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CONTAGION-BASED CHATBOT USAGE INTENTION: SYNTHESIZING TECHNOLOGY ADOPTION AND SOCIAL CONTAGION THEORY

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ABSTRACT
Chatbots have become transformative technology in the banking industry. However, there is still a knowledge gap in understanding the influence of social contagion on chatbot user behavior. This research aims to identify and analyze the intention to use chatbots based on the synthesis of technology adoption and social contagion theories. The research method used is quantitative, employing a survey approach and collecting data through online questionnaires from 300 chatbot users in private banks in Manado. Data analysis was conducted using smartPLS. The research results indicate that factors such as Perceived Effectiveness, Perceived Ease of Use, and Coercive Pressure significantly influence users' intention to continue using chatbots. However, normative pressure and mimicry do not have a significant impact. These findings provide an important contribution to theoretical understanding and practical application in the sustainable use of chatbots in the banking industry, which can assist banks in designing more effective marketing strategies and services.

Keywords: Chatbot; Continuous Intention, Social Contagion Theory, Coercive Pressure, Technology Adoption.

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INTRODUCTION

In conjunction with the development of technology, several service industries have experienced significant innovation and digitalization renewal. Thus, value creation in the digital era has become a collaboration between customers and enterprises (Hosseini et al., 2022). Internet and technological advancement have altered the delivery and utilization of financial services (Hwang & Kim, 2021). The digital revolution has also changed the landscapes of numerous industries (Wang et al., 2021). Many financial institutions provide innovative alternative electronic channels to maintain a competitive advantage and meet consumer expectations (S.-N. Zhang et al., 2019). Like many other industries, the banking sector is evolving due to changing consumer behavior, rising expectations, the adoption of new technology, and the general digitization of business and society (Rahmayati, 2021). Significantly, the onset of the COVID-19 pandemic has induced a transformative change in how communication and work are conducted, emphasizing the importance of automated chat functions, specifically Chatbots, in the operations of diverse companies. (Nguyen et al., 2021) brahi. Banking must become digitally adapted to survive in this new technological era. Failure to respond and adapt to the new environment will inevitably lead to catastrophic losses and failure.

Chatbots appeal to bank customers because they can communicate quickly and anytime. Customers utilize these messaging services to obtain information (e.g., product specifications) or technical support (e.g., problem resolution). This service provides customers with real-time

assistance and services (Adam et al., 2021). The immediate responsiveness of messaging services has altered customer service into an interactive dialogue, exerting notable impacts on consumer trust, satisfaction, repurchase intent, and loyalty. (Mero, 2018) As with most industries affected by digitization, technological advances have infiltrated the Banking Industry (Rahmayati, 2021). Consumers who have experienced convenience and comfort when obtaining services from one bank frequently desire the same services from other banks. The perception of safety and comfort generates tension, such as contagious social disease. Social Contagion is a person's intentions and behaviors that are influenced and modeled by their observations and social learning. (Chaouali & El Hedhli, 2018) This means that Banking Businesses that have yet to adopt Chatbot services must be able to adapt and develop by employing technology to modify their business model to continue to exist and compete with other Banking Businesses. The functions of the most popular Chatbot services are interaction, amusement, problem-solving, style, and customization (Misischia et al., 2022). (Richad et al., 2019) have already highlighted the importance of studying Chatbot acceptance in the context of the banking industry by researching the technology acceptance model and customer experience for consumers banking with Chatbot technology, respectively. Existing literature has investigated the significance of Chatbot acceptance and user experience in the banking industry.

Numerous prior studies have voiced concerns regarding implementing Chatbots due to their widespread use. The term "Chatbot" combines "Chat" and "Robot" (Hwang & Kim, 2021). According to (Lui & Lamb, 2018), chatbots are computer programs propelled by artificial intelligence that engage in conversations or interactions with real people via messaging apps and websites. Text-based exchanges and verbal interactions between humans and Chatbots are possible regardless of time or location (Karri & Kumar, 2020). Both forms of machine-based engagement are deftly camouflaged as human agent assistance, allowing consumers to initiate conversations more easily (Prasetya et al., 2018). The technology acceptance model (TAM) is essential to the study of consumer behavior concerning the adoption of technologies. (Carranza et al., 2021). According to the Technology Acceptance Model (TAM), if usability and ease of use influence an individual's attitude towards technology, it can alter technology usage intentions. When Chatbots provide real-time banking services, many clients enjoy their advantages. Chatbot is part of the banking industry's initiative to innovate and improve the quality of banking services (Carranza et al., 2021). The factors influencing Chatbot adoption have been studied using technology acceptance models, and the consumer experience has been considered in the context of banking with Chatbot technology. Nevertheless, more research is needed to investigate the influence of social contagion in the acceptance of Chatbot services. This study aims to thoroughly comprehend the impacts of attitudes and social contagion on the adoption of Chatbots. The focus and objectives of this research involve assessing the impact of Chatbot adoption on clients' engagement in private banks through the application of the Technology Acceptance Model (TAM) and Social Contagion.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a paradigm for examining and comprehending the elements that influence the adoption of technology use. TAM illustrates the causal relationship between ideas about the benefits of a technology or information system, perceived ease of use, perceived usefulness, attitude towards using the technology, and intention to keep using it (Carranza

