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The Use of Artificial Intelligence as a Marketing Support Tool: A Feasibility Study of the Chatbot “TANYA” Use on Consumer Behavioral Intention in Indonesia

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Abstract: The features of a chatbot can lead to behavioral intention among its users. This study examines how the features found in TANYA can generate behavioral intention to its consumers. This study uses several different research variables which are then made into a model with a simple regression design. These variables are convenience, authenticity of conversation, enjoyment, pass time, social influence, anthropomorphism, privacy concern, and immature technology. The study was conducted quantitatively through Google Form and successfully gathered 214 respondents from Generation Z and millennials who had used TANYA previously. Using linear regression analysis through SPSS, the study concludes that convenience, enjoyment, social influence, anthropomorphism, and immature technology influence the behavioral intention experienced by consumers, while authenticity of conversation, pass time, and privacy concern have no influence on behavioral intentions of TANYA consumers.

Keywords: Chatbot, Behavioral Intention, Virtual World, TANYA.

INTRODUCTION

In modern times, the spread and development of the internet have accelerated, including in Indonesia. According to a survey regarding the usage of internet in Indonesia on 2024 produced by the Indonesian Internet Service Providers Association (*Asosiasi Penyelenggara Jasa Internet Indonesia/APJII*), 221,563,479 people or approximately 79.5% of the current Indonesian population use internet regularly. This shows that the majority of Indonesians have access to the internet or utilize its services. This number is expected to grow still, given that the government is still working to provide equal internet access throughout Indonesia. According to Ministry of Communication and Digital Republic of Indonesia (*Kementerian Komunikasi dan Digital Republik Indonesia/Komdigi RI*) the efforts are executed mainly by building digital infrastructure such as the construction of Base Transceiver Station (BTS) in the Underdeveloped, Frontier, and Outermost (*Tertinggal, Terdepan, dan Terluar/3T*) areas, expanding the coverage of internet access for public facilities, deploying the Palapa Ring fiber optic cable network, and launching the SATRIA-1 multifunctional satellite. In addition, other

supporting activities to improve digital literacy are also implemented, such as investment in the education sector, Digital Talent Scholarship (DTS) program, and specialized trainings related to cybersecurity and Artificial Intelligence (Komdigi, 2024). All these efforts are certainly important, because the internet itself has become an inseparable part of human life, either in Indonesia or other countries.

One of the biggest technological developments currently being widely discussed in Indonesia is artificial intelligence (AI) technology. AI is a social and cognitive phenomenon that enables machines to socially integrate with society to perform cognitive tasks and communicate with other entities in society through the exchange of high-content information and concise representations (IEEE, 2021). From the definition above, it can be seen that AI is not merely a technological advancement, but rather a figure or entity integrated into human life. Although AI is a feature that has become popular in recent years, it has actually existed for a long time, although at that time its capabilities were not as advanced as they are now. AI technology has been studied since the 1950s and it continues to provide impressive breakthroughs both in terms of theoretical studies and its real-world applications (Kaynak, 2021; McCarthy et al., 1995). Today, many things we see in society either utilize AI assistance or are based on it. According to Yuchen (2021), the AI market has a projected potential to grow to USD 190 billion by 2025, with a compound annual growth rate (CAGR) of 36% between 2018 and 2025. AI itself also has a wide scope of applications, such as speech recognition, image processing, natural language processing, smart robots, autonomous vehicles, energy systems, healthcare, fintech, and so on (Yuchen, 2021).

As AI has become more user-friendly and commonly used in many applications, including those involving human-computer interaction, a breakthrough called a chatbot has emerged (Adamopoulou & Moussiades, 2020). A chatbot is a computer program designed to interact with other humans using language typically used by humans, allowing users to feel as though they are interacting with another human, not a machine (Husain et al., 2019). There are various ways to interact with a chatbot, including text and voice. Chatbots are highly adaptable and offer significant potential because, compared to humans, they can operate continuously without fatigue and can be easily accessed or visited without requiring customers to wait or take turns (Marjerison et al., 2022). This is crucial for companies, as chatbots can replace the role of humans in the service sector, which is often considered "limited," and companies can save on payroll costs by transforming service processes into something more automated and integrated.

