be acceptable. Alpha values are described as follows: low (0.11), unsatisfactory (0.4–0.55), adequate (0.45–0.96), acceptable (0.45–0.98), satisfactory (0.58–0.97), moderate (0.61–0.65), adequate (0.64–0.85), fair (0.67–0.87), slightly low (0.68), relatively high (0.70–0.77), good (0.71–0.91), high (0.73–0.95), moderately high (0.76–0.95), robust (0.81), reliable (0.84–0.90), strong (0.91–0.93), and excellent (0.93–0.94) [14].

TABLE III
 RELIABILITY TEST

Variable	CA	CR	Result
<i>Relative advantage</i>	0.377	0.702	Reliabel
<i>Complexity</i>	0.466	0.711	Reliabel
<i>Trialability</i>	0.468	0.714	Reliabel
<i>Observability</i>	0.433	0.726	Reliabel
<i>Perceived compatibility</i>	0.602	0.768	Reliabel
<i>Perceived enjoyment</i>	0.433	0.702	Reliabel
<i>Perceived usefulness</i>	0.434	0.728	Reliabel
<i>Perceived ease of use</i>	0.471	0.716	Reliabel
<i>Behavioral intention to Use</i>	0.816	0.878	Reliabel

Furthermore, to measure discriminant validity, Fornell and Larcker (1981) explain that discriminant validity analysis is useful for demonstrating how a particular construct differs from other constructs. To assess discriminant validity, the AVE (Average Variance Extracted) value must be greater than the variance between the constructs and other constructs in the model [17]. There are several ways to determine discriminant validity, such as the heterotrait-monotrait ratio (HTMT), cross-loadings, and the Fornell-Larcker criterion. However, according to Henseler et al. (2015), the use of simulation studies shows that discriminant validity deficiencies are better detected by the heterotrait-monotrait ratio (HTMT) than by cross-loadings and the Fornell-Larcker criterion. The following is a method for determining discriminant validity.

TABLE IV
 DISCRIMINANT VALIDITY WITH CROSS LOADING

	BIU	CO	OB	PC	PEU	PE	PU	RA	TR
BIU1	0.817	0.140	0.252	0.323	0.152	0.177	0.307	0.215	0.204
BIU2	0.790	0.165	0.292	0.331	0.157	0.109	0.302	0.186	0.175
BIU3	0.785	0.158	0.277	0.282	0.150	0.057	0.242	0.132	0.154
BIU4	0.818	0.163	0.288	0.349	0.164	0.178	0.340	0.171	0.222
CO1	0.161	0.662	0.244	0.296	0.252	0.278	0.186	0.198	0.184
CO2	0.043	0.523	0.114	0.151	0.193	0.142	0.073	0.165	0.123
CO3	0.188	0.620	0.296	0.242	0.247	0.211	0.160	0.196	0.167
CO4	0.072	0.660	0.242	0.210	0.278	0.242	0.146	0.201	0.215
OB2	0.225	0.305	0.677	0.278	0.278	0.248	0.289	0.215	0.305
OB3	0.230	0.237	0.691	0.232	0.286	0.292	0.254	0.267	0.242
OB4	0.254	0.222	0.686	0.341	0.308	0.249	0.229	0.196	0.273
PC1	0.230	0.214	0.288	0.650	0.322	0.305	0.241	0.197	0.285
PC2	0.386	0.273	0.272	0.682	0.292	0.216	0.194	0.279	0.214
PC3	0.320	0.280	0.213	0.640	0.280	0.203	0.184	0.207	0.139
PC4	0.191	0.244	0.326	0.717	0.365	0.241	0.318	0.279	0.213
PEU1	0.129	0.218	0.297	0.277	0.604	0.291	0.169	0.258	0.215
PEU2	0.107	0.282	0.260	0.250	0.574	0.286	0.150	0.272	0.177
PEU3	0.151	0.232	0.253	0.318	0.649	0.324	0.289	0.229	0.241
PEU4	0.096	0.255	0.248	0.328	0.658	0.338	0.233	0.199	0.222
PE1	0.094	0.283	0.308	0.223	0.314	0.664	0.248	0.264	0.226
PE2	0.106	0.162	0.148	0.157	0.286	0.567	0.232	0.130	0.184

