

The Rise of Bots: Exploring Malaysians' Intention to use Chatbots for Travel Planning

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Abstract

Chatbots is a game changer in the travel industry. With enhanced functionality, chatbots emerge as an innovative technology designed to expedite the travel planning process. However, their successful integration into the Malaysian tourism industry is contingent on factors such as perceived ease of use, perceived usefulness, and, most importantly, trust. Thus, by extending the Technology Acceptance Model (TAM) to include trust as a vital construct, this research seeks to understand how perceived ease of use, perceived usefulness, and trust impact users' behavioral intention to use chatbot technology for travel planning. Using a quantitative approach, the study is expected to be dispersed via an online survey to gather data from Malaysian adults familiar with chatbots. The findings shall have practical implications for the tourism industry, chatbot developers, and businesses aiming to optimize chatbot services for enhanced travel experiences, thus contributing to the evolving landscape of technology adoption in Malaysia's tourism sector.

Keywords

Chatbots; trust; travel planning; behavioral intention; Technology Acceptance Model (TAM)

1 Introduction

Chatbots, derived from 'chat robots,' are computer programs or automated systems that enable customers to engage in natural language conversations through text, auditory, or mixed methods (Um et al., 2020; Brandtzaeg & Følstad, 2019; Hatwar, 2016; Wailthare et al., 2018). The history of chatbots can be traced back to the 1950s, but it wasn't until around 2016 that they gained significant attention, primarily driven by advancements in Artificial Intelligence (AI) and Machine Learning (ML) (Brandtzaeg & Følstad, 2018). This technological progress empowered chatbots with improved Natural Language Processing (NLP) capabilities and enhanced contextual understanding (Khanna et al., 2015), allowing them to exhibit human-like, anthropomorphic traits.

Having recognized the incredible efficacy and prospect of chatbots, major companies especially those with strong customer interaction are eager to capitalize the technology in their own customer experience system (Gatzioufa & Saprikis, 2022). Google, Meta and Alibaba have all joined the AI race, releasing their own AI-powered chatbots (Forbes, 2023) which introduce some of the famous or known ones like ChatGPT, Bard & Bing. Under a very short time, chatbots have quickly found applications in various sectors, including banking, healthcare, education, agriculture, and religion-related domains (Eren, 2021; Nguyen et al., 2021; Polekar et al., 2022; Okonkwo et al., 2022; Gopikrishnan et al., 2022; Suardi et al., 2021). The tourism industry, like other early adopters, is also embracing the trend of chatbot adoption.

During the peak of the COVID-19 pandemic, many travel companies switched from human-operated customer service to chatbots, aiming to cut costs and minimize contact between customers and employees (The Washington Post, 2022). This change was further accelerated by the Great Resignation in the hospitality and tourism industry (Liu-Lastres et al., 2022), prompting widespread use of chatbot systems. From a social standpoint, chatbots indeed harbor significant potential for effecting change as it offer personalized recommendations and tailored travel experiences based on individual preferences that can empower travelers to create more fulfilling and enjoyable journeys (Pillai & Sivathanu, 2020). Moreover, the efficiency and convenience of chatbots streamline the planning process, saving travelers time and reducing the stress associated with itinerary coordination (Hsu et al., 2017). This enhanced customer service experience, coupled with round-the-clock assistance, not only addresses travelers' inquiries promptly but also fosters positive relationships between travelers and service providers, potentially increasing customer loyalty and retention. Overall, the widespread adoption of chatbots for travel planning has the potential to reshape how people approach and experience travel, personalization, efficiency, and sustainability within the tourism industry.

However, despite being hailed as the "next big thing" in technology, the adoption of chatbots for travel planning depends on users genuinely accepting them and having positive interactions. While it is evident that the chatbot market is continually growing, there remains a scarcity of research dedicated to the adoption of chatbots in the Malaysia tourism and hospitality sector. As the world shifts towards chatbots and

technology to capitalize on cost-saving opportunities for both consumers and businesses (Ukpabi et al., 2019), Malaysia stands to gain substantially from the widespread acceptance of chatbots. Thus, the primary goal of this conceptual paper is to explore Malaysians' behavioural intention to use chatbots for travel planning.