The existence of chatbots that are viewed as beneficial and simplifying by companies does not mean that chatbots have become a one-stop solution for consumers. There are mixed reactions from consumers regarding the performance and existence of chatbots themselves. Some consumers feel that chatbots are still unable to exceed their expectations, which may lead to them being less willing to agree to requests made by chatbots and reluctant to use their services (Husain et al., 2019). However, some consumers feel the opposite as they find chatbots easy to use and practical because they can be reached and accessed anytime and anywhere (Marjerison et al., 2022). Furthermore, chatbots can also be designed to have humanistic characteristics that make their responses similar to conversation with a real person, so consumers can feel more open. This will cause consumers to feel more confident in using chatbot services (Pizzi et al., 2022). So, it can be concluded that chatbots, like any ideas or breakthrough, still have their own advantages and disadvantages.

In Indonesia, chatbots have been used by several service providers for similar reasons. One such chatbot available in Indonesia is TANYA by Tokopedia. TANYA is a virtual assistant based on artificial intelligence programmed to help solve problems that arise on Tokopedia for its customers through an automated digital service system provided by Tokopedia Care (Tokopedia, 2025). TANYA itself has various capabilities, namely answering

both simple and complex questions, understanding problems by identifying texts sent by customers, providing real-time solutions to customers, and bridging the gap between AI and further assistance if customers require direct human assistance (Tokopedia, 2025). Those features can be seen as advantages of chatbots, as previously described. TANYA can also provide solutions anytime and anywhere, as long as consumers possess the Tokopedia application. Furthermore, TANYA's advantages can trigger behavioral intentions, leading consumers to want to continue using TANYA.

These behavioral intentions phenomenon is interesting to discuss, as we observe a growing trend of chatbot use in Indonesia. According to an infographic created by Databoks (2023) based on a Populix survey, ChatGPT, a form of chatbot, is the most widely used AI application in Indonesia. The same survey also found that 45% of workers and entrepreneurs in Indonesia have used AI technology and applications (Databoks, 2023). Seeing the increasing use of chatbot applications, we felt that there's a connection between chatbots and consumers' desire and willingness to continue using applications that offer similar features, and we chose to base our research on Tokopedia as one of the most popular e-commerce platforms among Indonesians.

This study, which examines behavioral intentions arising from the features and experience of using a chatbot, was written to identify the effect of the variables used to improve behavioral intentions among consumers using TANYA. We analysed consumers' experiences and feelings while using TANYA and how these experiences influenced and created their behavioral intentions.

METHOD

This research is a quantitative study aiming to explain the association between the analyzed variables. This study was conducted to examine how variables related to chatbots can trigger behavioral intentions. We used primary data as a result of a single data collection sourced from questionnaires distributed by the author. This is done because the author's study method is a structured, non-randomized list of questions per variable given to respondents to obtain information (Malhotra, 2017). Furthermore, the questionnaire used a Likert scale of 1 to 7 in reference to the study by Marjerison et al. (2022). The author also believed that a scale of 1-7 is more precise and makes the respondents more comfortable to fill it. The scale spanned between 1 for strongly disagree to 7 for strongly agree.

The inclusion criteria for respondents were Indonesian people of all genders, aged 18 to 44 who had previously used TANYA by Tokopedia. The author chose this age range because the majority of e-commerce app users are millennials and Generation Z. To reach the right number of respondents, the author distributed the questionnaire through social media.

RESULTS AND DISCUSSION

This study used a non-probability sampling procedure, in which the author distributed online questionnaires in the form of Google Forms through social media. From the distributed questionnaires, 430 responses were collected, but the author only used 214 respondents because among them there were some individuals who, according to the author, filled out the questionnaire carelessly, so the author only used the properly filled responses. To see the distribution media for this questionnaire, please see Appendix 2. This questionnaire was distributed by the author from April 21, 2025 to May 2, 2025. The following is an overview of the profile of respondents who have filled out the author's questionnaire and have been summarized in table 1:

Table 1. Profile of main test respondents

Demographical Characteristics	Category	Frequency	Percentage
Age	18 - 22	27	12.6%
	23 - 27	73	34.1%
	28 - 32	72	33.6%
	33 - 37	31	14.5%
	38 - 43	11	5.1%
Sex	Male	77	36%
	Female	136	63.6%
	Unanswered	1	0.5%
Current educational level	Elementary school	2	0.9%
	Junior high school	4	1.9%
	Senior high school	97	45.3%
	Associate degree (D3)	12	5.6%
	Bachelor's degree (S1/D4)	76	35.5%
	Master's degree (S2)	23	10.7%
	Doctoral degree (S3)	0	0%
Current occupation	Government employees	17	7.9%
	Private employees	88	41.1%
	Student	22	10.3%
	Entrepreneur/self-employed	34	15.9%
	Professional workers (doctors, lawyers, etc)	7	3.3%
	Housewives	33	15.4%
	Others	13	6.1%