PE3	0.137	0.181	0.223	0.267	0.323	0.619	0.244	0.226	0.271
PE4	0.068	0.256	0.252	0.228	0.290	0.583	0.199	0.206	0.219
PU2	0.094	0.187	0.246	0.237	0.271	0.276	0.561	0.170	0.229
PU3	0.333	0.173	0.271	0.233	0.220	0.238	0.745	0.205	0.218
PU4	0.330	0.130	0.259	0.269	0.220	0.272	0.746	0.150	0.256
RA1	0.111	0.239	0.203	0.262	0.267	0.256	0.214	0.711	0.200
RA3	0.166	0.232	0.268	0.241	0.213	0.173	0.102	0.567	0.164
RA4	0.176	0.157	0.209	0.221	0.280	0.242	0.175	0.708	0.242
TR1	0.091	0.185	0.247	0.211	0.232	0.285	0.174	0.302	0.565
TR2	0.245	0.253	0.304	0.215	0.209	0.202	0.213	0.177	0.643
TR3	0.124	0.134	0.195	0.177	0.159	0.176	0.205	0.114	0.564
TR4	0.132	0.138	0.247	0.194	0.249	0.253	0.250	0.170	0.703

TABLE V
 DISCRIMINANT VALIDITY WITH THE FORNELL-LARCKER CRITERION

	BIU	CO	OB	PC	PEU	PE	PU	RA	TR
BIU	0.802								
CO	0.195	0.619							
OB	0.345	0.373	0.685						
PC	0.403	0.371	0.415	0.673					
PEU	0.195	0.395	0.424	0.473	0.622				
PE	0.168	0.361	0.384	0.361	0.499	0.609			
PU	0.375	0.236	0.376	0.358	0.342	0.380	0.690		
RA	0.221	0.308	0.330	0.359	0.383	0.341	0.254	0.666	
TR	0.238	0.283	0.400	0.320	0.345	0.371	0.341	0.306	0.621

TABLE VI
 DISCRIMINANT VALIDITY WITH HTMT

	BIU	CO	OB	PC	PEU	PE	PU	RA	TR
BIU									
CO	0.304								
OB	0.581	0.800							
PC	0.591	0.692	0.797						
PEU	0.313	0.837	0.942	0.874					
PE	0.271	0.785	0.884	0.697	1.103				
PU	0.612	0.520	0.870	0.681	0.758	0.881			
RA	0.403	0.744	0.840	0.753	0.905	0.824	0.611		
TR	0.382	0.599	0.886	0.596	0.727	0.817	0.756	0.732	

The results of the discriminant validity analysis can be considered valid, even though the HTMT test shows that several variables have values above 0.9. However, in the Cross-Loading and Fornell-Larcker Criterion tests, all variables are considered valid.

B. Inner Model

Inner model analysis is used to examine the presence or absence of exogenous latent variables. It is also employed to analyze variables that significantly influence endogenous latent variables [15]. In the inner model analysis, you will look at three tests: R-Square, Q-Square, and model fit.

The R-Square test is used to determine whether the variance in the dependent variable can be predicted or explained by the independent variables, and it is considered a measure of model quality in linear regression analysis [15]. The R-Square test also evaluates the predictive power of the structural model in SEM-PLS. The value of R-Square is expected to range between 0 and 1. According to Chin and Wynne (1999), an R-squared value close to 0.67 indicates a strong model, 0.33 indicates a moderate model, and 0.19 indicates a weak model [15] [19]. The following is an analysis of the R-Square test.

TABLE VII
 R-SQUARE TEST

Variable	R-Square
Behaviour Intention to Use (BIU)	0.154
Perceived Ease to Use (PEU)	0.401
Perceived Usefulness (PU)	0.245

The Q-Square test functions as model validation. Q-Square testing serves as a measure of the suitability of

endogenous variables to the reflective measurement model. Good Q-Square test results indicate that exogenous latent variables can be used as explanatory variables capable of predicting endogenous variables [15]. A Q-Square value above 0 indicates that the model has predictive relevance, while a Q-Square below 0 indicates that the model lacks predictive relevance [15]. According to Ghazali (2013), the relevance of the Q-Square model predictions is classified as follows: 0.35 is considered strong, 0.15 is moderate, and 0.02 is weak [16]. The following is an analysis of the Q-Square test.

TABLE VIII
 Q-SQUARE TEST

Variable	Q-Square
Behaviour Intention to Use (BIU)	0.090
Perceived Ease to Use (PEU)	0.142
Perceived Usefulness (PU)	0.098

Next, test the model fit to determine whether the model and data are appropriate for testing the influence of variables [20]. Model fit testing can be assessed using the values of CMIN, RMSEA, GFI, AGFI, SRMR, TLI, NFI, PNFI, IFI, PGFI, and PCFI. In this study, the suitability of the fit model is evaluated using the Standardized Root Mean Square Residual (SRMR) value [15]. According to Hu and Bentler (1998), the SRMR value represents the difference between the observed correlation and the model correlation, where a value of less than 0.08 is considered a good fit [21]. Below is an analysis of the model fit test.

