

# Integration of TAM and UTAUT-ISS Model: How Customers' Service Chatbot Drove Users' Behavior Intentions

Humairoh<sup>1</sup>, Mohammad Annas<sup>2</sup>, Wihelmus Hary Susilo<sup>3</sup>

<sup>1</sup>*Faculty of Economy and Business, Universitas Muhammadiyah Tangerang*

<sup>2</sup>*Faculty of Business, Universitas Multimedia Nusantara*

<sup>3</sup>*Faculty of Economy and Business, Universitas Persada Indonesia Y.A.I*

**Abstract:** The usage of AI chatbots in fintech, remarkably, is increasing, so it's vital to recognize the factors that influence human beings' perceptions of chatbots and user interest in using them. From a long-term perspective, the utility of chatbots is predicted to enhance sustainable enterprise development. Studies on existing chatbots continue to be fragmented, with separate guidelines. The primary takes a generation acceptance-primarily based technique, even as the second takes a user pleasure-based approach to explain using chatbots. This work proposes a complete model by integrating separate studies directions incorporating principles from TAM, UTAUT, and ISS. Simple literature evaluation of relevant articles on the achievement of IS and TAM, UTAUT researched 2014-2022. A scientific look for medical sources ensures that numerous incredibly complete articles related to IS and TAM, UTAUT success comes from MIS journals, and reports from the Google Scholar scientific database are taken from specific journals and conferences. The list of works produced is reviewed manually at the cease of the choice procedure. This paper proposes an incorporated research framework based on the TAM, UTAUT and ISS models. This study is anticipated to provide input concerning the primary gain of this included framework is its capability to bear in mind elements related to technology adoption and user satisfaction to a degree utilization that leads to sustainable behavior.

**Keywords:** Artificial Intelligence, Chatbots, TAM, UTAUT, ISS Model

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## 1. Introduction

Within the contemporary technology of virtual transformation, artificial intelligence (AI) is expected to help people with diverse painting obligations and day-by-day life (Duan et al., 2019) (Letheren et al., 2020) (Jarrahi et al., 2022). Chatbots may be broadly understood as artificial intelligence software programmed to communicate robotically with people thru text messages or chats (Przegalinska et al., 2019) (Nicolescu & Tudorache, 2022). Presently, chatbot systems are extensively utilized by corporations in areas inclusive of user offerings, advertising, B2C sales, and training (Smutny & Schreiberova, 2020) (Alt et al., 2021) (Zhu et al., 2021) to beautify the online capabilities they give provide customers with efficient 24/7 service (Jansom, 2022). In addition, digitization has also modified the landscape of numerous industries (Wang et al., 2019), in particular in the monetary and banking region, with the emergence of fintech tendencies, which include various applications such as online banking, online playing cards, virtual bills, and crypto coins (Aichner & Shaltoni,

2019) (Elliot et al., 2022). It is a fintech that facilitates customers to experience the provider effectively. The adoption of chatbots for carrier customers is increasing, which is beneficial for each business and customer. on the consumer facet, because of the shortage of provider employees, customers in conventional consumer services normally have to queue and await solutions to resolve their issues, which can cause bad provider experiences (McLean & Wilson, 2016) (McLean & Osei-Frimpong, 2017). In evaluation, virtual agents along with chatbots are capable of offering instant responses and relevant facts to consumer concerns (Radziwill & Benton, 2017) (Chung et al., 2020).

(Dospinescu & Anastasiei, 2019) Argues that ready time, aggressive transaction, and service fees are the principal elements determining personal satisfaction in relationships with service carriers (e.g., banks). Consequently, consumer service that helps responsive chatbots is considered a key to personal pleasure (Ashfaq et al., 2020) (Rana et al., 2022). On the business side, chatbot services can take care of the desires of a massive number of customers 24/7 without the involvement of personnel, which lets corporations reduce operational prices successfully (Kumar et al., 2021). In the long term, chatbot packages and other technology-primarily based solutions must encourage sustainable business development (Mudofi & Yuspin, 2022). To this quit, chatbots are being rolled out throughout industries starting from banking, retail, and healthcare to tourism and hospitality. According to Grand View research's Chatbot marketplace size 2021-2027 file, boom strategies, possibilities, challenges, boom trends, and Forecast report, the chatbots market is expected to reach \$430.nine million in 2020, expected to develop through 2028 \$2.486 million will develop of \$2.486 million. CAGR of 24.9% in 2021-2028. it's anticipated that with the aid of 2023, retail, banking, and healthcare will store \$eleven billion annually via the adoption of chatbots (*Chatbot Market Size, Growth Strategies, Opportunity, Challenges, Rising Trends And Forecast 2021-2027*, 2021).