et al., 2021). Researchers have widely utilized TAM models to assess behavioral intentions and user satisfaction (Duarte et al., 2018). The TAM theory was developed to analyze user acceptance behavior concerning information service systems, grounded in the perspective of social psychology (T. Zhang et al., 2018). According to (Ilhamalimy & Ali, 2021), TAM is the best predictive model for analyzing consumer behavior regarding its use of information technology. TAM utilizes the explanatory variables of "Perceived Usefulness" (PU) and "Perceived Ease of Use" (PEOU) to explain a user's attitude toward the adoption of a specific technology and their intention to persist in its use. (Ashfaq et al., 2020)

Perceived Ease of Use (PEOU) and Perceived Usefulness (PU)

Perceived Ease of Use (PEOU) pertains to "the extent to which an individual believes that utilizing a specific system would entail minimal effort." (Davis et al., 1989). Previous research has consistently demonstrated a substantial correlation between PEOU and PU. (Ashfaq et al., 2020). PEOU represents an individual's perception of the ease of technology use (Carranza et al., 2021). In the context of Chatbot services, ensuring ease of learning and usage is crucial to minimize user intimidation. (Jain et al., 2018) This suggests that a positive impact on users' PU in their engagement with Chatbot services will likely result from the construction of PEOU. Perceived usefulness (PU) is defined as the extent to which an individual believes using a specific system would improve their job performance." (Davis et al., 1989). The preceding explanation can be expressed as the following hypothesis:

H1: PEOU has a positive effect on PU on Chatbot.

Perceived Usefulness (PU) and Attitude Towards Using (ATU)

Perceived Usefulness (PU) can be characterized as individuals' perception of the enhancement in performance achieved by using a particular technology. (Foroughi et al., 2019) Limited research has indicated that PU stands out as the most robust cognitive factor influencing the acceptance of technology, as consumers emphasize the potential benefits of an innovation (Zarouali et al., 2018). Furthermore, it has been established that PU plays a crucial role in shaping positive attitudes among consumers toward novel digital technologies. Consequently, the perceived usefulness of a Chatbot will exhibit a positive correlation with consumers' attitudes toward utilizing the Chatbot.

H2: PU has a positive effect on the ATU Chatbot.

Perceived Ease of Use (PEOU) and Attitude Towards Using (ATU)

In the realm of technology, PEOU within TAM has been recognized as a pivotal element in bolstering Continuous Intention. (Ashfaq et al., 2020) PEOU is delineated as the degree to which consumers perceive the utilization of the Chatbot as straightforward and uncomplicated (Zarouali et al., 2018). Given its focus on the efficacy of action, PEOU has been acknowledged as a significant inherent motivator for consumers, forming a direct link with their attitude. Attitude toward using (ATU) signifies an individual's inclination or desirability to employ the system. (Emaran et al., 2020). Following this reasoning, we expect that:

H3: PEOU has a positive effect on the ATU Chatbot.

Perceived Usefulness (PU) and Continuous Intention (CI)

In the first version of TAM, Davis et al. (1989) identified perceived usefulness (PU) as a pivotal determinant influencing users to adopt and sustain their usage of novel technologies. The significance of PU extends across various research contexts, particularly in e-commerce studies,

where it consistently emerges as a noteworthy factor impacting shoppers' behavioral decisions (He et al., 2018). In the e-commerce domain, PU has demonstrated a consistent and significant association with continuance intention (CI), denoting users' intent to persist in using the information system (Gupta et al., 2021). Continuous intention (CI) is defined as users' willingness to maintain their engagement with the information system over time (Ahmad et al., 2020). The essence of PU lies in its ability to instill a belief among users that utilizing the system will enhance their overall performance. A heightened perception of usefulness leads consumers to believe that the technology will improve their performance, positively influencing their intention to continue using it. (Gupta et al., 2021) Ahmad et al. (2020) defined continuous intention (CI) as an individual's inclination to persist in utilizing a specific technology beyond the initial adoption phase; the same article emphasizes that the perceived usefulness (PU) of the technology significantly influences an individual's intent to continue using it. A higher PU of Chatbot services corresponds to a more positive inclination for their sustained usage, thereby increasing the likelihood of continued intention.