On exploring on Malaysians' behavioural intention to use chatbots for travel planning, Technology Acceptance Model (TAM) is applied in this study, in which Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) are the main factors that affect behavioural intention to use. However, it's assumed that the traditional TAM model may not fully align with contemporary technology, such as chatbots, due to technology's evolving nature over time (Agustina, 2019). New variables, not initially part of the model, can significantly influence the decision to adopt new technology. From an extensive review of past studies regarding chatbots adoption, perceived trust are added as a construct to the original model.

The decision to expand the original TAM Model by including trust is founded on the pivotal role that trust plays as a predictor for chatbot technology adoption, alongside perceived usefulness and perceived ease of use (Pillai & Sivathanu, 2020). Trust in novel technologies like chatbots emerges as a critical component in assisting users with their perceptions of risk and uncertainty during information search. As the use of chatbots becomes more widespread, consumers are increasingly concerned about issues related to personal data security and privacy (Chauhan & Kshetri, 2021; De Cosmo et al., 2021). Data breaches stemming from compromised corporate systems (Chin et al., 2020) and the unauthorized use of personal information (Abdulquadri et al., 2021) have further exacerbated these apprehensions, discouraging some users from embracing chatbots due to fears of privacy violations (Mogaji & Nguyen, 2021).

In a news piece on Yahoo Finance (2023) also reported that 15 countries have banned the use of ChatGPT (Chat Generative Pre-training Transformer), with Italy being the first Western nation to take such action in compliance with the European General Data Protection Regulation (GDPR). The bans were primarily initiated due to concerns over data breaches and misinformation, but have been revoked later following the chatbot company's consistent efforts to ensure user data protection. Furthermore, according to Adyantari (2022), chatbots with anthropomorphic qualities, a characteristic unique to emerging technology, may raise privacy concerns among users due to their perceived intrusion into personal privacy.

The escalating frequency of cybercrimes directed at chatbot systems, coupled with growing concerns about privacy, especially when handling sensitive personal data such as flight details, emphasizes the significance of trust in shaping users' intention to use chatbots for travel planning (Zamora, 2017). Despite the associated risks, chatbots hold considerable potential for travel planning, and the extent of Malaysian trust in chatbot technology remains largely unexplored.

2 Literature Review

2.1 Overview of Travel Chatbots

1950 marked the beginning of chatbot history. Alan Turing, who is considered a pioneer of computer science became the first person to bring the concept of a chatbot to public attention (Zemcik, 2009). He proposed what is now known as the Turing Test, a method of inquiry in Artificial Intelligence (AI) to test a machine's capability to exhibit intelligence like their human counterpart and the result was in the favour of chatbots (Turing, 2009). Following the inspiration, many developers and computer scientists have worked on creating machines that can communicate in a way indistinguishable from humans, leading to the first known chatbot, ELIZA. These chatbots were the predecessor of today's modern chatbots like Amazon's Alexa and Apple's Siri, and are accessible on a variety of platforms, including websites, smartphone applications and smart speakers (Um et al., 2018).

When describing a chatbot, keep in mind that its role evolved alongside its design. Earlier chatbots like ELIZA were designed with goals to simulate a psychotherapy setting and used a simple script template and matching pattern i.e. triggering chatbot responses based on a pattern (Jhadav & Thorat, 2020). At that time, chatbots were not yet conversational, as they lacked the capability to contextualize and learn through interaction (Law, 2022). Later, in the late 2010s, newer chatbots were designed to exhibit human personas with 3D avatars (visual cues), human-like names (identity cues) and their own verbal cues (i.e. tone, pitch, inflection and accents), thus raising users' expectations for interactivity (Go & Sundar, 2019). Unlike their text-based predecessors, modern chatbots incorporate speech recognition technology (voice-based), enabling more natural conversations with users.

In general, there exist various classifications of chatbots, but they are all fundamentally programmed to fulfil a shared purpose, which is responding to users' simple inquiries, conveying information, and executing tasks (Adamopoulou & Moussiades, 2020). From a technical standpoint, these interactions between humans and chatbots are not bound by constraints of time or location and are adeptly designed to resemble human agent support, thereby making users feel more comfortable when starting a conversation (Nguyen et al., 2021). Chatbots offer the advantage of round-the-clock accessibility, ensuring continuous service throughout the year (Samala et al., 2020). While there have been numerous efforts to define chatbots, they all share common elements, including software programs, robotic agents, artificial intelligence (AI), conversations, interactions, chats, dialogues, and the capability to handle both voice and text (Le & Rajah, 2022).

