

The Usage Intention of Chatbot Technology in Hospitality and Tourism Industry: Customers' Perspective

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Abstract

Chatbot technology is used as part of an excellent tool to enhance communication, boost the efficiency of service delivery, save costs, and enhance customers' experience. Nevertheless, the usage of chatbot is still low in Malaysia's hospitality and tourism industry. Therefore, this study aims to examine the usage intention of chatbot technology in the hospitality and tourism industry focusing on communication accuracy, customization, and anthropomorphism. The moderating role of technology anxiety was also observed. A total of 103 online were obtained via questionnaires, distributed among hospitality and tourism consumers who are aware about chatbot technology. A purposive sampling technique was used. Data were analysed using multiple regression and PROCESS MACRO by Hayes to test the hypotheses. The results established the relationship between communication accuracy, customization, anthropomorphism, and usage intention of chatbot technology. Nevertheless, technology anxiety does not moderate the relationship between communication accuracy, customization, anthropomorphism, and usage intention of chatbot technology. It is hoped that this study could help the chatbot providers to better understand the benefits of chatbot and factors affecting chatbot usage intention, thus pique and improve customers' interest in utilizing chatbot.

Keywords:

Chatbot Technology, Communication Accuracy, Customization, Anthropomorphism, Technology anxiety

1 Introduction

In the hospitality and tourism industry, adapting to new technology is a game-changer (Pillai & Sivathanu, 2020). Technology advancement in communication such as industrial robots, AI, and machine learning, are growing quickly in many industries (Brandtzaeg & Folstad, 2017). The hospitality and tourism industry is one of the first to adapt new technologies with AI and robots are increasingly deployed (Chi et al., 2020; McCartney and McCartney, 2020; Osei et al., 2020; Wang et al., 2021). The utilization of information and communication technology are crucial in the hospitality and tourism industry due to competitive environment and evolving innovation practices (Khatri, 2019). Modern communication technology such as AI chatbots in the hospitality industry helps to improve customer experiences and fulfil expectations through real-time interactions (Hagberg et al., 2016).

Chatbot is a great investment for communication tools because of its potential to improve service delivery efficiency, reduce costs, and provide a better customer experience (Nordheim et al., 2019). Chatbot stands for chat robots which helps to establish communication with humans using an artificial intelligence technology along with some fundamental computer programming (Ramachandran, 2019). The adoption of chatbot by businesses and organizations in the hospitality industry is driven by the rapid development and usage of mobile Internet and messaging applications such as Facebook Messenger and other platforms made by Google and Microsoft (Brandtzaeg & Folstad, 2017). Most of the hospitality industry sectors such as airlines, food and beverage, travel agencies, and lodging sectors have adopted chatbot technology as part of their tool to enhance communication (Chi & Hoang Nam, 2022; Ghosh & Chakravarty, 2018; Ivanov & Webster, 2019; Leung & Wen, 2020; Parmar et al., 2019).

The utilization of chatbot in the hospitality industry can be manipulated by many factors such as customization, communication accuracy and anthropomorphism. Accuracy is very important for users to get short, yet precise answers from the chatbot to avoid further confusion and misleading information (Nordheim et al, 2019). Customization is crucial to modify answers according to the questions given (Weiss & Bartneck, 2015). Anthropomorphism is the extend where non-human entity such as chatbot able to produce human-like interaction in chatbots so that users feel like they are interacting with another human (Araujo, 2018; Van Doorn et al., 2017). These technical factors of chatbot able to persuade users to use chatbots, however human factors also play a role in technology usage intention. Technological anxiety among users is seen as an important psychological reason in manipulating the adoption of new technology (Evanschitzky et al., 2015; Mani & Chouk, 2018).