H4: PU has a positive effect on the CI of Chatbot.

Attitude Toward Using (ATU) and Continuous Intention (CI)

Attitude toward using (ATU) represents a user's disposition towards incorporating a system into their daily life, reflecting their acceptance or rejection of technology usage. According to TAM, attitudes shape users' behavioral tendencies concerning technology usage. Numerous studies have affirmed a positive correlation between attitude and the intention to persist in using technology (Foroughi et al., 2019). A different research defines ATU as an individual's inclination or desire to engage with the system. (Al-Emran et al., 2020). Earlier research Prior studies showcased a significant association between ATU and CI (Al-Emran et al., 2020). Moreover, attitude is delineated as the degree to which an individual holds positive or negative sentiments regarding executing a specific behavior (Davis et al., 1989). Additional research outlines crucial factors that impact attitudes regarding technology use (Kemp et al., 2019). Moreover, according to (Alsharo et al., 2020), ATU positively influences the sustained utilization of technology. Consequently, attitude is anticipated to be a notable determinant in predicting users' intentions regarding using Chatbot services. In line with this, the following hypothesis is suggested:

H5: ATU has a positive effect on the CI of Chatbot

Social Contagion Theory

Social contagion is how consumers impact each other's decisions to adopt or utilize a product. It embodies the concept that individuals choose products when they observe others who have already adopted them, akin to the spread of innovations resembling epidemics (Kiogothe, 2018). Social contagion pertains to an individual's intentions and behaviors, molded and influenced by observations and social learning (Chaouali & Hedhli, 2019).

Social contagion emanates from the societal framework, leading individuals in analogous social positions to assess the advantages and risks of adoption comparably (Kiogothe, 2018). When individuals interact with various social factors, they are prone to internalize implicit choice norms, which become the fundamental basis for their future decisions. (e.g., individuals, institutions, and organizations) (Chaouali & Hedhli, 2019). Individuals embrace novel entities such as products, services, and technology either involuntarily to meet the expectations of perceived authoritative

entities like service providers, suppliers, and public authorities or willingly through observational learning and positive reinforcement (Chaouali & Hedhli, 2019). Past research has indicated that continuous intention (CI) is notably influenced by the impact of social contagion (Al-et al., 2020). The key expressions of this form of social contagion include normative pressure, mimetic pressure, and coercive pressure.

Coercive Pressure

Social contagion is characterized by the extent to which an individual believes that influential or similar others endorse the idea that they should utilize the new system (Chaouali & El Hedhli, 2018). Coercive pressures encompass formal and informal influences exerted on social actors, whether individuals or organizations, compelling them to adopt similar attitudes, behaviors, and practices under the influence of more influential actors (Fauzi, 2019). Informal pressures may stem from the cultural dynamics and expectations within a community or an organization's environment (Masocha & Fatoki, 2018). Coercive pressures, exemplified by government and regulatory bodies, play a crucial role in influencing behaviors for sustainability (Masocha & Fatoki, 2018). Coercive pressure denotes alterations in individual behavior prompted by directives from more influential social actors. This leaves communities or individuals with no recourse but to conform to the desired conduct of entities possessing greater power (Hiqmah, 2020). For instance, entities like banks or government bodies may enforce specific channels for operations, such as electricity billing, leading individuals to adopt technology to consistently comply with more potent authorities. In this context, the formulated hypothesis is as follows:

H6: Coercive pressure has a positive effect on Chatbot's CI.

Normative Pressure

Normative pressure entails shifts in an individual's behavior driven by an unconscious inclination to conform to social norms, especially when a particular behavior becomes widely accepted or popular among relatives or society (Hiqmah, 2020). Such pressures may lead social actors who have yet to embrace the innovation to experience dissonance and consequent discomfort when witnessing peers whose approval they value adopt the innovation (Fauzi, 2019). Furthermore, a similar study also asserted that social actors are more inclined to imitate a specific action if numerous others have already taken that same action. The adoption of certain behaviors by social actors is compelled by their anticipation of legitimacy rather than a strict consideration of appropriateness. Normative pressure within a society significantly shapes individuals' behavior and choices. However, the motivation to adhere to these social norms can range from profound intrinsic involvement to a superficial identification with a social group and mere extrinsic compliance (Nguyen et al., 2021). Individuals not conforming to these behaviors may encounter frustration and discomfort as they lag behind those who have embraced the new norms (Hiqmah, 2020). Consequently, individuals generally continuously use technology to adapt to their environment. Building on this rationale, our expectation is that:

H7: Normative Pressure positively affects the CI's decision to use a Chatbot.