TABLE IX
 MODEL FIT TEST

	Saturated Model	Estimated Model
SRMR	0.073	0.079

C. Hypothesis Testing

Hypothesis testing utilizes bootstrapping with a confidence level of 95%, where the significance level (α) = 5% = 0.05, and the t-table value is 1.96 [22]. According to Ghazali and Latan (2015), if the t-statistic exceeds or is equal to the t-table value (t-statistic \geq 1.96), then the hypothesis can be accepted [22]. If the p-values are smaller than 0.05 (p-values < 0.05), they can be considered significant for variable relationships [23]. Below is an analysis of the hypothesis test t-values and p-values.

TABLE X
 HYPOTHESIS

Correlation	T-Statistics	P- Values	Result
RA \rightarrow PU	0.441	0.330	Rejected
RA \rightarrow PEU	2.193	0.014	Accepted
CO \rightarrow PU	0.366	0.357	Rejected
CO \rightarrow PEU	2.248	0.012	Accepted
TR \rightarrow PU	1.756	0.040	Accepted
TR \rightarrow PEU	0.875	0.191	Rejected
OB \rightarrow PU	2.207	0.014	Accepted
OB \rightarrow PEU	2.183	0.015	Accepted
PC \rightarrow PU	2.183	0.015	Accepted
PC \rightarrow PEU	4.021	0.000	Accepted
PE \rightarrow PU	2.852	0.002	Accepted
PE \rightarrow PEU	4.731	0.000	Accepted
PEU \rightarrow PU	0.836	0.202	Rejected
PU \rightarrow BIU	5.383	0.000	Accepted
PEU \rightarrow BIU	1.204	0.114	Rejected