**Table 1. Chatbots in Indonesian Banking**

No	Chatbot Name	Bank
1	CINTA (Chat with your Intelligent Advisor)	BNI
2	SABRINA (Smart BRI New Assistant)	BRI
3	MITA (Independent Intelligent Assistant)	Self-sufficient
4	VIRA (Virtual Assistant Chat Banking BCA)	BCA
5	MILA (Mega Intelligent Assistant)	Mega
6	AISYAH (Mandiri Syariah Interactive Assistant)	Mandiri Syariah
7	LISA (Bank Indonesia Information service)	Bank Indonesia
8	FRIEND	HSBC
9	EMMA	OCBD

Source: Data Processed, 2023

Banking chatbots are used for some motives. First, banking is considered one of the usual industries, the side of retail and tour, which have substantially benefited from implementing chatbot services. Now not most effective that, Juniper research (*Bank Cost Savings via Chatbots to Reach \$7.3 Billion by 2023*, n.d.) estimates that worldwide banking price financial savings thru chatbots will attain \$7.3 billion by using 2023, about 35 times better than 2019. (*What Does Smart Banking Look Like in 2021?*, n.d.), and chatbots are taken into consideration critical and essential for banking transformation and sustainable methods (Ron Shevlin, 2021). A comparable fashion may be visible with banks in Indonesia turning to technology and activating chatbot services. Indonesian banking uses chatbots in advertising, sales, and consumer dating management (Purnomo, 2018) to offer customers fast, less expensive, and personal services. This AI-primarily based provider product facilitates increased consumer pride. The benefits and convenience of artificial intelligence generation grow consumer interest in using synthetic intelligence-based services by 20-40% (Ledignan, 2020).

Primarily based on an Indonesian market observation (2020), it turned intodetermined that chatbots at banks are nonetheless unable to apprehend messages

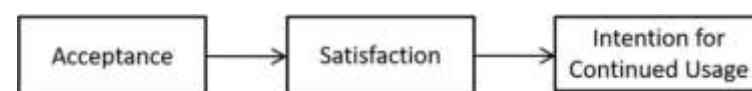
conveyed by customers successfully. As many as 45% of banking customers said that the price obtained through the interactive system of artificial intelligence technology did not meet their expectations. Banking businesses also admit that 35% of interactions between customers and chatbots are not similar to interactions with people (Marketing Research Indonesia "Chatbot," 2020). Diverse studies were performed to analyze consumer satisfaction, including an assessment of influencing elements to make feel about expanding services or products that meet personal expectancies. Numerous research topics have been formerly carried out to investigate consumer satisfaction with Chatbot products. In keeping with a look at (Bagana et al., 2021), numerous Indonesian banking chatbots failed to provide relevant records and answers. These troubles may discourage financial institution chatbot offerings from getting used in the future. In this case, chatbot services that users can extensively use are considered non-consumer-centric.

In keeping with (Girard & Shankavaram, 2020) there may be a gap between the quality of advanced chatbot services and consumer expectations. This is specific to the advantages of AI chatbots due to the fact they can apprehend various communicate inputs and respond nicely as if they have been speaking with real humans. Banking agencies should be more modern in developing offerings based totally on FinTech. (Richad et al., 2019) Located that the factors influencing the adoption of banking chatbot offerings amongst millennials in Indonesia are innovation, perceived benefits, and ease of use. These factors affect consumer perceptions of bank chatbot offerings. Satisfaction is a measure of the achievement of an information system. Improved satisfaction has a nice impact on consumer interest to keep the use of and recommending the goods offered. Banking chatbots are one of the financial technologies supported with the aid of the banking industry to meet customer needs. however, there is nonetheless a gap between the high quality of the chatbot's advanced and personal expectations. In this example, the authors are interested in reviewing the literature concerning the factors that affect the interest in chatbot services in Indonesian banking behavior.