Despite the enormous benefits of chatbot in the hospitality operations, the chatbot adoption is still scarce with only a few companies in the hospitality industry have utilized this technology in Malaysia (Jones, 2019). As now, Aeon Big Hypermarket has Yaya as AI chatbots to assist with grocery shopping. AVA the AI chatbot by AirAsia provides a user-friendly experience in various ways including flight bookings and customer support. In hotel industry, Hatten Hotel Malacca and A Famosa have also adopted chatbot. However, the interest in chatbot adoption in other local businesses and organizations in Malaysia is still low due to the chatbot inability to process the inquiries by Malaysians with their own speech style and mixed languages (Khairani, 2018). Additionally, chatbot is generally not being utilized to its best and the design does not allow it to address the needs of customers properly (Brandtzaeg & Folstad, 2018).

There is still a gap between the expectations of users and the abilities chatbot can hold (Jain et al., 2018). Constant failures to communicate with its user have led them to opt for human interaction instead, and disapproving further interaction with chatbot (Araujo, 2018). Previous studies highlighted the downfall of chatbots such as inability to understand meanings empathically, conversational undertones (Adamopoulou & Moussiades, 2020), redundant words (Ukpabi et al., 2019) and provide very generic response (Brandtzaeg & Folstad, 2019). Failure in executing chatbot may also be due to the lack of expertise in chatbot development (Pricilla et al., 2018). Many users are frustrated with the adoption of chatbot in the hospitality industry because of technology anxiety and lack of human interaction (Kimes, 2011). Technological anxiety may poorly impact new technological adoption in the hospitality industry. This brings a concern onto a table; whether the barrier is due to technological anxiety, which include communication accuracy, customization and anthropomorphism that might affect the utilization of chatbot in Malaysian hospitality and tourism industry.

There are several studies being conducted regarding chatbot adoption. However, there are still a limited number of studies found so far that investigate the adoption of AI chatbot in the Malaysia hospitality and tourism industry. Therefore, this study aimed to void the gap with the purpose to examine the relationship between communication accuracy, customization, anthropomorphism, and usage intention of chatbot technology in the hospitality and tourism industry from customers' perspective. This study also seeks to determine the moderating effect of the technology anxiety between the relationship of communication accuracy, customization, anthropomorphism, and usage intention of chatbots technology.

2 Literature Review

2.1 Chatbot Technology in the Hospitality Industry

Chatbot is an interactive, virtual agents that engage in verbal or vocal interactions with humans using natural language (Przegalinska et al., 2019). It is designed for turn-by-turn conversations with human users based on the textual input (Adam et al., 2020) and can occur through textual or vocal format (Pillai & Sivathanu, 2020). During the interaction process, after users pose a question, chatbot searches for relevant responses from the reply to database which match with the content of the customer's inquiry and then provides an instant response (Adamopoulou & Moussiades, 2020). The responses are typically standardized using pre-scripted messages (Rese et al., 2021).

This AI communication systems is getting more attention (Cao, 2021; Chopra, 2019) and allows for more new formation of ways to communicate in the hospitality industry (Korstanje, 2015). One of its many functions is to enhance customers' engagement through optimizing the communication between the service providers and receivers. Chatbot able to perform various communications task such as recommendations, reservations, and other services, and this makes the hospitality and tourism industry as one of the biggest beneficiaries of chatbot services (Ivanov & Webster, 2019; Li et al., 2021)

The benefits chatbot brings to the operations among hospitality business are conversational checking-in for airlines industry, offering customer support and recommendations for travel arrangement in tourism industry, assisting in customer's preference, booking for reservations and ordering for take-outs for food and beverage industry, and helping guests reservation and enquiries through live and automated chatbots concierge in hotel industry (Chi & Hoang Nam, 2022; Ghosh & Chakravarty, 2018; Ivanov & Webster, 2019; Leung & Wen, 2020; Parmar et al., 2019). Despite its multi-purpose functions, the utilization of chatbot in in the tourism and hospitality industry remains low (Ukpabi et al., 2019). The adoption of chatbots in Malaysian hospitality and tourism industry is visible among big companies only such as Petron, Aeon Big, Air Asia and A Famosa.