From the demographic data, it can be seen that the majority of respondents who filled out this questionnaire were those aged 23-27 years old (34.1%) and 28-32 years old (33.6%). Most of the respondents were female (63.6%) with high school / equivalent as their highest education (45.3%). In the context of employment, as many as 41.1% of these respondents were working as private employees. In addition to the profile, the author also asked about the behavioral characteristics of TANYA users as described on table 2 as follows:

Table 2. Characteristics of main test respondents

Behavioral characteristics	Category	Frequency	Percentage
How often do you use TANYA in a month?	Less than once	40	18.7%
	Once or twice	93	43.5%
	Three or four times	53	24.8%
	More than five times	28	13.1%
What do you usually use TANYA for?	Delivery problems	58	27.2%
	Payment problems	9	4.2%
	Item search	51	23.9%
	Refund problems	19	8.9%
	Order complaints	45	21.1%
	Questions regarding Tokopedia promotions	30	14.1%
	Others	1	0.5%

From the data above, it can be concluded that the majority of respondents use TANYA services at least 1-2 times a month (43.5%), and they use TANYA mostly to ask about delivery problems (27.2%), item search (23.9%), and order complaints (21.1%).

Descriptive statistical analysis was conducted in this study to see the description of respondents' answers to the questionnaire that had been given. The Likert scale used in the questionnaire to describe the respondents' answer choices consisted of "1 = Strongly Disagree", "2 = Disagree", "3 = Somewhat Disagree", "4 = Neutral", "5 = Somewhat Agree", "6 = Agree", and "7 = Strongly Agree". To facilitate descriptive interpretation, the average value of respondents' answers will be grouped into five categories according to the interval method adapted from Boone & Boone (2012) and Joshi et al (2015) as described in table 3 below:

Table 3. Categories of respondents' average values

Average Values	Category
1.00 – 2.20	Very low
2.20 – 3.40	Low
3.40 – 4.60	Medium
4.60 – 5.80	High
5.80 – 7.00	Very high

While the results of the descriptive statistical analysis of this study can be seen in table 4 as follows:

Table 4. Descriptive statistical analysis of the main test

Factors	Variables	Item	Mean	Grand Mean	St. Dev
Technology	Convenience	C1	5.73	5.88	1.134
		C2	5.80		1.151
		C3	6.12		0.937
	Authenticity of Conversation	AC1	5.62	5.38	1.279
		AC2	5.17		1.511
		AC3	5.34		1.390
Hedonic	Enjoyment	E1	5.25	5.40	1.361
		E2	5.39		1.348
		E3	5.57		1.343
	Pass time	PT1	4.77	4.73	1.709
		PT2	4.82		1.781
		PT3	4.59		1.908
Primary Evaluation	Social Influence	SI1	4.13	4.23	1.872
		SI2	4.16		1.900
		SI3	4.04		1.982
		SI4	4.42		1.864
		SI5	4.56		1.847
		SI6	4.06		1.985
	Anthropomorphism	A1	4.71	4.30	1.793
		A2	4.57		1.859
		A3	4.30		1.944
Risk	Privacy Concern	PC1	4.44	4.08	1.910
		PC2	4.15		1.747
		PC3	3.65		1.813
	Immature Technology	IT1	4.43	4.02	1.539
		IT2	3.88		1.699

	IT3	3.74		1.735
Behavioral Intention	IU1	5.18		1.460
	IU2	5.36	5.31	1.320
	IU3	5.40		1.390

The data shows that several variables have standard deviations above 1.0, indicating that these variables have the most diverse range of respondents' responses. Furthermore, several indicators such as convenience have very high scores, while authenticity of conversation, enjoyment, pass time, and behavioral intention have high scores, and social influence, anthropomorphism, privacy concern, and immature technology have medium scores.