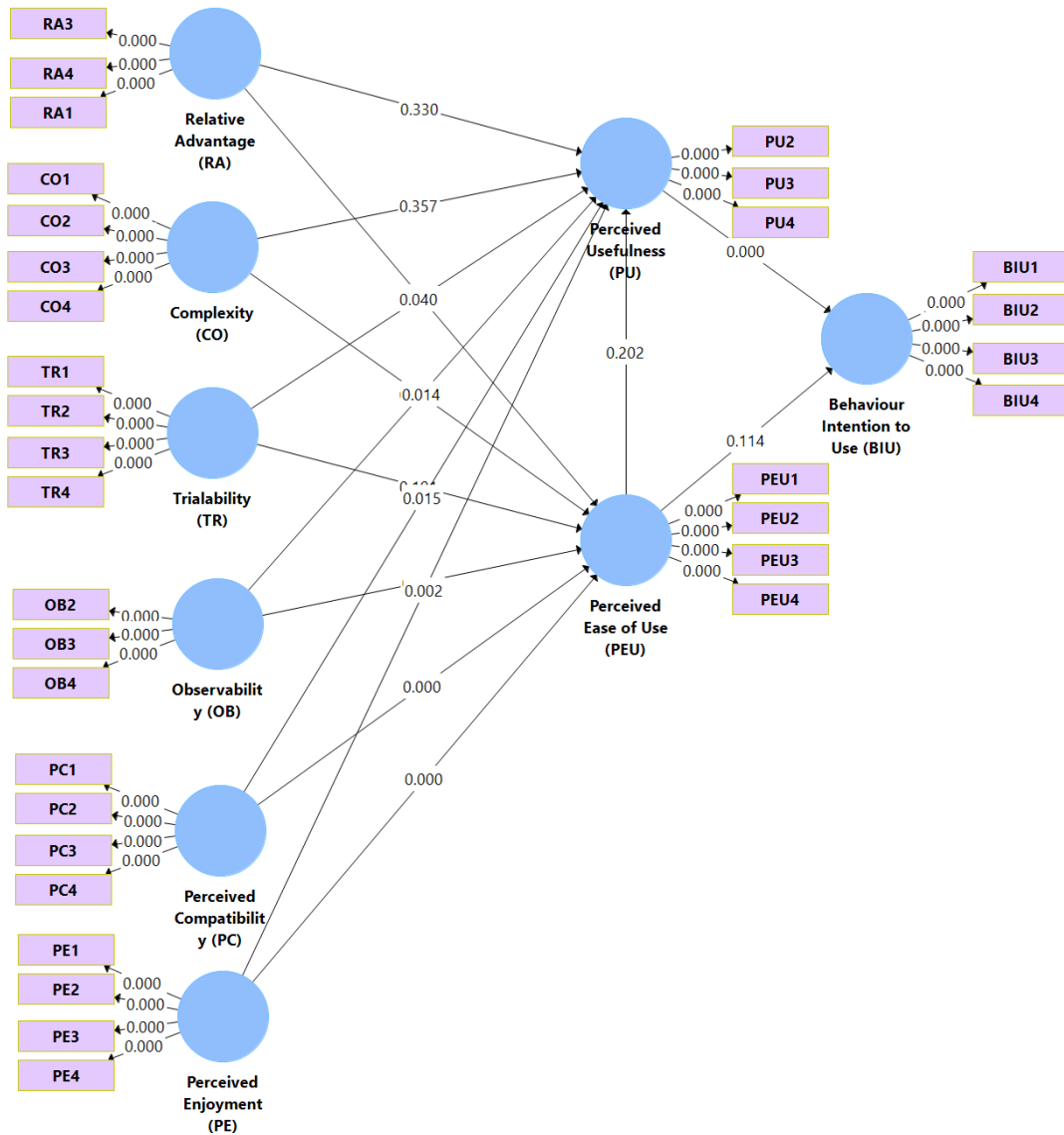


Fig. 2. Hypothesis Test Path

D. Discussion

From the research results, it was found that the variables in TAM and IDT influence users' intentions to use new social media applications. Variables that have an influence include **Complexity (CO) on Perceived Ease of Use (PEU)**. This research aligns with research conducted by Waleed et al. [8], which states that the Complexity (CO) variable has a significant relationship with Perceived Ease of Use (PEU). The convenience that new social media applications provide users, both in terms of navigation and interaction, can provide significant value. This is the extent to which the application is consistent with existing values, experiences, and needs, thereby increasing user comfort and satisfaction in interacting with the platform. The influence of **Observability (OB) on Perceived Ease of Use (PEU)** in this research supports what Waleed et al. [8] and Dr. Öğr. Üyesi et al. [6] found. The level of ease of use of a new social media application, including how easy it is to move between features and interact with others, influences how the impact of its use is visible to others in the user's online environment. Aspects such as how users interact with others publicly and how their influence is seen are key factors in assessing the effectiveness and acceptance of these applications among users. In other words, it is not only the performance of the application that is in focus but also how the application facilitates social interactions and impacts the user's reputation and relationships with others. The influence of **Observability (OB) on Perceived Usefulness (PU)** is supported by previous research, specifically the research of Waleed et al. [8]. Users believe that using new social media applications will increase their efficiency and work results thanks to the features the platforms offer. These beliefs also impact how the results of using the application can be seen by others in the user's social environment, through public interactions and visible influence. This means that users are not only concerned about their performance, but also how it impacts their perceptions and interactions with others online. The influence of **Perceived Compatibility (PC) on Perceived**

Ease of Use (PEU) is consistent with previous research conducted by Waleed et al. [8] and Jeeyeon Jeong et al. [11]. This means that the level of ease of new social media applications, both in terms of navigation and interaction, can meet user needs in using new social media applications consistently with their values, experiences, and needs. The influence of **Perceived Compatibility (PC) on Perceived Usefulness (PU)** is consistent with previous research by Jufry Heryanta [5], Waleed et al. [8], Jeanifer and Fergyanto [9], Dr. Öğr. Üyesi et al. [6], and Yusril et al. [13]. This indicates that platform functionality and increased productivity from using new social media are considered consistent with the values, experiences, and needs of new social media users. The influence of **Perceived Enjoyment (PE) on Perceived Ease of Use (PEU)** aligns with the results of previous research by Waleed et al. [8] and Jeanifer and Fergyanto [9]. The ease of using new social media applications, both in terms of navigation and interaction, significantly influences the level of satisfaction or enjoyment felt by users. When users can easily navigate and interact with an application without difficulty, they tend to experience higher levels of satisfaction. This contributes to a more enjoyable experience when using the app for entertainment and accessing relevant content. Thus, ease of use not only increases convenience but also enhances the satisfaction and pleasure derived from using new social media applications. The influence of **Perceived Enjoyment (PE) on Perceived Usefulness (PU)** supports previous research, namely the research of Waleed et al. [8], where users believe that the use of new social media applications can improve their performance or productivity through platform functionality, which in turn influences their level of satisfaction and pleasure when using these applications. The influence of **Perceived Usefulness (PU) on Behavioral Intention to Use (BIU)** is in line with previous research conducted by Jufry Heryanta [5], Waleed et al. [8], Jeanifer and Fergyanto [9], Dr. Öğr. Üyesi et al. [6], and Jeeyeon Jeong et al. [11]. This research shows that a user's intentions in their behavior or activities influence their performance or productivity when using new social media applications. The functionality and increased productivity experienced by users of new social media applications can motivate them to try the application and use it repeatedly. The influence of **Relative Advantage (RA) on Perceived Ease of Use (PEU)** is in line with the research results of Waleed et al. [8] and Dr. Öğr. Üyesi et al. [6]. The convenience provided by new social media applications is a key reason why users want to use them. The ease of navigation and interaction offered by new social media applications, whose functionality and advantages are considered better than previously existing applications, makes users feel that these new applications can benefit them. The influence of **Trialability (TR) on Perceived Usefulness (PU)** supports previous research, namely the research of Waleed et al. [8] and Yusril et al. [13]. The use and functionality of new social media designed to improve users' performance and productivity greatly influence the ease of trying or testing the application before fully committing to it. If the application is proven to improve performance and productivity, users will be more motivated and find it easier to try or test it. Features that help users work more efficiently make the process of initially testing an app more engaging and less intimidating, increasing the likelihood that they will give the app a chance before fully adopting it. Meanwhile, the other variables—Complexity (CO) and Trialability (TR) on Perceived Usefulness (PU), the Perceived Ease of Use (PEU) variable, Relative Advantage (RA) on Perceived Usefulness (PU), and the Perceived Ease of Use (PEU) variable on Behavioral Intention to Use (BIU)—were not found to have a significant effect.