In the field of tourism and hospitality, chatbots are frequently referred to as travel chatbots. Travel chatbots are typically categorized into two main types: retrieval-based and generative models (Kim et al., 2018). Retrieval-based chatbots solely rely on pre-existing database content and utilise buttons, keywords, and catchphrases to generate responses, rather than generating freeform text. (Haristiani, 2019). These types of

chatbots mostly work on interactive Frequently Asked Questions (FAQ) and are programmed to identify and recognize the key terms and patterns from the user query from which they can respond with pre-set answers in the database (Srinivasan, 2021). Leading airlines like Cebu Pacific Air with "CHARLIE," Scoot with "M.A.R.V.I.E.," and AirAsia with "AskBO" provide real-world instances of employing retrieval-based chatbots as their first point of contact for customer service inquiries.

Conversely, generative chatbots utilize search engines to produce more sophisticated answers (Adamopoulou & Moussiades, 2020). Recent years have seen the emergence of a new generation of generative chatbots, with notable examples like Google Bard, Microsoft's Bing, and OpenAI's ChatGPT (Chat Generative Pre-training Transformer) tailored for travel. Air India for instance, has invested \$200 million to update its digital systems, which will include ChatGPT-driven features (The Economic Times, 2023). However, given the infancy of these generative chatbots and difficulties in training and building them (Wong et al., 2023; Hien et al., 2018), both types of chatbots are still extensively utilized in distinct settings, serving diverse purposes.

2.2 Travel Chatbots for Travel Planning

Travel planning is a process where travellers select and obtain travel products to meet their needs (Park et al., 2021). When planning a trip, people gather information from different sources to make their travel experience better, and it usually involves making important decisions beyond just choosing the destination. There are three levels of decision that traveller made which have different levels of importance: the core decisions that are predetermined before the travel (e.g. destination, travel date, budget), the predetermined decisions that are flexible to change (e.g. secondary destination, activity, tourist attractions), and the en-route decisions that are made at the destination and actively seek alternatives e.g. restaurants, rest areas, shopping places (Fesenmaier & Jeng, 2000). With the advancement of modern technology, chatbots have emerged as a preferred solution for accessing this information. Travellers can seamlessly integrate chatbots at every stage of their journey, from the initial inspiration to booking and throughout the trip, even extending to the post-trip phase (Carvalho & Ivanov, 2023).

For a customer-centric industry like tourism and hospitality, tourism stakeholders took advantage of intelligent chatbots to expedite travel planning. Chatbots play pivotal role to ease website navigation, thus shortening time and assisting in quick decision-making (Hsu et al., 2017). Additionally, chatbots serve to facilitate the provision of information, encompassing details about airline procedures and visa requirements, automate customer support, handle bookings and reservations (such as hotel rooms and airline tickets), retrieve guest information, address common queries, and offer live travel updates to customers (Le & Rajah, 2022; Calvaresi et al., 2021; Stoilova, 2021; Pillai & Sivathanu, 2020). All these functions collectively aim to simplify the travel planning process. Within travel platforms like Expedia and Booking.com, the integration of generative chatbots allow the business to merge its data with customers' purchase history, allowing users to receive better personalized recommendations, bookmark

hotels, make reservations, and even generate itineraries based on their searches within the app.

Through effective pre-programming, chatbots go beyond mere inquiry responses. They offer a wide array of services, including ordering food, arranging transportation, reading messages, scheduling tasks, setting alarms, providing room services, managing housekeeping, and offering information about hotel facilities (Gajdosik & Marcis, 2019). Gamanyuk (2017) points out that chatbots even allow users to manage restaurant reservations, including booking, changing, cancelling, or re-booking tables, all while on the move. This chatbot implementation presents cost-saving opportunities for both customers and companies, as it allows firms to avoid the expenses associated with hiring additional customer service representatives or outsourcing call centre services (Ukpabi et al., 2018).