Mimetic Pressure

Mimetic pressure refers to intentional and voluntary efforts to imitate the conduct of individuals perceived to be more successful and possessing a higher social standing (Hiqmah, 2020). Social actors are prompted by mimetic pressures to imitate the established behaviors and practices

of other influential and effective actors deliberately and willingly. Essentially, if an influential figure accomplishes a task effectively, it motivates others to replicate it (Fauzi, 2019). In innovation adoption, the mimetic influence acts as a catalyst or connection that motivates the non-adopter group to feel compelled to undertake the action, as it has already been executed by someone else (Hiqmah, 2020). This will lead to an uncertain reaction to a specific regulation. The uncertainty arises from various factors within the organization, including shifts in governmental politics and culture and frequent changes in legislation, among others. Inadequate organizational readiness for a rule will result in a lack of organizational comprehension regarding implementing new regulations (Ridha & Basuki, 2019). Pressure where users feel superior to obtain banking services and observe the convenience of other customers who use Chatbots, resulting in a solid intent to continue using the Chatbot application. Based on these findings, we expect that:

H8: Mimetic pressure positively affects the CI's ability to use a Chatbot.

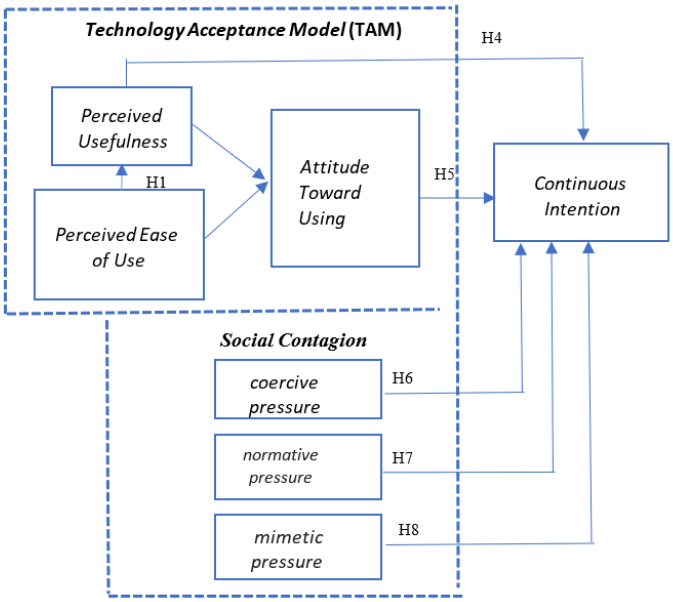

Figure 1. Conceptual Framework

METHOD

This research will employ a quantitative approach, necessitating the collection of data. Furthermore, the sampling method uses nonprobability sampling of the purposive type. The study utilized a questionnaire survey methodology to obtain pertinent data, using a questionnaire as the instrument to test our research model. We conducted a literature review in the initial phase to identify relevant reference variables. The measurements can be found in the Appendix. The questionnaire responses were evaluated on a five-point Likert scale, ranging from 1 to 5, where 1 corresponds to "strongly disagree," 3 indicates "neutral," and 5 represents "strongly agree." The research model comprises seven structural variables, with their measures drawn from existing literature or tailored to suit the Chatbot implementation context for content validity assurance. The measurement of PU and PEOU is based on the study of (Foroughi et al., 2019). ATU and CI are measured based on the analysis of (Foroughi et al., 2019) and (Chaouali & El Hedhli, 2018). The measurement of the three pressures of social contagion, which are CP, NP, and MP, is based on the

study of (Chaouali & El Hedhli, 2018), Lin, Luo & Luo (2020). Each construct within the model is operationalized in the form of reflective constructs.

To collect relevant data, the study targeted users of chatbots in the Internet banking applications of private institutions in Manado who have interacted with a chatbot at least once and used Chatbot services within the previous six months. The survey questionnaire was distributed online through Google Form Survey using WhatsApp platforms, and 300 responses were included for analysis. Subsequently, SmartPLS was employed for statistical testing and validation of the proposed model. Several motivational factors influenced the selection of SmartPLS for this study. Firstly, SmartPLS is known for its user-friendly interface. Secondly, it has emerged as a prominent structural equation modeling (SEM) analysis method. Lastly, SmartPLS is widely recognized and accepted in academic circles, particularly within diverse research domains related to Management Information Systems (MIS).