Similar to the pre-test data, validity and reliability testing are necessary for the data collected for the main test. To test the validity and reliability of the indicators, the author will again use the same testing method as the pre-test due to limitations in the use of data processing tools. The parameters used will be aligned with the pre-test parameters. Table 5 shows the results of the validity test for the main test data:

Table 5. Validity test for the main test data

Factors	Variables	Item	KMO	Component Matrix	Barlett's Test of Sphericity	Description
Technology	Convenience	C1	0.687	0.810	0.000	Valid
		C2		0.809		Valid
		C3		0.808		Valid
	Authenticity of Conversation	AC1	0.725	0.879	0.000	Valid
		AC2		0.933		Valid
		AC3		0.907		Valid
Hedonic	Enjoyment	E1	0.758	0.920	0.000	Valid
		E2		0.933		Valid
		E3		0.942		Valid
	Pass time	PT1	0.766	0.932	0.000	Valid
		PT2		0.933		Valid
		PT3		0.936		Valid
Primary Evaluation	Social Influence	SI1	0.899	0.850	0.000	Valid
		SI2		0.924		Valid
		SI3		0.945		Valid
		SI4		0.939		Valid
		SI5		0.910		Valid
		SI6		0.907		Valid
	Anthropomorphism	A1	0.811	0.911	0.000	Valid
		A2		0.928		Valid
		A3		0.914		Valid
		A4		0.764		Valid
Risk	Privacy Concern	PC1	0.723	0.856	0.000	Valid
		PC2		0.872		Valid
		PC3		0.892		Valid
	Immature Technology	IT1	0.701	0.826	0.000	Valid
		IT2		0.912		Valid
		IT3		0.910		Valid
Behavioral Intention	IU1	0.678	0.883	0.000	Valid	
	IU2		0.919		Valid	
	IU3		0.811		Valid	

As seen in the data above, it can be determined that all the data used is valid, as the parameters for the KMO, component matrix, and Bartlett's Test of Sphericity are above the minimum parameter limit.

After conducting the validity test and finding valid results, the author can conduct a reliability test. Table 6 shows the results of the reliability test for the main test data:

Table 6. Reliability test for the main test data

Factors	Variables	Item	Cronbach's Alpha	Description
Technology	Convenience	C1	0.732	<i>Reliable</i>
		C2		<i>Reliable</i>
		C3		<i>Reliable</i>
	Authenticity of Conversation	AC1	0.891	<i>Reliable</i>
		AC2		<i>Reliable</i>
		AC3		<i>Reliable</i>
Hedonic	Enjoyment	E1	0.924	<i>Reliable</i>
		E2		<i>Reliable</i>
		E3		<i>Reliable</i>
	Pass time	PT1	0.926	<i>Reliable</i>
		PT2		<i>Reliable</i>
		PT3		<i>Reliable</i>
Primary Evaluation	Social Influence	SI1	0.960	<i>Reliable</i>
		SI2		<i>Reliable</i>
		SI3		<i>Reliable</i>
		SI4		<i>Reliable</i>
		SI5		<i>Reliable</i>
		SI6		<i>Reliable</i>
	Anthropomorphism	A1	0.902	<i>Reliable</i>
		A2		<i>Reliable</i>
		A3		<i>Reliable</i>
		A4		<i>Reliable</i>
Risk	Privacy Concern	PC1	0.844	<i>Reliable</i>
		PC2		<i>Reliable</i>
		PC3		<i>Reliable</i>
	Immature Technology	IT1	0.859	<i>Reliable</i>
		IT2		<i>Reliable</i>
		IT3		<i>Reliable</i>
Behavioral Intention		IU1	0.839	<i>Reliable</i>
		IU2		<i>Reliable</i>
		IU3		<i>Reliable</i>

From the data above, it can be determined that the main test data is reliable, since the value of Cronbach's Alpha has exceeded the minimum limit.