2.3 Behavioural Intention and Usage Behaviour of chatbots

While chatbots play an essential role and have been widely adopted, not all customers are willing or feel comfortable interacting with them (Ashfaq et al., 2020). This may be a reason why user behavioural intention to use chatbot has recently received much attention from researchers as Venkatesh et al. (2000) found that behavioral intention is a strong predictor of an individual's actual usage behaviour. This chatbot implementation presents cost-saving opportunities for both customers and companies, as it allows firms to avoid the expenses associated with hiring additional customer service representatives or outsourcing call centre services (Ukpabi et al., 2018). Once an individual perceives that the use of a certain technology will help achieve the expected outcomes or performance, they will intend to use it more often (Tam et al., 2022). It is important to examine the long-term or sustained use of technology over time, since any technology cannot be considered successful if it is not sustained by users who expect to benefit from continuing to use it (Jumaan et al., 2020).

In particular, there has been extensive research on chatbot adoption and usage behaviour in various context, including tourism and hospitality (Sumarjan et al., 2023; Melian-Gonzales et al., 2019; Pillai & Sivathanu, 2020; Abdelkawi & Salama, 2022), education (Rahim et al., 2022), banking (Nguyen et al., 2021; Alt et al., 2021) and retail (Rese et al., 2020). Table 2.1 below summarizes prior studies on behavioural intention and usage of chatbots in a variety of settings.

Table 1: Summaries studies on behavioural intention and usage of chatbots in various settings.

Authors	Context	Country	Sample	Key Determinants
Sumarjan et al. (2023)	Tourism and Hospitality	Malaysia	Malaysian Residents	Anthropomorphism, customization
Melian-Gonzalez et al. (2019)	Tourism and Hospitality	Spain	Undergraduate Students	Performance Expectancy, Usefulness
Pillai and Sivathanu (2020)	Tourism and Hospitality	India	Industry Players	Perceived Usefulness, Perceived Ease of Use
Abdelkawi and Salama (2022)	Tourism and Hospitality	Egypt	Hotel Management	Perceived Usefulness, Perceived Ease of Use
Rahim et al. (2022)	Education	Malaysia	Higher Education Students	Perceived Trust, Performance Expectancy
Nguyen et al. (2021)	Banking	Vietnam	Bank Customers	Information Quality, Trust
Alt et al. (2021)	Banking	Romania	Bank Customers	Compatibility, Perceived Usefulness
Rese et al. (2020)	Retail	Germany	Internet Users	Utilitarian Context

The synthesized table above illustrates the extensive exploration of behavioral intention and actual usage of chatbots across diverse sectors such as tourism, banking, education, and retail in previous research. Throughout these studies, perceived usefulness and perceived ease of use, integral components of the Technology Acceptance Model (TAM), consistently emerge as pivotal factors influencing individuals' adoption of chatbots. While Melian-Gonzalez's (2019) study does not explicitly employ the term 'Perceived Usefulness' as a research construct, the significant finding of 'Performance Expectancy,' rooted in the Unified Theory of Acceptance and Use of Technology (UTAUT), can be interpreted as addressing a similar aspect to chatbots' usefulness. Additionally, the studies by Rahim et al. (2021) and Nguyen et al. (2021) underscore trust as a critical factor in chatbot adoption, particularly within service-oriented sectors such as banking and education, similar to the observations in the tourism and hospitality sector.

Therefore, understanding evolving attitudes toward chatbots over time is crucial in determining their long-term success. While perceived usefulness remains paramount, challenges like privacy concerns, as previously mentioned, may impact individuals' comfort levels and perceived trust in utilizing chatbots. Hence, it is imperative to monitor shifts in people's perceptions and behaviours in response to these factors.

2.4 Technology Acceptance Model (TAM)

The best-known and widely accepted model for defining and testing individual intentions to adopt new technology is the technology acceptance model (TAM), which was first introduced by Davis (1989). Davis (1989) introduced this theoretical model by using two key determinants: perceived usefulness and perceived ease of use to understand the factors that influence individuals' acceptance and adoption of information technology (IT). Theoretically, the four main variables of traditional TAM are namely the perceived ease of use, perceived usefulness, behavioural intention and actual use of the system or technology. The mediating variable attitude can be omitted to better understand the direct effects of the two motivations on the intention to use a system (Davis et al., 1989; Venkatesh, 2000).