2.2 Chatbot Usage intention

Usage intention can be defined as the perceived likelihood that a person will engage in a specific behaviour (Bae, 2018). Knowing customers' usage intention is crucial for marketers to make strategic decisions and forecasting sales of both existing and new products and services. The model of technology acceptance (TAM) also proposes that users' attitudes toward information systems influence their behavioural intentions for

using them (Davis et al., 1989). As such, intent to continue using chatbot services are critical for the long-term viability of chatbot services and large business communication (Kuo et al., 2021). The usage intention for chatbots can be explained if the chatbot can perform adequately and respond to the user's needs (Santiago et al., 2019). There are many technical factors which may affect the effectiveness of chatbot. This study focused on three factors which are customization, communication accuracy and anthropomorphism. Additionally, this study examined the moderating effect of technology anxiety the relationship of communication accuracy, customization, anthropomorphism, and usage intention of chatbots technology.

2.2.1 Customization and the usage intention of chatbot

Customization is among the many factors that influence chatbots usage intention and adoption. (Rosenthal-von der Pütten et al., 2017; Stadler et al., 2014). Customization is defined as the modifying procedure following one's personal preference (Chung et al., 2018). The function and identity of a chatbot is generally created by developers so that it offers the same feature to every user (Daniel et al., 2018), which normally refers to a one-chatbot-fits-all solution. However, Nass and Lee (2000) emphasized the role of users' individual differences as crucial because it can notably bring impact to one's perception of chatbot. Godey et al. (2016), Perna et al. (2018) and Ball et al. (2006) corroborated when a personalized service meets a customer's personal preferences, it can strengthen brand affinity and encourage customer loyalty. Pillai and Sivathanu (2020) espoused that customers might gradually adapt to the use of chatbots if it is designed to better understand their needs and meet their expectations. De Cosmo et al. (2021) also claimed personalized content sent to customers, and tailored to their specific needs would activate the intention to use chatbots. Based on the preceding discussion, the researchers formulate the following hypothesis.

H1: There is a relationship between customization and usage intention of chatbots technology.

2.2.2 Communication Accuracy and the usage intention of chatbot

One of the main aspects influencing chatbot usage intention is communication accuracy. Communication accuracy is the ability of chatbots to answer enquiries precisely (Coniam, 2014). Users will be able to engage in intelligent social dialogues with virtual agents such as chatbot when the accuracy improves (Godey et al., 2016). Barry (2000) and Mohr (1995) expressed that accuracy in communication increases customers' trust in the reliability and completeness of a communication. The authors

added when the communication was accurate, customers have trust in the reliability and completeness of communication that align with their presumptions. Das and Kumar (2018) supported communication accuracy of chatbot in supplying accurate information can also enhance the users' experience. Nordheim et al., (2019) who conducted a study focusing on chatbots for customer service found that precise and pertinent information is surely the chatbot's expertise. On top of that, Chung et al. (2020) stated that accuracy and credibility of chatbot communication were proven to have a positive impact on customers' satisfaction. Based on the discussion, the following hypothesis is developed.

H2: There is a relationship between communication accuracy and usage intention of chatbot technology.

2.2.3 Anthropomorphism and the usage intention of chatbot

The term anthropomorphism implies the extent that customers or users see robotic technologies as human-like (Bartneck et al., 2009). One of anthropomorphism characteristics is the ability to offer polite responses or provide conversational expressions (Nordheim et al., 2019). The authors added the characteristic is crucial as users are used to those responses when chatting with service personnel. The human-likeness of a chatbot can also be encouraged by having human-like figures, human-like names, human-like identity, and the ability to mimic human's languages (Go & Sundar, 2019). Cassel and Bickmore (2003) stated chatbot's human-likeness will impact user's perception of the credibility, intelligence, trust and usage intention of the chatbot. However, lack of anthropomorphic characteristics in chatbot may harm a business or organization (Brandtzaeg & Folstad, 2018). Chatbot allow interaction between humans and machines and have been growing since the last decade (Amon et al., 2021). According to Følstad and Skjuve (2019), the usage of chatbots is growing due to its importance in users' everyday lives, making it important to improve the overall acceptance of chatbots in general. Murgia et al. (2016) explained that a user's acceptance of chatbot was influenced by its self-presentation as a human or machine. The statement is further supported by Araujo (2018) who stated that human-likeness in chatbots can strengthen the emotional connection to the service provider or chatbots. Følstad and Skjuve (2019) also added that anthropomorphism encourages chatbots to handle questions accurately and appropriately. This potentially adds more intention to use chatbots in the future. Based on the above discussion, the researchers proposed the third hypothesis.