Table 1. Data Analysis And Result

Characteristics	Options	Frequency	Percentage
Gender	Male	146	49
	Female	154	51
Age	<17 years	5	2
	17 - 25 years	15	5
	26 - 35 years	181	60
	36 - 45 years	84	28
	> 45 years	15	5
Education	High School and Equivalent	12	4
	College	23	8
	Undergraduates	226	75
	Graduate	39	13
	Postgraduate	0	0
Job Status	Employed	278	93
	Unemployed	22	7
Occupation	Office Employee	230	77
	Government Employee	15	5
	Students	5	2
	Entrepreneur	11	4
	Pensioner	3	1
	Housewives	3	1
	Others	30	10
Name of the Bank where I use Chatbot Services	Bank BNI	78	26
	Bank Mandiri	59	20
	Bank BCA	81	27
	Bank Lain	92	31
Purpose of using Chatbot Services	Products and services provided by the Bank	108	36
	Open a Bank Account	52	17
	Lodging a complaint	92	31
	Others	48	16
How long I've been using the Chatbot services	<1 Year	114	38
	<2 Years	93	31
	<3 Years	55	18

Characteristics	Options	Frequency	Percentage
	>3 Years	38	13
I am actively using Chatbot services to fulfill the objective of	Products and services provided by the Bank	108	36
	Open a Bank Account	52	17
	Lodging a complaint	92	31
	Others	48	16
How often I have used the Chatbot services over the last six months	1 time	95	32
	2 times	86	29
	3 times	42	14
	>3 times	77	26

As seen in Table 1, among all the participants, 51% of them are female, while 49% are male. Furthermore, the age categories of respondents were as follows: 60% were noted to be between 26 to 35 years, followed by 28% were 36 to 45 years, the rest, 5% were above 45 years, and 5% were 17 to 25 years. The sample is well-educated since 75% of the respondents were undergraduates, 13% graduated, and 12% were high school graduates. Based on employment status, around 93% of the respondents are employees, with the most common occupation being bank employees. Moving away from demographic factors and more into practical analysis, we quantify the frequency of chatbot service usage. In total, 87% of them use chatbot services less than 3 times, and only 13 % are the ones who often use the services. Regarding respondent usage, the result shows that chatbot services are used to obtain information about bank products.

Table 2. Result for reliability and convergent validity

Construct	Indicator	Factor Loading	Cronbach's	CR	AVE
Perceived usefulness	PU1	0.873	0.809	0.875	0.638
	PU2	0.787			
	PU3	0.765			
	PU4	0.765			
Perceived Ease of Use	PEOU1	0.727	0.762	0.846	0.580
	PEOU2	0.802			
	PEOU3	0.723			
	PEOU4	0.791			
Attitude Toward Using	ATU1	0.827	0.850	0.899	0.689
	ATU2	0.831			
	ATU3	0.820			
	ATU4	0.843			
Continuous Intention	CI1	0.825	0.849	0.898	0.689
	CI2	0.750			
	CI3	0.879			
	CI4	0.861			
Coercive Pressure	CP1	0.810	0.872	0.913	0.723
	CP2	0.838			
	CP3	0.881			
	CP4	0.871			
Normative Pressure	NP1	0.794	0.875	0.913	0.726
	NP2	0.862			
	NP3	0.892			
	NP4	0.857			

Construct	Indicator	Factor Loading	Cronbach's	CR	AVE
Mimetic Pressure	MP1	0.852	0.852	0.902	0.700
	MP2	0.915			
	MP3	0.885			
	MP4	0.674			

This study initially assessed the measurement model to validate the scale's reliability and validity before examining the structural model. Internal consistency was evaluated using Cronbach's α and Composite Reliability (CR) values, detailed in Table 2. The NP construct exhibited the highest CR and AVE values (CR = 0.913, AVE = 0.726), while the PEOU construct displayed the lowest values (CR = 0.846, AVE = 0.580). Consequently, all constructs in this research surpassed the recommended thresholds. Indicator loading factors or correlations with respective latent variables in Table 2 indicate individual reliability. Latent variable reliability employed Cronbach's α coefficient, with values above 0.7 considered acceptable.

Additionally, composite reliability was calculated to assess unidimensionality. Convergent validity was examined through Average Variance Extracted (AVE), where values above 0.5 were deemed acceptable. Table 2 presents Cronbach's α coefficient, composite reliability, and AVE. Discriminant validity was confirmed as the square root of AVE for each latent variable exceeded correlations with other latent variables. The recommended reliability threshold of 0.7 was met.

Validity assesses data accuracy and is determined by calculating the Average Variance Extracted (AVE). In the validity test results, the AVE values for each variable surpassed 0.5. Furthermore, all factor loadings exceeded 0.7, signifying robust convergent validity of the model. Convergent validity results are presented in Table 2. The square root of the AVE for each construct exceeded the inter-correlations among all constructs, confirming the model's discriminant validity. Discerning validity outcomes are detailed in Table 3.