The next step is to process the data through linear regression using SPSS. In processing this linear regression data, the first thing to note is the significance value in the correlation table between the variables in the regression. The correlation between the variables can be seen in Table 7, as follows:

Table 7. Correlation between variables

	BI	C	AC	E	PT	SI	A	PC	IT
Sig. (1-tailed)	Behavioral Intention (BI)		0,000	0,000	0,000	0,000	0,000	0,070	0,000
	Convenience (C)	0,000		0,000	0,000	0,000	0,000	0,001	0,000
	Authenticity of Conversation (AC)	0,000	0,000		0,000	0,000	0,000	0,007	0,000
	Enjoyment (E)	0,000	0,000	0,000		0,000	0,000	0,123	0,000
	Pass Time (PT)	0,000	0,000	0,000	0,000		0,000	0,200	0,008
	Social Influence (SI)	0,000	0,000	0,000	0,000	0,000		0,183	0,014
	Anthropomorphism (A)	0,000	0,000	0,000	0,000	0,000	0,000		0,150
	Privacy Concern (PC)	0,070	0,001	0,007	0,123	0,200	0,183	0,150	
	Immature Technology (IT)	0,000	0,000	0,000	0,000	0,008	0,014	0,072	0,000

It can be seen on Table 7 that several correlations between variables have values higher than 0.05. This indicates that some independent variables have no correlation to their dependent variables, such as PC with E, PC with PT, PC with SI, and PC with A. However, some other variables such as PC with BI and IT with A have values higher than 0.05 but still lower than 0.1, hence the correlations are acceptable but insignificant.

Another thing to look at is the R-square value. The R-square value indicates the percentage of how much the independent variables affect the dependent variable. In this study, behavioral intention is the dependent variable, while the other eight variables are independent variables. Table 8 explains the R-square value.

Table 8. R-square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.805	0.648	0.634	0.73228

- a. Independent variables: IT, A, C, PC, PT, AC, SI, E
- b. Dependent variables: BI

The R-square value, as depicted in Table 8, is 0.648. This indicates that the behavioral intention variable, as the dependent variable, is influenced by 64.8% of the eight independent variables. The remaining 35.2% marks the influence of other variables not included in the study/outside the eight independent variables. If the percentage of influence of the independent variables to the dependent variable exceeds 50%, it means that the independent variables successfully influence the outcome of the dependent variable. This indicates that the selected independent variables are suitable and capable of proving the dependent variable.

Next, the author will examine the coefficient values of this regression. The coefficient values describe the incremental value of each variable, which will then be calculated using the regression model. The dependent variable will have the same value, but the independent variables will have different values, as seen in column B. If the B value for an independent variable exceeds 0.05, then the variable is considered insignificant. The coefficient values can be seen in Table 9 as follows:

Table 9. First linear regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

	(Constant)	1,544	0,445		3,468	0,001
	C	0,193	0,076	0,139	2,534	0,012
	AC	-0,044	0,075	-0,046	-0,585	0,559
	E	0,365	0,087	0,379	4,196	0
1	PT	0,064	0,053	0,089	1,211	0,227
	SI	0,168	0,047	0,241	3,542	0
	A	0,078	0,045	0,106	1,736	0,084
	PC	-0,008	0,037	-0,01	-0,208	0,836
	IT	-0,103	0,04	-0,125	-2,578	0,011

a. Dependent Variable: BI

The table above shows that BI has a coefficient of 1.544, which remains unchanged. However, out of the eight independent variables, three show insignificant correlations: AC, PT, and PC. Although IT has a value greater than 0.05, it's still close to 0.1, hence it's considered significant, albeit weak. To perform a more accurate calculation, the author will exclude these three insignificant variables. The results of the recalculation of the linear regression of the five independent variables can be seen in Table 10 below.

Table 10. Second linear regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		
	B	Std. Error	Beta			Lower Bound	Upper Bound	
(Constant)	1,407	0,421		3,339	0,001	0,576	2,237	
C	0,196	0,073	0,141	2,664	0,008	0,051	0,340	
E	0,376	0,062	0,390	6,019	0,000	0,253	0,499	
1	SI	0,186	0,045	0,268	4,167	0,000	0,098	0,274
	A	0,081	0,042	0,110	1,909	0,058	-0,003	0,164
	IT	-0,101	0,036	-0,123	-2,828	0,005	-0,172	-0,031

a. Dependent Variable: BI

After performing the linear regression for the second time, the first thing clearly visible is the change in the values for each coefficient. This occurs because the confidence interval in this linear regression calculation is 95%, so changes in the values resulting from the reduction in independent variables can occur.