## 2. Literature Review

### Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology Model (UTAUT)

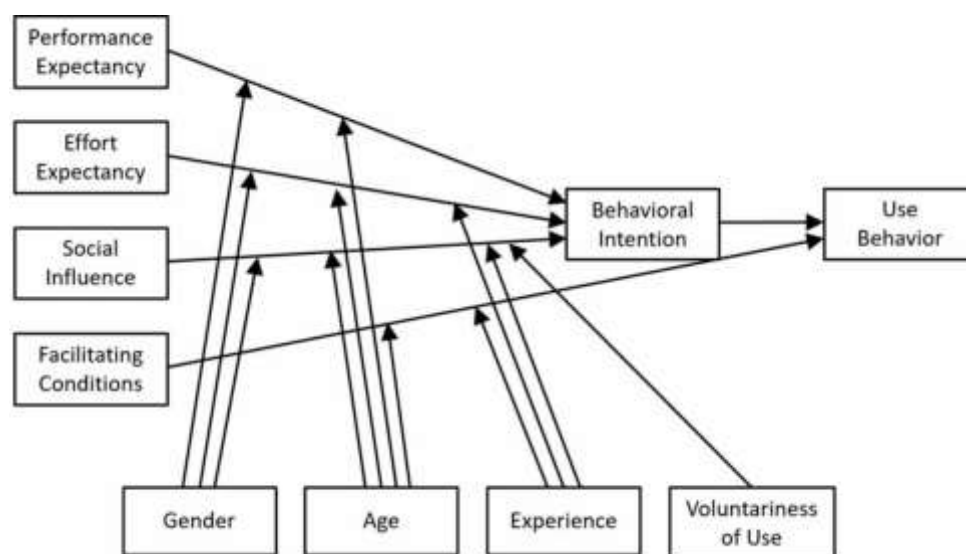
Technology acceptance theories and models have been advanced to analyze how users perceive and receive new technologies, how they may use them, and the outcomes of their persistent use. Numerous elements, such as ease of use, complexity, and social influence, can affect users' selections about technology and its use (Hill et al., 1975). These factors have been used in various theories and research in several studies (I Ajzen & Fishbein, 1980) (Icek, 1985) (Bandura, 1986) (Venkatesh & Davis, 2000) (Venkatesh et al., 2003) in the maximum in advance besides his paintings. The actual use of an information system relies upon implicitly the supposed use. However, continued use of the information system depends upon ideals: in the first step, the person must receive the information system. Further use after approval relies upon the user's satisfaction with the system. At the organizational



Source: (Momani, 2020)

**Figure 1. The continued use of intention as influenced by acceptance and satisfaction**

Based on a comprehensive review of previous studies (Moghavvemi et al., 2013) (Williams et al., 2015), 2015). An Examine (Venkatesh et al., 2003) attempted to define an integrated technology acceptance theory. It identifies five main limitations to comparative research and the practice of older approaches and models. Therefore, the Unified Theory of Acceptance and Use of Technology (UTAUT) becomes one of the most integrated and advanced theories of technology acceptance because it adopts the most valuable constructs from other ancient theories and models. ((Venkatesh et al., 2003) and their research team examined the following eight ideas of technology acceptance: The theory of Reasoned Activity (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Combined Forms of TAM and TPB (C- TAM-TPB), PC Usage Model (MPCU), Innovation Diffusion Theory (IDT), Motivational Model (MM) and Social Cognitive Theory (SCT). As a result, they proposed a new theory called the Theory of Acceptance and Use of Integrated Technology (UTAUT) as an integrated form that takes advantage of the unique properties of all the previously mentioned theories and models. The UTAUT model has three direct effects of three factors on behavioral intention: performance expectations, effort expectations and social influence. In addition to two factors that directly influence user behavior. Intended use and facilitating conditions. Figure 2 illustrates the UTAUT model with all constructs (determinants) and moderating variables. Intended use and facilitating conditions. Figure 2 illustrates the UTAUT model with all constructs (determinants) and moderating variables.