H3: There is a relationship between anthropomorphism and usage intention of chatbot technology.

2.3 Technology Anxiety and the moderating effect between communication accuracy, customization and anthropomorphism, and usage intention of chatbots technology

Technology anxiety is focused on the user's mental state about the ability and willingness of using technology-related tools (Matthew et al., 2003). On the other hands, Guo X et al., (2013) described technology anxiety may influence older adults to use it and obtain wearable technologies. Tsai et al., (2020) also explains anxiety has been found to be a factor influencing patients' acceptance of customer health information technology. Chang and Im (2014) discovered that older adults' lack of computer experience was linked to their computer anxiety; thus, assessing health information from the Internet seems to be more challenging for older individuals. As mentioned by Tsai et al., (2020), users' sensitivity and elevated levels of resistance to the use of new technology could influence their review of the technology's usefulness. Thus, the research also elucidates if users have less belief in a technology before using it, this may have a negative impact on their intention to use it.

In this context, technology anxiety is seen as a significant psychological factor that influences the acceptance of new technologies such as chatbot (Evanschitzky et al., 2015; Mani & Chouk, 2018). Li et al., (2021) noted that technology anxiety acts as a moderator in a way that is beneficial for the correlations between communication accuracy and the use of a chatbot service in the future. Additionally, customization was moderated by technological anxiety as users grow increasingly cautious about using new technologies (Lee & Yang, 2013; Yang & Forney, 2013). Furthermore, Blut et al., (2021) mentioned that people with technology anxiety will feel a loss of control and uncertainty while dealing with a chatbot. Yet, anthropomorphism can satisfy user's wants to belong and desire for affiliation by facilitating perceived humanlike relationship with the chatbot. Empirical research has demonstrated that when anthropomorphism is implemented into chatbot technology, users with technology anxiety will be able to adapt effectively to chatbots (Stroessner & Benitez 2019). Therefore, technology anxiety creates uncertainty and worry in the user's mind (Igbaria & Parasuraman, 1989; Venkatesh, 2000) that can hence reduce the willingness to adopt the chatbot technology. The above discussion led to the fourth hypothesis.

H4: Technology anxiety moderates the relationship between communication accuracy, customization and anthropomorphism, and usage intention of chatbots technology.

3 Methodology

3.1 Study design

This was a cross-sectional study that utilized the quantitative approach through the deployment of questionnaires.; conducted in a non-contrived setting with minimal interferences of the researcher. The population of this research included customers of the hospitality and tourism industry in Malaysia while the sample consisted of hospitality and tourism customers aged 18 years old and above in central region of Malaysia who are aware of chatbot technology. The sampling technique used in this study was purposive sampling with 103 sample size derived from G-Power analysis.