Finally, the author will calculate the coefficients using the regression model formula. The regression model formula is a method for determining the increase in the value of the dependent variable in response to the appearance of the independent variable. Given that the three variables are considered insignificant, the author will only calculate the increase in the dependent variable in relation to the five independent variables. The regression model formula is:

$$“Y = a + b1X1 + b2X2 + bnXn”$$

In this formula, Y is the dependent variable, a is a constant value (1.407 according to the second regression table), b1 or bn is the B value of the independent variable. Therefore, when the formula is entered into the values listed in the table, the calculation will appear as follows:

$$“Y = 1.407 + 0.196X1 + 0.376X2 + 0.186X3 + 0.081X4 -0.101X5”$$

To interpret this formula or calculation, look at the numbers for each independent variable listed in both the formula and the table. Each additional value from X1 to X5 increases the Y value by the same amount as the X1 variable. Therefore, the result is:

1. If the value of X1 (Convenience) increases by 1 point, the value of Y (Behavioral Intention) will increase by 0.196 points.
2. If the value of X2 (Enjoyment) increases by 1 point, the value of Y (Behavioral Intention) will increase by 0.376 points.
3. If the value of X3 (Social Influence) increases by 1 point, the value of Y (Behavioral Intention) will increase by 0.186 points.
4. If the value of X4 (Anthropomorphism) increases by 1 point, the value of Y (Behavioral Intention) will increase by 0.081 points.
5. If the value of X5 (Immature Technology) increases by 1 point, the value of Y (Behavioral Intention) will decrease by 0.101 points.

Data testing using linear regression has been conducted to evaluate the correlation categories, the impact of the correlations, and the significance of the hypotheses forming the model. This evaluation served as the basis for concluding the author’s hypotheses based on the previous literature review. The following are the hypotheses proposed in this study, which were then compared with the hypotheses found in previous studies:

Table 11. Comparison table of study results

Hypothesis	Study results	Marjerison et al, 2022	Gursoy et al, 2019	Chen et al, 2022	Pizzi et al, 2022
H1: Convenience has a positive effect on behavioral intention.	Supported	Supported	-	-	-
H2: Authenticity of conversation has a positive effect on behavioral intention.	Unsupported	Supported	-	-	-
H3: Enjoyment has a positive effect on behavioral intention	Supported	Supported	-	-	-
H4: Pass time has a positive effect on behavioral intention	Unsupported	Supported	-	-	-
H5: Social influence has a positive effect on behavioral intention.	Supported	-	Supported	Supported	-
H6: Anthropomorphism has a positive effect on behavioral intention.	Supported	-	Supported	-	Supported
H7: Privacy concern negatively influences behavioral intention	Unsupported	Supported	-	-	-
H8: Immature technology has a negative effect on behavioral intention	Supported	Supported	-	-	-

The following is an explanation of the hypotheses after the author tested the hypotheses proposed in this study:

H1: Convenience has a positive effect on behavioral intention.

The first hypothesis is a positive correlation between convenience and behavioral intention. From the linear regression results above, it can be seen that for every increase in the

value of X1, the value of Y increases by 0.196. This indicates that TANYA is an easy-to-use product, and this increases consumers' behavioral intention. Furthermore, the correlation between convenience and behavioral intention is less than 0.05. This indicates a strong correlation between the independent and dependent variables, thus supporting Hypothesis 1.

In research conducted by Marjerison et al. (2022), convenience also has a positive correlation with behavioral intention. This suggests that ease or practicality is one of the factors that makes customers feel comfortable to use chatbots.

H2: Authenticity of conversation has a positive effect on behavioral intention.

In the second hypothesis, we begin to see a lack of correlation between the independent and dependent variables. Authenticity of conversation has a poor coefficient value with behavioral intention, as evidenced by the regression coefficients in the table. Although the correlation between the variables is small, it can be concluded that Hypothesis 2 is not supported.

A study by Marjerison et al. (2022) shows authenticity of conversation has a positive correlation with behavioral intention. However, the author used TANYA in their study, while Marjerison et al's (2022) used examples such as Apple's SIRI and Amazon's Alexa, hence the vast differences in the chatbots. In terms of technological advancements, product features, and services offered, TANYA is clearly inferior to both of these products. When consumers open the TANYA app, the answers provided are basically standard or "template" answers, which of course raises doubts about their authenticity and interaction. In contrast, SIRI or Alexa have a more precise and honest communication style and answers, so consumers will undoubtedly prefer using a chatbot that sounds more authentic or sincere.

Despite that, the author doesn't think this fact proves to be a barrier in using TANYA. One fundamental difference between TANYA and the other chatbots mentioned above is that TANYA's goal is limited to helping Tokopedia customers, so more straightforward answers are prioritized to support customers' understanding. Informal language might make it difficult for consumers to obtain the desired answers, leading to miscommunication. That's why TANYA prefers to use language that's considered more "rigid" than other chatbots.