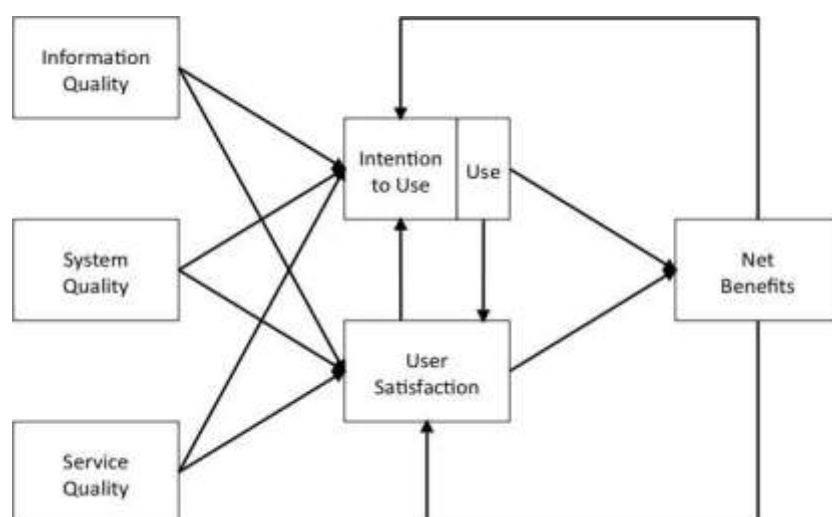
Source: (Venkatesh et al., 2003)

**Figure 2. The Unified Theory of Acceptance and Use of Technology Model**

### **DeLone and McLean's Information System Success Model (ISS)**

The success model of DeLone and McLean IS (D&M ISS) (DeLone & McLean, 2003) on this examination serves to perceive the effect of consumer satisfaction at the intention to continue using financial institution chatbot services. The ISS D&M model, first added by using DeLone and McLean (Petter et al., 2013) in 1992, is theoretically excellent at explaining conduct in the publish-adoption degree (Petter et al., 2013) (Wei et al., 2017). The unique ISS D&M model (Petter et al., 2013) consists of six constructs that define successful information systems: information quality, system-based quality, usage, user

satisfaction, person effect, and organizational effect. Ten years later, DeLone and McLean (DeLone & McLean, 2003) updated the original version by including a new variable, service quality. One year earlier than publishing the updated model, DeLone and his colleagues (Petter et al., 2012) defined that the principal cause for redeveloping their version turned into the changing nature of information systems over the years, leading to a shift in the perception of success. A few researchers argue that it's essential to recall service quality when measuring information systems (Kettinger & Lee, 1994) (Pitt et al., 1995). Consequently, with the brand new model of the ISS D&M model (DeLone & McLean, 2003) figure 3, it is believed that the three data system components (i.e., service quality, information quality, and system quality) will affect system utilization and consumer satisfaction, which explains in element effective success of data system platforms (Tam & Oliveira, 2017). Following its reinvention, the ISS D&M model (DeLone & McLean, 2003) has been broadly used to evaluate intentions to continue the usage of a selected information system. as an example, (Rahi & Abd. Ghani, 2019) included the ISS D&M model into self-dedication concept to assess the mutual consequences of facilitator quality, consumer satisfaction, outside motivation, and continuance intention within the context of internet banking. (Nguyen et al., 2021) combines the D&M ISS, ECM, agree with models; continuance intention; banking to analyze the elements that have an impact on the fulfillment of banking services in Vietnam. therefore, it's miles fantastically advocated to use the ISS D&M model as a theoretical framework to understand users' ongoing intentions within the context of bank chatbot services.



Sources:(Delone & Mclean, 2002, 2003)

Figure 3. DeLone & McLean ISS Model

## Chatbot

The time chatbot is a mixture of chat and human machines (Hwang & Kim, 2021). Chatbot essentially has two essential components, namely chat, which can be referred to as communication, and bot, which is an application that has some facts if the input is given so it will share a response. Chatbots can reply to issues by reading notes typed with the aid of purchasers through the keyboard. The chatbot is a conversation software program that could shop for suitable solutions to problems at the server, create a form that then penetrates to develop correct answers thru chats with consumers, set dispensations, and provide set-off answers (Serban et al., 2018). Chatbots create self-gaining knowledge of fashions thru computer applications and mathematical calculations and offer customers solutions and different applicable facts that are as close as feasible to purchaser concerns in actual time. For industry, a chatbot is an interface that gives the records needed via customers and sales through communicate with economic customers (Yu et al., 2021).