Table 3. Discriminant Validity

Discriminant Validity - *Fornell-Lacker criterion*

	ATU	CI	CP	MP	NP	PEOU	PU
ATU	0.830						
CI	0.760	0.830					
CP	0.577	0.703	0.850				
MP	0.404	0.509	0.685	0.836			
NP	0.529	0.635	0.780	0.650	0.852		
PEOU	0.647	0.592	0.474	0.399	0.444	0.762	
PU	0.732	0.697	0.398	0.256	0.403	0.676	0.799

Notes: Bold values on the diagonal are the square roots of AVE, and the off-diagonal values are correlations. ATU: Attitude Towards Using; CI: Continuous Intention; CP: Coercive Pressure; MP: Mimetic Pressure; NP: Normative Pressure; PEOU: Perceived Ease of Use; PU: Perceived Usefulness.

Table 4. Discriminant Validity – Heterotrait–monotrait ratio (HTMT)

	ATU	CI	CP	MP	NP	PEOU	PU
ATU							
CI	0.888						
CP	0.662	0.811					

	ATU	CI	CP	MP	NP	PEOU	PU
MP	0.464	0.583	0.789				
NP	0.591	0.711	0.878	0.741			
PEOU	0.775	0.715	0.547	0.464	0.508		
PU	0.881	0.844	0.474	0.304	0.461	0.846	

Notes: ATU: Attitude Towards Using; CI: Continuous Intention; CP: Coercive Pressure; MP: Mimetic Pressure; NP: Normative Pressure; PEOU: Perceived Ease of Use; PU: Perceived Usefulness.

Table 3 affirms the discriminant validity of this study's utilized variables through the Fornell-Larcker criterion and HTMT ratio (Lee et al., 2021). The Fornell-Larcker results demonstrate that the square root of the AVE exceeded the corresponding columns and rows. According to (Rohmatulloh & Nugraha, 2022), discriminant validity is considered valid if the HTMT value is below 0.9. All HTMT ratio results meet this criterion, as determined by the bootstrapping algorithm. Moreover, reliability values ranging from 0.60 to 0.70 are deemed "acceptable in exploratory research," while values between 0.70 and 0.90 are considered "satisfactory to good" (Purwanto, 2021).

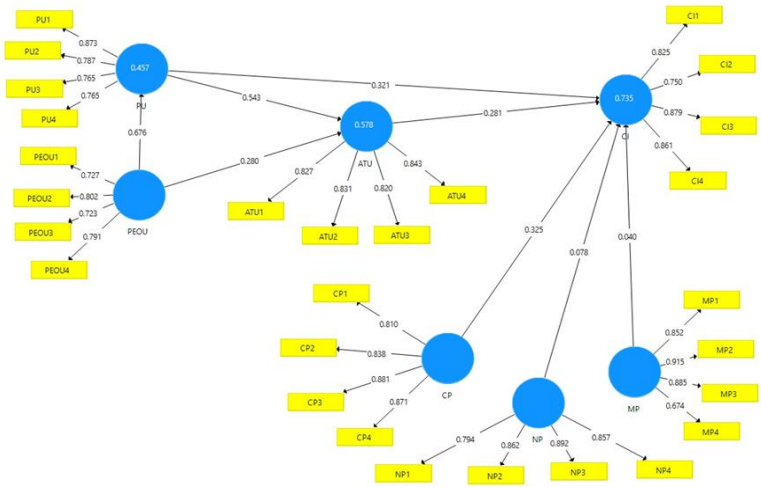

Figure 2. Path Modelling

The significance of path modeling (Figure 2) was measured using the bootstrapping technique (Hair Jr et al., 2021) with a p-value of 0.05 and the variance of the dependent variable.

Table 5. Results for the hypothesis test.

Hypothesis	Path	Original Sample	T Statistic	P Values	Comment	Result
H1	PEOU -> PU	0.676	13.081	0.000	Significant	Supported
H2	PU -> ATU	0.543	8.426	0.000	Significant	Supported
H3	PEOU -> ATU	0.280	4.358	0.000	Significant	Supported
H4	PU -> CI	0.321	5.789	0.000	Significant	Supported
H5	ATU -> CI	0.281	3.826	0.000	Significant	Supported
H6	CP -> CI	0.325	6.122	0.000	Significant	Supported
H7	NP -> CI	0.078	1.313	0.190	Not Significant	Not supported
H8	MP -> CI	0.040	0.926	0.355	Not Significant	Not supported

The proof for the final hypothesis can be determined by examining the t-statistic value and p-value. The hypothesis exhibits a noteworthy positive impact when the t-statistic value equals or surpasses 1.96, and the p-value is below 0.05. Conversely, if the t-statistic value falls below 1.96 and the p-value exceeds 0.05, it can be inferred that the hypothesis lacks an effect. We can scrutinize Table 4 for relevant findings in this study.