3.2 Instrumentation

The online questionnaire has been adapted from previous literature, using dual languages (English and Malay) and designed in seven sections. First section comprised of screening question: Are you aware of chatbot technology? Only the respondents who answered yes were allowed to proceed answering the questionnaire. The purpose of the screening question is to make sure the researcher acquires suitable respondents to answer the survey. The second to the sixth section covered items pertaining to the study's variables. Communication accuracy questions were adapted from Chung et al. (2020). Among questions asked include the accuracy, credibility, and adequacy of chatbot. Customization items were also adapted from Chung et.al (2020). Among questions asked include the chatbot ability to provide information about product and to answer customer's questions. Anthropomorphism items were adapted from Bartneck et al. (2008) and Sheehan (2018). Among questions asked include the resemblance of chatbot to human being and the chatbot understanding when interacting with humans. Technology anxiety items were adapted from Meuter et al. (2003) and Evanschitzky et al. (2015). Among questions asked include difficulty to understand technology-related matters and inability to keep up with new technological advances. Finally, usage intention items were adapted from Venkatesh et al. (2012) and Parra-López et al. (2011). Among questions asked include the intention to use chatbot in the future and usage continuity. All the items were measured using the Five-Point Likert Scale. Demographic items were developed by the authors consisting of five items such as gender, age, education level, occupation and chatbot usage frequency.

3.3 Data collection and Data Analysis

Before distributing questionnaires, the questionnaire has been reviewed by two experienced managers in the hospitality industry and one academician from the hospitality field. Their reviews were significant to ensure the structured questions were highly understandable, correctly communicated to respondents and provided critical judgement on how these items accurately represented the objective of the study. The questionnaire was then pilot-tested to thirty hospitality and tourism customers who were later exempted from the actual data collection. The result of the pilot test achieved a reliability value of more than 0.7, which was deemed acceptable (Sekaran & Bougie,

2009). The author distributed the online questionnaire through social media platforms such as Instagram, Tik Tok and Facebook. These online platforms are widely used by Malaysian with 91.7 percent of total populations are active social media users (Kemp, 2022). Multiple regression and PROCESS MACRO by Hayes was conducted for hypotheses testing, using Statistical Package for Social Science (SPSS) version 22.

4 Findings

4.1 Demographic profile

The demographic profile demonstrates a higher response from female compared to male. Most of the respondents were aged 21 to 30 years old, with almost 70% of them having bachelor's degree qualification. The respondents also mostly worked in the private sector and have never used chatbot technology. The overall demographic profile of respondents is shown in Table 1

Table 1: Demographic profile of respondents

Profiles	n	%
Gender		
Male	23	22.3
Female	80	77.7
Age		
18 -20	11	10.6
21-30	84	81.6
31-40	4	3.9
41-50	4	3.9
51>	0	0
Education		
SPM	9	8.7
Diploma	15	14.5
Bachelor's degree	69	67
Master	7	6.9
PhD	3	2.9
Occupation		
Public sector	38	58.2
Private sector	60	36.9
Unemployed	5	4.9
Chatbot usage frequency		
0 time	50	48.5
1-3 times	32	31.1
4-6 times	10	9.7
7-10 times	7	6.8
>10 times	4	3.9

4.2 Multiple Regression Analysis

4.2.1 The relationship between customization and usage intention of chatbot technology

Prior to multiple regression analysis, assumption testing was conducted. It was found that linearity exists between the independent variables and dependent variables, data is normally distributed, no multicollinearity observed, and residuals are normally distributed (homoscedasticity). The multiple regression analysis also showed that there is significant relationship between customization and usage intention of chatbot technology ($r= 0.547$, $p<0.01$). Therefore, H1 was supported.

4.2.2 The relationship between communication accuracy and usage intention of chatbot technology

The analysis found that there is significant relationship between communication accuracy and usage intention of chatbot technology ($r= 0.569$, $p<0.01$). Therefore, H2 was supported.

4.2.3 The relationship between anthropomorphism and usage intention of chatbot technology

H3 was also tested using the multiple regression analysis. The finding showed there is significant relationship between anthropomorphism and usage intention of chatbot technology ($r= 0.303$, $p<0.01$). Thus, H3 was supported.

4.3 The Moderation analysis

4.3.1 Technology anxiety moderates the relationship between customization and usage intention of chatbots technology.

The moderation test through PROCESS by Hayes is carried out to determine the moderation effect of technology anxiety to the relationship between communication accuracy, customization, anthropomorphism, and usage intention of chatbots technology. Model 1 was used by using 5,000 bootstrap samples for bias correction and to establish 95 percent confidence intervals.