A Chatbot is a computer application designed to simulate communication or interactive communicate with (human) users through textual content, audio, and photographs. A conversation between a laptop and a

human is a form of response from an application declared inside the database of a computer program. The answers generated are the consequences of scanning users to enter key phrases and produce solutions that are taken into consideration the maximum appropriate or the maximum similar phrase patterns within the database (Mashud & Wisda, 2019).

The first chatbot software turned into written by way of MIT professor Joseph Weizenbaum in 1966. At that time, chat changed into still relatively simple. Even Though the development of artificial intelligence is currently very rapid and advanced, chatbots still claim their place in the world of artificial intelligence (AI). A chatbot is a shape of Natural Language Processing (NLP) software (S. C. P & Afrianto, 2015). Communication between pc and humans is a form of reaction from this system which is asserted inside the software database. The resulting solution is scanning the keywords entered by the person and presenting the answer. This is considered the most appropriate, or the phrasesample is regarded as the closest (Indrawaty & Harianja, 2018). The manner chat works are to experiment with critical terms inside the form of entered phrases, and then the gadget responds with the most appropriate keywords or comparable phrase patterns from the database. The procedure works when a person sends a request. The bot can return a particular response based on the request dispatched.

The chatbot consists of a program bot component and a brain file component. The program bot is the main program on the chatbot that will access input from the user, parse it, and then take it to the brain file to be given a response. The program bot consists of scanner and parser components. The brain file is the brain of the chatbot itself that determines how the chatbot thinks and responds. Brain files are usually plain text files. Brain files function like information tables on high-level programming language compilers. In this brain file, all the vocabulary, personality, and knowledge of the chatbot are stored. The more knowledge a chatbot has, the larger the file size of the brain file (Oktavia, 2020).

In line with (Lui & Lamb, 2018), chatbots are AI-based laptop applications that facilitate conversations and interactions with real human beings thru messaging apps and websites. Conversations among humans and chatbots can take location in the form of textual content-based and voice interactions without spatial or temporal regulations. Both kinds of machine-based interaction cleverly conceal themselves as human agents help, allowing users to provoke extra conversations with no trouble (Prasetya et al., 2018). The primary function of chatbots is to help users meet their informational needs, answer questions, and construct social relationships (Chung et al., 2020). Chatbots are employed as proxies for corporations to provide statistics prices to customers and to meet their desires (Radziwill & Benton, 2017). Advantages and effectiveness of the usage of chatbot capability:

- a. Quick response means that when a customer wants to ask something through the bank's application or website, it will be automatically answered,
- b. Work at any time or can be said to be 24/7 days, meaning that it does not know working hours like a human being so that when and at any time there are questions, then service to customers can still be done,
- c. Simplify the customer service business so that performance becomes better.

### **3. Research Method**

A literature overview is a diffusion of articles that discuss the underlying studies' subject matter and are provided in perspective to describe the studies' trouble. Theoretical evaluations assist in proportion to the effects of other research, which can be closely associated to analysis accomplished in the continuation of articles to find gaps or enlarge on previous studies (Cooper, 1984) (Marshall & Rossman, 2006). In addition, the literature assessment places study ideas into a systematic perspective, avoids repeating previous research findings and conceptual and procedural methods, and presents extra tips for hassle-solving (Marshall & Rossman, 2006). Therefore, the literary research method is considered a scientific system that needs to be guided by suitable study techniques. An evaluation article is an overview of previously published fabric. This literature review is primarily based on researched articles on the achievement of IS and TAM. A systematic search for medical resources ensures several fantastic articles on the problem, IS, and TAM's success in this research. Pick out as entire a listing of instructional materials as feasible, in particular journals that post-

conceptual studies the success of IS and TAM. in step with Webster & Watson (Webster, 2002), significant contributions may be entered into the fine journals.