Table 5 presents the outcomes of the hypothesis testing. The findings from the PLS-SEM analysis reveal a significant positive impact of PEOU on PU (t-statistic = 13.081, p-value = .00), thereby supporting H1. Additionally, PU has a notable positive effect on ATU (t-statistic = 8.426 p-value = .00) and PEOU on ATU (t-statistic = 4.358, p-value = .00), confirming hypotheses H2 and H3. The significant positive effect of PU on CI is evident, with a t-statistic of 5.789 and a p-value of .00, supporting H4. Furthermore, ATU substantially positively impacts CI (t-statistic = 3.826, p-value = .00), helping H5. Moreover, CP exhibits a significant positive impact on CI, with a t-statistic of 6.122 and a p-value of 0.000, backing H6. Conversely, hypotheses H7 and H8 lack support as their t-statistics and p-values do not meet the criteria for hypothesis confirmation. The t-statistics are below 1.96 in both cases, and the p-values exceed 0.05. Therefore, these hypotheses cannot be accepted, indicating no positive and meaningful relationship between NP and CI and MP and CI.

RESULTS AND DISCUSSION

Research introduces a conceptual model for examining users' intention to use chatbots, incorporating the Technology Acceptance Model (TAM) and the influential effects of social pressure. The author notes a need for more empirical studies investigating the continuous intention to use chatbots based on TAM and social pressure, limiting direct comparisons with earlier research. However, meaningful comparisons can be drawn with relevant literature. The study, utilizing multivariate statistical analysis techniques on a dataset of 300 responses collected through an online questionnaire survey, tested eight hypotheses outlined in the proposed model, employing SmartPLS software. The results supported six hypotheses (H1-H6), while the remaining two hypotheses (H7-H8) lacked support from the data (see Table 4). The findings contribute significantly to both theoretical understanding and practical insights into the continuous intention of using chatbots.

The path modeling analysis revealed several significant findings that shed light on the factors influencing users' continuous intention to use chatbot services. Notably, Perceived Usefulness (PU) significantly affected users' attitudes towards chatbot usage. This supports the idea that users are likelier to continue using chatbots if they perceive them as valuable tools that enhance their performance and productivity. Moreover, the study found that Perceived Ease of Use (PEOU) plays a vital role in shaping users' perceptions and attitudes. A positive impact on Perceived Usefulness and Attitude Toward Using (ATU) was observed, indicating that chatbots that provide immediate responses can lead to greater satisfaction and a higher intention to continue using the service. Coercive Pressure (CP), characterized by external influences pushing users to adopt Chatbot services, was also identified as a significant factor impacting users' continuous intention. The results suggest that certain external factors can influence users' decisions to continue using Chatbots, highlighting the importance of considering external drivers in adopting Chatbot technology. Furthermore, the influence exerted by the external environment and the opinions of relatives and friends is not sign needs to be enough to have a continuous intention to use Chatbot. Hence, the research hypotheses

about normative pressure and mimetic pressure on the constant intention of using Chatbot have yet to prove their validity based on the data collected from the respondents.

The pressure to conform to social norms and expectations, specifically regarding adopting Chatbot services, does not significantly influence bank clients' continuous intention to use Chatbots. The non-significant effects of NP and MP on CI highlight the need for further investigation into the specific circumstances and contexts under which these factors may or may not influence customer adoption behavior. Normative pressure, which involves individuals conforming to social norms or behaviors considered normal or popular within their society or social circles, is a well-documented psychological phenomenon. Nevertheless, within the context of continuous intention to use Chatbots, empirical investigations have suggested that the impact of normative pressure does not play a significant role in prompting bank clients to continuously use Chatbot services. When the user perceives that the Chatbot does not effectively fulfill their needs or deliver the desired outcomes, their reliance on the technology is primarily guided by this assessment rather than conforming to social norms. In the context of mimetic pressure, the tendency to imitate or follow the actions of others in adopting Chatbot services does not significantly impact bank clients' continuous intention to use Chatbots, particularly when the users perceive the Chatbot as lacking in utility. In such circumstances, the user's evaluation. This finding suggests that clients' adoption decisions are not heavily influenced by observing others' behavior or actions related to Chatbot usage. The lack of significant influence of mimetic pressure highlights that clients' perceptions of the value and effectiveness of Chatbots play a more critical role in shaping their continuous intention to use these services. This result underscores the importance of considering other factors in understanding customer acceptance and adoption of banking technologies. In contrast, the usage of Chatbot is significant and approved due to the beneficial influence of the results of utilizing chatbots, both in terms of perceived usefulness and perceived ease of use.