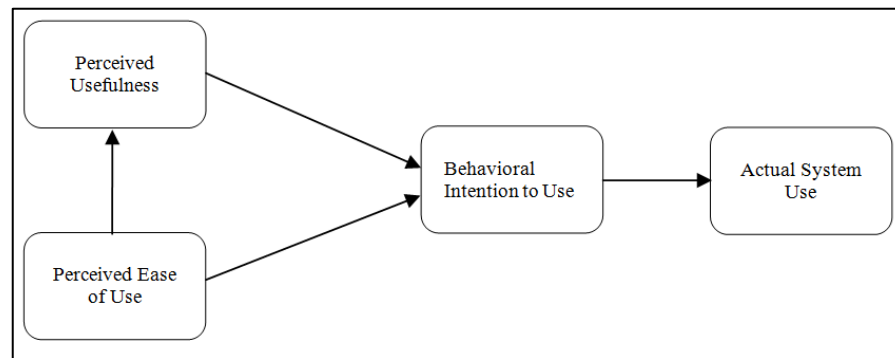


Figure 1: Technology Acceptance Model (Davis, 1989).

Due to the limitations of the TAM in terms of explanatory power, Venkatesh and Davis (2000) extended TAM to include two processes: the social influence processes (Subjective Norm, Voluntariness and Image) and the cognitive instrumental processes (Job Relevance, Output Quality, Result Demonstrability and Perceived Usefulness) which is also known as TAM2. The aspiration for the TAM2 was to keep the original TAM constructs intact and to understand how the effect of these constructs changed with increasing users' experience over time with the target system. Then TAM3 was developed to posit new relations and include constructs like perceived enjoyment and computer anxiety.

TAM despite its perceived oversimplification (Bagozzi, 2007; Benbasat & Barki, 2007), remains as a good theoretical-based model for users to build their research model on due to its simplicity and its relevance in different types of technology adoption studies (Chong et al., 2018). Furthermore, its wide acceptance within the research community as theoretical foundation for models like TAM2 (Venkatesh & Bala, 2000),

UTAUT (Venkatesh et al., 2003) and TAM3 (Venkatesh & Bala, 2008) adds to its credibility.

2.5 Conceptual Model and Research Hypothesis

Other researchers have also adapted TAM and added new theoretically justified factors, i.e. trust and external antecedents, such as situational involvement, to the model (Beldad & Hegner, 2018). Expanding the TAM model can be done by adding or extending several external variables that further explain or be the cause (antecedent) of the perceived usefulness (PU) and the perceived ease of use (PEU) on the TAM. For this study, perceived trust is added as a construct to the original TAM due to its significance to chatbots as novel technology.

2.5.1 Perceived Ease of Use

Perceived Ease of Use (PEU) is one of the an antecedent of behavioural intention to use technology related to tourism. Perceived ease of use (PEU) refers to the level of simplicity and effortlessness experienced by users when utilizing a chatbot, as described by Latip et al. (2017). It can be understood as the extent to which individuals believe that using the technology will be effortless, as established by Davis (1989). Previous studies have demonstrated a favourable relationship between perceived ease of use and behavioural intention to use (Pillai & Sivathanu, 2020; Rigopoulos & Askounis, 2007; Jayasingh & Eze, 2015).

H1: The perceived ease of use (PEU) positively influence perceived usefulness to using chatbots for travel planning.

H2: The perceived ease of use (PEU) positively influence Malaysians' behavioural intention (BI) to use chatbots for travel planning.

2.5.2 Perceived Usefulness (PU)

The perceived benefits of using chatbot services are commonly referred to as "perceived usefulness." Previous research has demonstrated a clear connection between perceived usefulness and both user satisfaction and the intention to continue using the service. For example, a study by Liao et al. (2009) found a positive and significant correlation between perceived usefulness and user satisfaction, as well as perceived usefulness and the intention to continue using chatbots in the context of Taiwan. Essentially, when users perceive greater benefits and advantages from using chatbots, they are more likely to continue using the technology. Based on this premise, the following hypotheses were formulated:

H3: Perceived Usefulness (PU) positively influence Malaysians' behavioural intention (BI) to use chatbots for travel planning.