Table 2 demonstrated the result of the moderation effect of technology anxiety on the relationship between customization and usage intention of chatbots technology. The model was found to be not statistically significant as the interaction term $M \times X$ ($\beta = 0.0016$, $[-0.1690, 0.1658]$ ($p >0.00$). Therefore, technology anxiety also did not moderate the relationship between customization and usage intention of chatbots technology.

Table 2: Result of moderation effect of technology anxiety on relationship between customization and usage intention of chatbots technology

Predictor	β	S E	t	p	L L	U L
Technology anxiety (M)	0	0	0	0	-	0
	.	.	.	.	0	.
	0	0	7	4	.	0
	4	6	6	4	1	8
	9	5	0	8	7	0
Customization (X)	7	4	5	7	9	0
					4	
	0	0	6	0	0	0

	5	0	5	0	3	6
M x X interaction term	2	8	3	0	6	9
	9	1	8	0	8	0
	7	0	8	0	9	4
	*					
	0	0	-	0	-	0
	.	.	0	.	0	.
	0	0	.	9	.	1
	0	8	0	8	1	6
	1	4	1	5	6	5
	6	4	8	2	9	8
			6		0	

4.3.2 *Technology anxiety moderates the relationship between communication accuracy and usage intention of chatbots technology.*

Table 3 demonstrated the moderation effect result of technology anxiety on the relationship between communication accuracy and usage intention of chatbots technology. The moderation effect was found to be not statistically significant as the interaction term M x X ($\beta = 0.0904$, $[-0.2570, 0.0761]$ ($p > 0.00$). Thus, technology anxiety did not moderate the relationship between communication accuracy and usage intention of chatbots technology.

Table 3: Result of moderation effect of technology anxiety on relationship between communication accuracy and usage intention of chatbots technology

Predictor	β	S E	t	p	L L	U L
Technology anxiety (M)	0	0	0	0	-	0
	.	.	.	.	0	.
	0	0	1	9	.	1
	0	6	0	1	1	3
	6	3	9	2	1	1
	9	0	9	7	8	9
					0	

Communication accuracy (X)	0	0	6	0	0	0

	5	0	7	0	4	7
	6	8	5	0	0	3
	7	4	9	0	1	4
	6	0	9	0	0	3
	*					
M x X interaction term	0	0	1	0	-	0
	.	.	.	.	0	.
	0	0	0	2	.	0
	9	8	7	8	2	7
	0	3	7	3	5	6
	4	9	7	8	7	1
					0	

4.3.3 Technology anxiety moderates the relationship between anthropomorphism and usage intention of chatbots technology.

Table 4 demonstrated the result of moderation effect of technology anxiety on relationship between anthropomorphism and usage intention of chatbots technology. The model was found to be not statistically significant as the interaction term M x X ($\beta = 0.0559$, $[-0.2441, 0.1322]$ ($p > 0.00$). Thus, technology anxiety did not moderate the relationship between anthropomorphism and usage intention of chatbots technology.

Table 4: Result of moderation effect of technology anxiety on relationship between anthropomorphism and usage intention of chatbots technology

Predictor	β	S E	t	p	L L	U L
Technology anxiety (M)	0	0	0	0	-	0
	.	.	.	.	0	.
	0	0	5	5	.	1
	3	7	4	8	1	7
	8	0	9	4	0	9
	8	7	0	3	1	1
					5	
Anthropomorphism (X)	0	0	3	0	0	0

	2	0	2	0	1	4
	8	8	1	0	0	6
	4	8	1	1	8	0
	8	7	2	8	8	7
	*					
M x X interaction term	0	0	-	0	-	0
	.	.	0	.	0	.
	0	0	.	5	.	1
	5	9	5	5	2	3
	5	4	8	6	4	2
	9	8	9	6	4	2
			9		1	