Theoretical Implications

This is one of the early studies that we are aware of that apply TAM and social contagion theory to the context of Chatbot Service's continuous usage intention to determine the coexistence of the aspects in these theories that define Chatbot Service's ongoing usage intention. Utilizing the TAM and Social Contagion theories, this study established hypotheses to investigate their direct influence on Chatbot Continuous Intention. However, it's worthwhile to note that the antecedents of adoption from TAM and Social Contagion function better when they are separately used in the context of adoption and continuous intention, respectively. Additionally, the examination asserts that Perceived Usefulness is positively related to Attitude Toward Using, as supported by (Zarouali et al., 2018), while Attitude Toward Using further predicts Chatbot Continuous Usage Intention (Ashfaq et al., 2020). A significant number of studies in the field of Chatbot Services have supported this assertion. Revealing these two predictors is still salient in research on determining Chatbot Continuous Intention.

This present investigation expands on existing research that explores the impact of social contagion on the ongoing intention to use Chatbots. Previous studies have predominantly concentrated on the influence of social acceptance, specifically others' approval, in utilizing Chatbots.

Managerial Implication

The results have practical consequences for providers of chatbot services. In practice, it was discovered that Perceived Usefulness positively influences Chatbot Service Continuous Use Intention. This calls for chatbot service providers, particularly banks, to provide chatbot services to let users use chatbot services while performing various tasks. Similarly, the Perceived ease of use of chatbot service significantly impacts the Chatbot service's Continuous Usage Intention of users. This also calls for banks to ensure chatbots provide services that give users a good experience while using chatbots. In that, customers are more likely to continue using Chatbot service. Furthermore, as customers enjoy the continuous usage of chatbot services, it motivates bankers to continue with innovative services and provide constant updates to enhance and promote better services.

Prior research has been less active in finding social contagion to improve our understanding of the predictors of intent to use a chatbot service. In essence, how might the impact of social contagion be significant for necessary technologies like Chatbots? Addressing this question emphasizes the importance of considering attitude and social contagion as pivotal factors in the inference-drawing process. As the authors know, the intertwined functions of attitude transferability across a bank's distribution channels and the contagion of social influences in technology usage have yet to be specifically explored. By utilizing their established self-service technology and examining social contagion, the present study introduces a comprehensive research model to assist banks in effectively encouraging their clients' ongoing utilization of chatbot services.

The study's findings indicate that banks can enhance the continuous usage of Chatbot services through advertising campaigns, adhering to practical and valuable criteria. As clients encounter inquiries about banking services for transactions, there is an opportunity to improve services by establishing more effective methods, contingent upon banks' profound understanding of the combined contagious effects that arise in such situations.

Moreover, financial institutions can leverage diverse manifestations of social contagion to impact the rates of continuous intention toward chatbot services. As previously mentioned, coercive pressure exerts a more substantial and comparatively more significant influence than normative and mimetic pressures in shaping customers' inclination to utilize chatbot services persistently. Banks are advised to tap into social networks facilitated by mobile phone users, fostering word-of-mouth dissemination (e.g., peer recommendations via emails) to enhance adoption rates among non-adopters. This underscores banks' reliance on authentic mobile banking customers to sustain the operational effectiveness of chatbots. For instance, this reliance could involve enlisting well-known figures (e.g., celebrities, prominent business figures, politicians, athletes, etc.) as advocates for chatbot usage. In the context of coercive pressure, banks may explore partnerships and alliances with other private or public entities, such as service providers or public authorities, to compel their clients to persist in using chatbot services. Customers are presented with the option to continually utilize chatbot services for financial transactions entirely accessible through mobile phones.

CONCLUSION

The conclusion of this research is to introduce a conceptual model for studying users' intention to use chatbots by combining the Technology Acceptance Model (TAM) and social influence. This study addresses the gap in empirical research on the continuous intention to use chatbots by testing

the proposed model on data from 300 respondents through an online survey. The analysis results indicate that factors such as Perceived Usefulness, Perceived Ease of Use, and Coercive Pressure significantly influence users' intention to continue using chatbots. However, normative and mimetic pressures were not found to have significant effects. These findings significantly contribute to both theoretical understanding and practical applications in continuous chatbot usage.

The implications of this research suggest that understanding the drivers behind users' continuous intention to use chatbots is crucial for the successful implementation and utilization of chatbot technology in the banking industry. Banks can leverage the insights from this study to tailor their chatbot services and marketing strategies more effectively, focusing on enhancing perceived usefulness and ease of use while considering the influence of coercive pressures. Additionally, the findings highlight the importance of addressing social influence factors in the design and promotion of chatbot services to encourage sustained user engagement.

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