H3: Enjoyment has a positive effect on behavioral intention.

From the third hypothesis, we can see that there's a significant correlation between enjoyment and behavioral intention. The linear regression results show that for every increase in X2, the Y value increases by 0.376. Furthermore, the correlation between the independent and dependent variables is also significant. This concludes that Hypothesis 3 is supported.

Viewing TANYA as a chatbot, we can certainly see that TANYA is more enjoyable to use as a customer service representative than a human. This is because TANYA can provide quick answers and is very easy to operate. TANYA can quickly provide problem-solving options and also swiftly respond to user complaints. One downside of TANYA is its limited capabilities. However, Tokopedia is able to solve this problem by connecting consumers with human customer service if TANYA is deemed unable to resolve a problem or does not provide satisfactory options for the customer. Furthermore, according to research by Marjerison et al. (2022), enjoyment also has a positive correlation with behavioral intention.

H4: Pass time has a positive effect on behavioral intention.

Data processing for H4 revealed that H4 does not have a significant correlation with the dependent variable, as the linear regression value for this hypothesis exceeded 0.05. Although the correlation between the variables was significant, it can be concluded that Hypothesis 4 is not supported.

In a study by Marjerison et al. (2022), pass time had a significant positive correlation with behavioral intention. This is because the chatbot used in the study has a lot of unique features that allow people to spend a significant amount of time using it. Compared to TANYA, whose features are quite straightforward, it would certainly be difficult for consumers to continue using TANYA beyond its original function. TANYA, although an AI-based chatbot, does not have extraordinary capabilities to alleviate boredom or be used as a toy. Therefore, the results are quite clear when we compare TANYA with other AI-based chatbots.

H5: Social influence has a positive effect on behavioral intention.

From the linear regression analysis, it can be concluded that social influence has a significant correlation with behavioral intention. The linear regression results show that for every increase in the value of X3, the value of Y increases by 0.186. In addition to the linear regression value, the correlation between the variables is also significant, thus supporting Hypothesis 5.

In a study conducted by Gursoy et al. (2019), social influence can affect performance expectancy, but not effort expectancy. This suggests that consumers may use chatbots if others around them also use them. However, if the application is perceived as difficult to use, consumers will not use it. This contrasts with TANYA, which lacks many features, making it very user-friendly and easy to find and use when consumers encounter problems.

H6: Anthropomorphism has a positive effect on behavioral intention.

Looking at the results of the linear regression, we can conclude that anthropomorphism has a significant correlation with behavioral intention. From these calculations, it can be concluded that for every increase in the value of X4, the value of Y will increase by 0.081. Furthermore, the correlation between the dependent and independent variables also shows a significant value. Therefore, Hypothesis 6 can be supported.

As depicted in the study by Gursoy et al. (2019), it can be seen that anthropomorphism does not affect performance expectancy, but it can affect effort expectancy. The study also says that chatbots with human characteristics actually threaten consumers' human identity, requiring greater effort to communicate with them. Discussing anthropomorphism naturally evokes images of AI technology with human-like visuals (Wirtz et al., 2018), communication styles (Huang & Rust, 2018), and gestures (Blut et al., 2021). This can be both a breakthrough and a disappointment for humans, as some people find chatbots with human characteristics more trustworthy and vice versa. TANYA itself is not a chatbot that prioritizes its ability to converse like a human, so some consumers feel aware and comfortable to continue using TANYA.

H7: Privacy concern negatively influences behavioral intention

Looking at the results of the linear regression analysis, it's clear that privacy concern has no significant correlation on behavioral intention. Furthermore, the correlation between the two variables is also insignificant, so hypothesis 7 is not supported.

A closer look reveals that privacy concern does not influence the behavioral intention of Indonesian consumers or Tokopedia consumers toward TANYA. This can be seen from two perspectives. The first perspective explains that TANYA, as a chatbot or AI technology development, has a security quality that is trusted by the Indonesian public, so privacy concerns do not arise and influence consumer perceptions. Although TANYA's security quality is not detailed on Tokopedia's website, the author's search results did not find any security issues that arose when consumers used TANYA, indicating Tokopedia's success in maintaining the security of consumer data privacy while using TANYA.