Consequently, the great MIS journals are considered. Scopus suggests exceptional journals within the MIS journal ranking. After that, for selected articles from 2014-2022, articles are taken from the Google pupil medical database of positive journals and conferences. at the cease of the choice method, the product list is checked manually in keeping with table 2.

**Table 2. Chatbot Features Identifications**

Construct/Factor	Satisfaction Chatbots	Quantity	Directly Chatbots intention	Quantity	Indirectly Chatbots intention	Quantity
Perceived usefulness	(Nguyen et al., 2021)	1	(Cardona et al., 2021) (Soni & Pooja, 2020) (Soni & Pooja, 2020) (Kim, 2014) (Ho et al., 2022)(Ashfaq et al., 2020); (Nguyen et al., 2021); (Gümüş & Çark, 2021); (Alt et al., 2021)	8	(Soni & Pooja, 2020)	1
Perceived ease of use	(Soni & Pooja, 2020)	1	(Soni & Pooja, 2020)(Ho et al., 2022)(Ashfaq et al., 2020); (Gümüş & Çark, 2021); (Alt et al., 2021)	5	(Kim, 2014)(Soni & Pooja, 2020)(Soni & Pooja, 2020)	3
Perceived enjoyment			(Soni & Pooja, 2020) (Ashfaq et al., 2020); (Gümüş & Çark, 2021)(Almahri et al., 2020)	4	(Soni & Pooja, 2020)	1

Performance expectancy			(Soni & Pooja, 2020)(Trapero et al., 2020)(Almahri et al., 2020)(Kuberkar & Singhal, 2020)			
Effort expectancy			(Soni & Pooja, 2020)(Trapero et al., 2020)(Almahri et al., 2020)(Kuberkar & Singhal, 2020)			
Social influence			(Soni & Pooja, 2020)(Trapero et al., 2020)(Almahri et al., 2020)(Kuberkar & Singhal, 2020)			
Facilitating Condition			(Trapero et al., 2020)(Almahri et al., 2020)(Kuberkar & Singhal, 2020)			
Information quality	(Mulyono & Sfenrianto, 2022); (Ashfaq et al., 2020); (Nguyen et al., 2021)	3	(Mulyono & Sfenrianto, 2022)	1		
System quality	(Mulyono & Sfenrianto, 2022); (Nguyen et al., 2021)	3				
Service Quality	(Mulyono & Sfenrianto, 2022); (Ashfaq et al., 2020); (Nguyen et al.,	3				



	2021)					
Experience			(Gümüş & Çark, 2021)	1		
Trust			(Nguyen et al., 2021)(Cardo na et al., 2021)(Soni & Pooja, 2020)(Trapero et al., 2020)(Kube rkar & Singhal, 2020)	5		
PersonalFactor			(Mulyono & Sfenrianto, 2022)	1		
Perceived compatibility			(Alt et al.,2021)	1		
Perceived Privacy Risk			(Alt et al., 2021)(Soni & Pooja,2020)	2		

Source: Data Processed, 2023

#### 4. Discussion

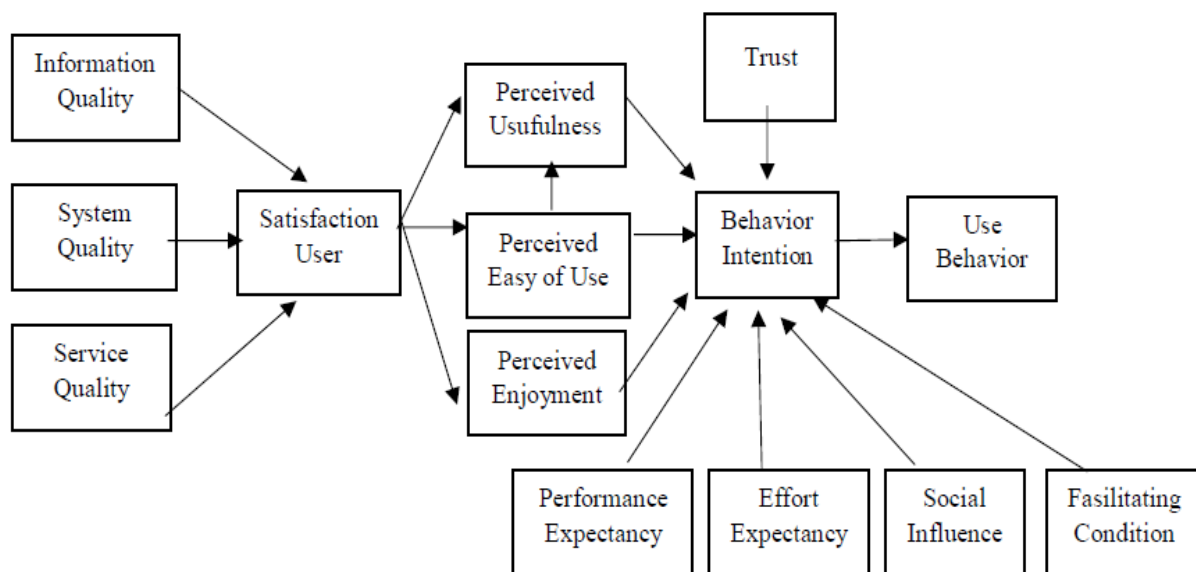
##### An Integrating TAM, UTAUT and ISS Model