2.5.3 Perceived Trust (PTR)

Perceived Trust encompasses consumers' perceptions of information quality, and system security. Several studies in tourism technology research have highlighted the positive impact of trust on the intention to adopt various technologies, including self-service hotel technology, smartphone apps, online travel purchases, live chat assistants on websites, and emerging technologies in tourism. The establishment of trust holds significant importance for travellers who rely on chatbots, as they must place genuine trust in the information provided by these chatbots. Failure to establish this trust may result in a sense of scepticism. Additionally, the studies by Francisco et al. (2015), Gefen et al. (2003), and Pavlou (2003) also showed a positive impact of trust on perceived usefulness.

Therefore, the hypothesis is proposed:

H4: Perceived Trust (PTR) positively influence the perceived usefulness (PU) to use chatbots for travel planning.

H5: Perceived Trust (PTR) positively influence Malaysians' Behavioural Intention (BI) to use chatbots for travel planning.

2.5.4 Behavioural Intention (BI)

Behavioural Intention (BI) refers to the likelihood of an individual accepting or rejecting a new technology based on their behaviour and attitudes towards it (Chao, 2019). It represents the probability of whether someone will or will not embrace a new technology. Meanwhile, actual usage (AUE) is the end point where people use the technology (Davis, 1989). As illustrated in Figure 2, AUE is one outcome variable of observable behaviour, whereas BI of users to use the technology is another outcome variable of intended behaviour. It is, therefore, hypothesized that users' BI to use the technology is a direct determinant of their AUE of the technology. Even though there is research pointing out that the direction of this relation is not deterministic as positive user experience may also predict future BI (Straub, 2009; Raza et al., 2021), yet in most cases, users' BI predicts their AUE.

The extant research supports the effect of BI on the AUE of tourism technology (Gupta et al., 2017; Ghanem et al., 2017; Leue et al., 2014). A chatbot is a new technology used by customers to plan their travel. Though they intend to use this new chatbot technology, still the probability of its AUE is not confirmed. Thus, in the context of chatbots for travel planning it is posited that:

H6: Behavioral intention (BI) influences the actual use of chatbots for travel planning.

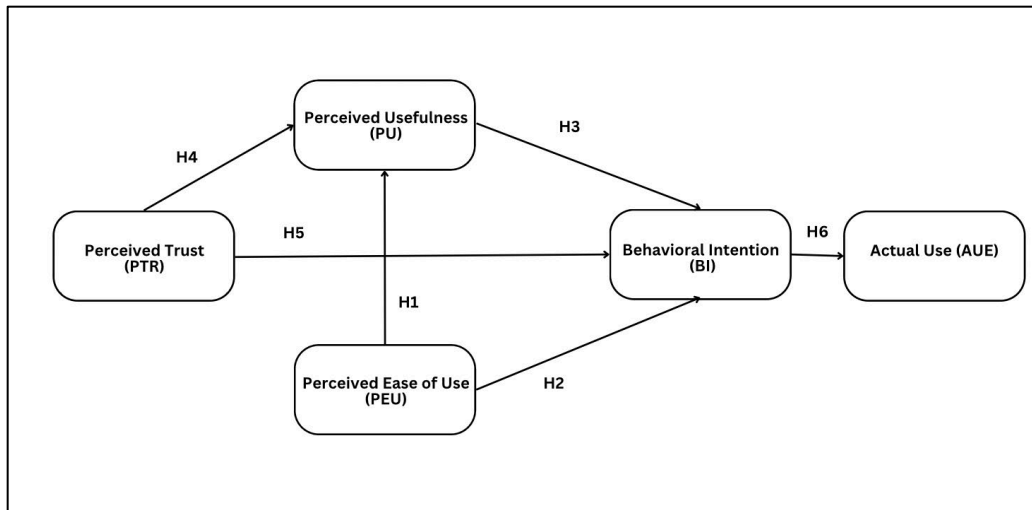


Figure 2: Conceptual Framework

3 Methodology

In the methodology section of this study, the research design is outlined using a quantitative approach with a correlation research design conducted in Malaysia. This approach is preferred for its efficiency in saving time and resources while allowing the utilization of statistical tools such as SPSS and SmartPLS to quantify and analyse numerical data. The study shall employ a non-experimental correlational research design, emphasizing the importance of examining the relationship between Malaysian users' behavioural intention and actual usage of chatbots in travel planning. A cross-sectional design is chosen, and the study is set in a non-contrived setting with minimal researcher interference.