The second argument is the users' lack of understanding regarding cybersecurity, so privacy concerns do not influence consumers' behavioral intentions when using TANYA. If we

look at the Indonesian Cybersecurity Landscape in 2024, there were 330,527,636 anomalous traffic caused by various things, such as the Mirai Botnet, Generic Trojan RAT, and phishing websites (BSSN, 2025). This is caused by several factors, such as the lack of policies related to securing civilians' data, public's lack of understanding regarding procedures for securing their personal data, and a lack of education for civilians regarding cybersecurity. Indonesian Cybersecurity Landscape revealed that there had been several efforts made by National Cyber and Crypto Agency (*Badan Siber dan Sandi Negara/BSSN*), both regarding mitigation and education related to cybersecurity, but the impact was still minimal, considering that incidents such as ransomware attacks on national data centers and tax identification numbers (*Nomor Pokok Wajib Pajak/NPWP*) data leaks still occurred in 2024 (Tempo, 2024). The government needs to play an active role to address this issue, as cyberattacks are a significant threat to national sovereignty, and if Indonesia fails to protect its citizens, it could be perceived as weak in cybersecurity. Indonesia currently ranks 49th out of 176 countries and fifth in ASEAN in the national cybersecurity index (NCSI, 2023). Furthermore, there are no laws or regulations regarding data protection and data privacy (Data360, 2024). Therefore, the Indonesian government needs to make changes to increase public awareness and protection of cyber privacy.

H8: Immature technology has a negative effect on behavioral intention

Looking at the results of the linear regression, it's clear that the correlation between the two variables is highly significant. From these calculations, it can be concluded that for every increase in the value of X5, the value of Y increases by -0.101. Furthermore, the two variables also have a significant correlation. Therefore, we can conclude that Hypothesis 8 is supported. Some consumers may feel that TANYA is still not operating properly or as it should. This is understandable, as in addition to its limited feature set, TANYA itself is still very "rigid" in assisting consumers in resolving issues that may arise on Tokopedia. According to research by Marjerison et al. (2022), immature technology also has a negative impact on behavioral intentions. Therefore, it can also be seen that chatbots are still imperfect, and there are still many opportunities for development of this technology. Regarding TANYA itself, TANYA can currently be classified as a new technology that emerges to help consumers resolve issues they encounter while using Tokopedia. Immaturity or prematurity of technology of TANYA itself is still considered normal, considering that chatbot technology itself is still quite new and will continue to grow in the future. Therefore, Tokopedia needs to develop both features and TANYA's capabilities so that consumers feel that TANYA is very capable of helping them and can be a good solution for them as well.

CONCLUSION

This study aims to determine and provide insight into how consumers can develop behavioral intentions when using chatbots. Based on the findings, the following conclusions emerge:

1. TANYA can be used anywhere and is easy to use. TANYA, as a chatbot from Tokopedia, is very easy to access, because as long as consumers have the Tokopedia app and a registered Tokopedia account, consumers can immediately use TANYA. To use it, consumers only need to select their complaint related to the problem they are facing on Tokopedia or type the problem directly. Furthermore, TANYA can also respond to complaints quickly, so consumers do not have to wait long for answers to their problems.
2. Encouragement from the surrounding environment can influence consumers to use TANYA. From the results of the study above, it can be seen that consumers feel that by using TANYA, they can appear superior or "cool" compared to those who do not use it. In addition, they consider TANYA a good product, so they are willing to influence or

recommend others to use TANYA. Then, using TANYA can also be a less popular thing, so consumers who use it can feel they have their own uniqueness or difference so they can feel classier than those who do not use it.

3. Pass time does not have a positive correlation with behavioral intention, meaning that respondents and consumers do not feel that TANYA can be used in their free time. Pass time explains that chatbots can be used in free time to fill time or relieve boredom felt by consumers. If this hypothesis is not supported, it means that respondents do not feel that TANYA can be used to relieve their boredom. This can happen because TANYA as a chatbot is very rigid, meaning that TANYA can only do things that have been programmed in it without being able to do anything else beyond its capabilities. When compared to other chatbots such as ChatGPT or Amazon Alexa, TANYA's quality is certainly far below. However, this does not make TANYA less of a chatbot when compared to other chatbots. TANYA can still function optimally and can still help consumers properly, according to the functions required by Tokopedia.

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