Technology adoption has obtained an excellent deal of interest in the statistics research community in recent years, and as a result, various studies frameworks that examine the dynamics of technology adoption have been studied and proposed. The idea of Reasoned actions (TRA) (Icek Ajzen & Fishbein, 1969), TAM and UTAUT are the basic models most customarily utilized by researchers. In line with TRA, attitudes and subjective norms are the two most essential precursors of behavioral intentions, which then affect actual conduct. TAM is the most outstanding TRA extension proposed by (Davis et al., 1989) to explain computer usage. PU and PEOU are core TAM constructs used in numerous technology adoption research (Marangunić & Granić, 2015). These days, TAM has been used not simply to describe chatbot implementation situations, but additionally within the implementation of other clever products and technology (Dutot et al., 2019). However, TAM has frequently been criticized for its simplicity and restrained predictive energy (Legris et al., 2003), which has caused the emergence of different era acceptance models such as UTAUT and UG&T.

Except for technology adoption, some other research region specializes in user satisfaction with IT systems and services. (DeLone & McLean, 1992) first proposed the ISS model, which describes six impartial statistics system success dimensions: system quality, information quality, usage, user satisfaction, man or woman effect, and organizational impact. Inside the IS achievement literature, consumer satisfaction is frequently regarded as a consumer's attitude closer to an information system; consequently represents an object-oriented attitude (Wixom & Todd, 2005). Present studies suggest that studies that cognize entirely on user satisfaction have a fundamental hassle of their constrained potential to expect system usage (Davis et al., 1989) (Wixom & Todd, 2005). (Wixom & Todd, 2005) first proposed integrated information systems success model (ISS W&T version), which combines object-based total ideals and attitudes (consumer satisfaction) with behavioral beliefs and attitudes (era reputation) inside the context of records garage (Wixom & Todd, 2005). optimistic concept of purpose (TRA) (Icek Ajzen & Fishbein, 1969), TAM (Davis et al., 1989) (Davis, 1989). UTAUT (Venkatesh et al., 2003) is used to e an explanation for behavioral ideals, while DeLone Mclean from the ISS model (DeLone & McLean, 1992) and the Theory of Expected Value (Davis et al., 1989) have to be used to explain belief-based objects in addition, the ideas of information quality (IQ) and system quality (SysQ) are both used to construct object-based total attitudes, which in turn affect behavioral beliefs which includes PU

and PEOU.