5 Conclusion

5.1 Customization and usage intention of chatbot technology

Based on the findings, customization is significantly related to usage intention of chatbot technology. This finding was found to be in line with earlier studies (De Cosmo et al., 2021; Pillai & Sivathanu, 2020). The likelihood of the users continuing the usage of chatbot increase when the services provided by the chatbot is customized according to the preferences and needs of the users and ability to answer user's inquiry (Neidhardt & Wörndl, 2020). This is because hospitality customers anticipate receiving personalized service (Neidhardt & Worndl, 2020). The authors also added that chatbots will eventually comprehend user's requirements over time and determine the user's priorities by recording user choices and preferences. This will result in customized and dedicated assistants provided by chatbots, which lead to better chatbot experience and ultimately encourage chatbot usage.

5.2 Communication accuracy and usage intention of chatbot technology

The finding of this study revealed that there is a significant relationship between communication accuracy and usage intention of chatbot technology. Chatbot needs to be simple to interact with in the form of a conversation, ought to comprehend what user is saying, and should offer adequate and pertinent information (Zamora, 2017). Thus, the level of conversational quality of chatbot must be high and there must be emotional exchanges for effective communication with chatbot (Oliver, 2014). Interaction between chatbot and human depends on performance qualities such as competence, accuracy, and dependability to influence confidence of user in using chatbot technology (Yagoda & Gillan, 2012).

5.3 Anthropomorphism and usage intention of chatbot technology

The finding shown that there was a significant relationship between anthropomorphism and usage intention of chatbot technology. Customers distinguish customer service interactions by emotions and factual statements. AI-powered chatbot with the characteristic of anthropomorphism will be able to respond to customers almost as great as human operators (Liu et al., 2018). Anthropomorphic attributes in chatbot can also reduce uncertainties while creating a feeling of familiarity (Etlinger, 2017). Anthropomorphism has ability to influence consumer behavior, as people tend to feel more engaged and connected to the technology with anthropomorphic features (Klein and Martinez, 2022), hence promote the usage of chatbot technology.

5.4 Moderating role of technology anxiety

The result of this study found that technological anxiety did not have moderation effect towards any relationships. Interestingly, the finding is not aligned with past studies (Dekkal et al, 2023; Li et al, 2021). As majority of the respondents aged 21 to 30 years old, it justifies the insignificant moderating role of technology anxiety. Basically, Millennials and generation Z are 'tech-savvy' as they were born and grew up with

technology (Latkovikja & Popovsk, 2020). They have no issues navigating technology such as smartphone and applications, in fact use it on daily basis to make life simpler (Brintia, 2018). They feel more comfortable in using technology as an intermediary for communication. Moreover, the number of internet users in Malaysia is at 89.6 percent in 2022. Thus, the higher adoption of technology among population is expected to reduce technology anxiety.

The research findings may help hospitality and tourism operators understand the benefits of chatbots technology to the business. Although developing the chatbots system may require a significant initial investment, the finding shows chatbots may provide long-term benefits in communicating and engaging with customers in the industry. Besides that, the adoption of chatbot technology will assist service providers in terms of reducing workload and allowing them to focus on more critical tasks. As the number of internet users in Malaysia is expected to increase in years to come (Kemp, 2022), chatbot will eventually become the main form of communication for users as it is more convenient and interactive. With more new features added in chatbot technology such as multilingual capabilities, computer-generated 3D character and integration with 3rd-party apps such as WhatsApp, chatbot technology will continue to motivate users' usage.

There are some study limitations that need to be considered. First, this study was done quantitatively where all the answers were provided with the scale offered. Future study is suggested to be conducted qualitatively as a richer response can be obtained to explain the phenomena. Additionally, this study only focused on three variables (customization, communication accuracy and anthropomorphism. Future study may investigate other variables for a more holistic understanding of usage intention of chatbots. Finally, this study only uses the online questionnaire platform due to COVID 19 outbreak. Future study is recommended to explore other or broaden the data collection technique to gain more responses for a better generalizability of the result.

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