The population for this study comprises all Malaysian adults with general knowledge and awareness of chatbots. Using G-Power with a confidence of 0.05 and 4 number of predictors, the appropriate total sample size for this study is 129. Then considering the acceptable response rate in the social sciences could be from 30% to 70% (De Vaus, 2013), the number of surveys to be distributed should aim to reach at least 195 respondents. An online survey will be conducted using Google Forms, which includes a screening question to filter respondents with the necessary knowledge of chatbots. The questionnaire, adapted from existing research papers, addresses four predictor and 1 dependant variables, including perceived ease of use, perceived usefulness, perceived trust, behavioural intention actual usage. The hypotheses testing will be done using SmartPLS, through Path Analysis and Structural Equation Modelling (SEM). This comprehensive approach will provide valuable insights into Malaysian users' behaviours regarding chatbots in travel planning and the findings shall contribute to the literature.

4 Research Contribution

4.1 Theoretical Implication

This work aims to extend the Technology Acceptance Model (TAM) by Davis (1989) with variables derived from the past research to provide more explanatory power. Earlier scholars claimed that there is a necessity to combine and/or extend various theories to understand user adoption and post-adoption behaviour (Veeramootoo et al., 2018). Since the limited proficiency of concepts is unable to explain the intricacies related to chatbots, it is necessary to integrate different theories/models to analyse the continuance usage behaviour. This is the first step towards empirically testing and validating a theoretical model for chatbot usage and adoption, a disruptive technology in the hospitality and tourism industries in a developing country like Malaysia.

4.2 Practical Implication

The tourism and hospitality industry stand to benefit greatly from chatbots if it was optimized to their full capacity. At a managerial level, the findings of this study should be applicable to help tourism businesses and practitioners who intend to adopt chatbot to further understand how chatbot services affect customers in comparison to other existing technology such as robots, augmented reality and Internet of Things (IoT).

In addition, this research will also provide new insights for chatbot developers regarding users' individual-specific characteristics, specifically trust when interacting with technology to construct more effective chatbots to better meet the needs of travellers. This is consistent with the findings of Dhiman and Jamwal (2022) study, which suggests that understanding the factors influencing continuance intention would help chatbot developers enhance the overall quality of chatbot systems. Likewise, this research can also be used as a basis for how practitioners and companies can formulate service-recovery strategies in response to mitigate potential risk of using chatbots like data leaks and concern on privacy.

5 Conclusion

In summary, chatbots have undergone significant evolution in recent years, with technological advancements enhancing their natural language processing capabilities. Nevertheless, their adoption within the Malaysian tourism sector remains relatively unexplored despite their increasing popularity. In addition to their perceived usefulness and ease of use, trust emerges as a critical yet understudied predictor for the adoption of innovative technologies like chatbots.

Through this conceptual paper, it is envisioned that this research shall extend the Technology Acceptance Model (TAM) by incorporating context-specific variables from the study of Human-Robot interaction, aiming to provide a more comprehensive understanding of ones' behavioural intention and continuance usage behaviour. Combining and extending theories, as advocated by previous scholars, is essential to address the intricacies associated with chatbots, particularly in industries like hospitality

and tourism in developing countries such as Malaysia. This research is expected to provide valuable insights into chatbot adoption in Malaysia and similar regions, particularly in the context of trust, contributing to the evolving field of chatbot technology. Anticipated outcomes of this research include valuable insights into chatbot adoption in Malaysia and similar regions, with a particular emphasis on the role of trust, thus contributing to the advancement of chatbot technology.

While trust represents an initial focal point in understanding the Malaysian perspective on chatbots, future studies could look at other factors that affect people's perceptions and interactions with these technologies. These might include external variables like anthropomorphism, which is how much people see chatbots as human-like, or technological anxiety, which is how nervous or uneasy people feel about using new technology. Another aspect to consider is perceived intelligence, which is how smart people think chatbots are. By studying these factors alongside trust, researchers can get a better understanding of how people in Malaysia and beyond feel about chatbots and other novel technologies.

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