IQ and SysQ are not exclusive characteristics of the considered system. While IQ is determined by way of the completeness and timeliness of the records furnished using the system, SysQ describes the structural features of the system and refers to performance dynamics which include flexibility, reliability, and response time. The concepts of IQ and SysQ are very vital in the chatbot paradigm. The increasing use of chatbots as "software dealers that facilitate automated conversations using natural processing language" (Brandtzaeg & Følstad, 2017) or "synthetic structures designed to speak with human beings using natural language as enter and output" and as "synthetic conversation gadgets or computers" AI. Program-based that is extraordinarily interactive and conducts conversations the use of audio or text strategies" (Shawar & Atwell, 2007) makes IQ and SysQ very vital parameters for comparing user satisfaction. Each time a user requests a chat to ask for facts or carry out another project, the chat ought to be able to recognize it without a doubt and recognize its meaning and return the essential data correctly, well-timed, relevant, and whole. In truth, accuracy, timeliness, shape, and completeness are the four pillars used to degree records best in any gadget (Wixom & Todd, 2005) (Xu et al., 2013) (Koivumaki et al., 2008). Consequently, the system needs to also be dependable and bendy enough to conform to the changing desires of users, which is a central concept related to machine high-quality. The S&T ISS model combines IQ and SysQ (item-based ideals) and corresponding satisfactions (item-primarily based attitudes), which have other effects, behavioral objectives (PU or PEOU), and, sooner or later, behavioral attitudes. Similar to the above fine constructions related to consumer satisfaction, some existing research additionally keeps in mind the best of offerings supplied by way of the device (ServQ) as a third device to degree user satisfaction, which generates an experience of pleasure (believe behavior). ) to apply the device (Jiang et al., 2000) (Kettinger & Choong C, 1999). These three factors, referred to as IQ, SysQ, and ServQ, simultaneously have an effect on user usage and satisfaction (Chatterjee et al., 2018).



**Figure 4. TAM, UTAUT-ISS Integrated Model Framework**

In this work, the TAM-ISS model is mixed with the trust element (Soni & Pooja, 2020) (Trapero et al., 2020) (Kuberkar & Singhal, 2020) (Nguyen et al., 2021) (Cardona et al., 2021). Jian's studies (Miller et al., 2016) show that there are not any significant differences in the belief issue when comparing trust among humans with human beings, humans with machines, and ideals in standard. (Mcknight et al., 2011) suggest the distinction among consider in technology and trust in humans and, in addition, discuss the need to isolate and perceive factors influencing trust in an era. In this regard, (Nguyen et al., 2021) (Cardona et al., 2021) trust in technology, which is manifested in people who trust that technology will work effectively and without negative or harmful results, is critical for the reputation of information technology (IT) at the consumer level. Therefore, current studies focus on analyzing diverse factors of consideration or privateness associated with chatbots. (Følstad et

al., 2018) Examined the determinants of agreeing with in-user service chatbots from a user attitude. Based totally on the effects in their interviews, they recognized the chatbot's capability to understand users nicely and provide powerful recommendations as a key aspect of trust in consumer service chatbots. (Laumer et al., 2019) Found that a higher degree of trust in service companies and fitness chatbot technology can reduce customers' perceived privacy risks. Similarly, (Trapero et al., 2020) (Nguyen et al., 2021) (Cardona et al., 2021) analyzed the intention to spread chatbots by combining TAM (Cardona et al., 2021) and trust theories. The take looks showed that the simplest accept as accurate has a right-away effect on the intention to use chatbots.

## 5. Conclusion

The usage of chatbots in fintech, especially banking in Indonesia, is growing, so it's miles vital to apprehend the factors that impact humans' perceptions of chatbots and user interest in using them. Therefore, this work proposes an integrated research framework based totally on the TAM and ISS models. The main benefit of this included framework is its ability to bear in mind factors associated with technology adoption as well as personal satisfaction to measure usage main to sustainable behavior. Preceding studies on chatbot adoption in banking have not centered on these two factors simultaneously. The information used for modeling comes from survey participants who are experienced in the usage of chatbots. This provides realism to the proposed framework because the consumer already the usage of chat and consequently has a better chance of understanding and answering the questionnaire. By including a further acceptance as true with issue to the proposed framework, we hope this version will observe all commonplace usage scenarios of data structures, chatbots especially. Those outcomes purpose to focus on the beneficial advantages of chatbots and the near courting among item-based total beliefs and attitudes and belief-primarily based interests and behaviors. Contemporary paintings have several barriers that want to be addressed in destiny. IT provider regulations may additionally range using us of a and way of life; however, this element is not considered in this work. Likewise, the adult degree of chatbot technology and the chatbot marketplace varies from country to country and may affect the entire usage situation. Therefore, future studies need the consciousness of extraordinary nations and cultures to increase the generalizability of the modern-day model.

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**Corresponding Author:** **Mohammad Annas**, Faculty of Business, Universitas Multimedia Nusantara.

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