By conducting a more in-depth exploration of the factors that influence users' intentions to adopt new social media applications using the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT) approaches. There are differences from the results of research conducted on previous research such as: the influence of Complexity on Perceived Ease of Use is different from previous research [6] where in previous research Complexity had no influence on Perceived Ease of Use, the influence of Complexity on Perceived Usefulness is different from previous research [8] where in previous research Complexity had an influence on Perceived Usefulness, the influence of Observability on Perceived Usefulness was different from previous research [6] where in previous research Observability had no influence on Perceived Usefulness, the influence of Perceived Compatibility on Perceived Ease of Use was different from previous research [6][13] where Perceived Compatibility has no influence on Perceived Ease of Use, the influence of Perceived Compatibility on Perceived Usefulness is different from previous research [11] where Perceived Compatibility has no influence on Perceived Usefulness, the influence of Perceived Ease of Use on Behavioral intention to Use is different from previous research [5][8][11] where Perceived Ease of Use has an influence on Behavioral Intention to Use, the influence of Perceived Ease of Use on Perceived Usefulness is different from previous research [5][8][9][6][10][11] where Perceived Ease of Use has an influence on Perceived Usefulness, the influence of Relative Advantage on Perceived Usefulness is different from previous research [8][9][6][13] where Relative Advantage has an influence on Perceived Usefulness, and the influence of Trialability on Perceived Ease of Use is different from previous research [8][13] where Trialability has an influence on Perceived Ease of Use. The differences obtained from this research to previous research strengthen the understanding of how these factors interact to influence technology acceptance, which not only confirms previous findings but also provides new contributions with a broader dataset and in-depth analysis methodology that can provide more insight. Holistic and deeper practical implications for the development of new social media

applications in the future. The differences in the results of this research with previous research have an impact, especially in enriching the literature by emphasizing that not all factors from TAM and IDT are always consistent in all contexts, especially regarding the use of new social media.

IV. CONCLUSION

In this research, it was found that the factors from TAM and IDT influencing users' intentions to use new social media applications were quite effective. The influencing factors include Complexity (CO), Observability (OB), Perceived Compatibility (PC), Perceived Enjoyment (PE), and Relative Advantage (RA) on Perceived Ease of Use (PEU); Observability (OB), Perceived Compatibility (PC), Perceived Enjoyment (PE), and Trialability (TR) on Perceived Usefulness (PU); and Perceived Usefulness (PU) on Behavioral Intention to Use (BIU). Meanwhile, the factors that do not have an influence include Complexity (CO) on Perceived Usefulness (PU), as application complexity does not affect users' willingness to use it; Perceived Ease of Use (PEU) on Behavioral Intention to Use (BIU), as ease of use does not influence users' intentions; Perceived Ease of Use (PEU) to Perceived Usefulness (PU), as ease of use does not affect users' perceptions of the application's usefulness; Relative Advantage (RA) on Perceived Usefulness (PU), as the advantages of the new social media application do not impact users' views of its usefulness; and Trialability (TR) on Perceived Ease of Use (PEU), as the ability to try an application does not influence users in considering its ease of use.

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