

Preparation of the Original Manuscript for Publication in ICBIM Conference Proceedings

Dear Author,

Authors are strictly required to adhere to the Preparation of the Original Manuscript. Submissions that do not comply with the specified format will not be considered for review.

Guidelines for Preparing the Original Manuscript:

1. Type on A4 paper (single-sided) with a maximum of 12 pages (including abstract, figures, tables, references).
2. The components of the research paper include an abstract, introduction, research objectives, literature review, research methodology, research findings, conclusion and discussion, recommendations, and references. Authors may include additional sub-headings or specific sections relevant to their research as necessary.
3. The entire manuscript must use single line spacing (1.0) which can be adjusted under the 'Line and Paragraph Spacing' menu in Microsoft Word.
4. Write the Conference's Name in Footer with 8 pt. (Times New Roman)

Requirements for Preparing the Original Manuscript:

1. Paper size A4 with the following settings:

Top margin: 1.00 inch

Bottom margin: 1.00 inch

Left margin: 1.00 inch

Right margin: 1.00 inch

2. Font

Use Times New Roman, throughout the manuscript, with line spacing equal to one line of the computer.

3. Title of the article

Use bold font size 14 pt. for title with uppercase. The title should be concise and cover the content of the article. Align the title in the center of the page.

Note: Title to Author Spacing: A 11-point space must be maintained between the Title and the Author's Name.

4. Author's name and email

Use bold font size 11 pt. Align in the center of the page. Capitalize the first letter of the first and last name (do not include academic titles or positions, e.g., Assoc. Prof. or Dr., only include the first and last name). Use superscript number (1,2,3) to indicate author affiliation, the corresponding author must be designated with an asterisk (*) following their number.

5. Affiliation information

Include faculty/department, institution/organization, and country. Use regular font size 11 pt. Align in the center of the page.

Note: Use superscript numbers to match authors with their respective affiliations.

6. Abstract

It should be in bold font size 11 pt., left alignment. The text of the abstract should be in regular font size 11 pt., justified alignment, with a 0.5-inch indentation. The abstract should include the significance of the problem, research objectives, research methodology, and research findings and should not be exceed 300 words

7. Keywords

It should be in bold font size 11 pt., left alignment. It should be in regular font size 11 pt. Capitalize the first letter of each word. Select 3-5 keywords relevant to the article and separate them with commas.

8. Article Details: Include:

Main title: Use bold font size 11 pt., left alignment. The first line of the Main title should be indented by 0.5 inches from the left margin.

Subtitles: Use bold font size 11 pt., left alignment, with a 0.5-inch indentation. The first line of the Subtitle should be indented by 0.5 inches from the left margin.

Article content: Use regular font size 11 pt., Body text should be fully justified (aligned to both left and right margins) to ensure a neat and professional appearance.

Note: Each main heading should be preceded by an 11-point space

9. Presentation of Images

“**Figure**” should be in bold font size 11 pt. The image's description should be in regular font size 11 pt. and placed centered beneath the image. The image should be clear and detailed enough to read the text within it.

“**Source:**” should be in bold font size 11 pt. The source's description should be in regular font size 11 pt. and place centered beneath the image's description.

Example of Figure



Distance from the top of the figure 11 pt.

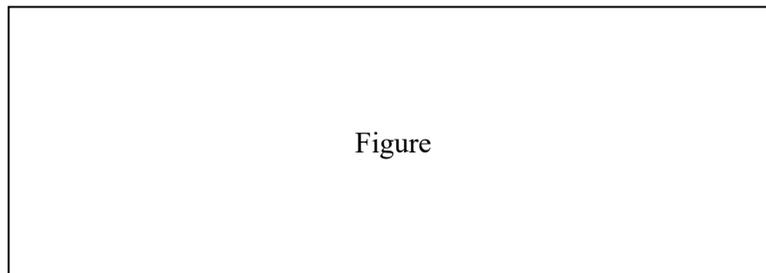


Figure 1 Finance system modal

Source: Kendy (2021)



Distance from the bottom of the figure 11 pt.

10. Presentation of Tables:

“**Table**” should be in bold font size 11 pt. The description of the table's title should be in regular font size 11 pt. and positioned flush left above the table. Table borders should be specified on all sides.

“**Source**” should be in bold font size 11 pt. The source of the table should be in a regular font size 11 pt. and positioned flush left below the table.

Example of Table

Table 1 Data Analysis

Distance from the top of the table 11 pt.

Type	Primary data	Secondary data
XXX	XXX	XXX

Source: Kendy (2021)

Distance from the bottom of the table 11 pt.

**Format of citing in-text and reference documents
(American Psychological Association: APA 6 Style)**

1. Book

1 Author

- In-text Harris (1995).....(p. 4)
- In-text (Harris, 1995, p. 4)
- Reference Harris, M. B. (1995). *Basic statistics for behavioral science research*. Boston: Allyn and Bacon.

2 Authors

- In-text Magee and Kramer (2001).....(p. 30-40)
- In-text (Magee & Kramer, 2001, p. 30-40)
- Reference Magee, J., & Kramer, J. (2006). *Concurrency state models & Java programs*. West Sussex, UK: John Wiley.

3-6 Authors

- In-text John, Whitaker, and Johnson (2003).....(p. 5)
- (First citation)
- In-text (John, Whitaker, & Johnson, 2003, p. 5)
- (First citation)
- In-text John et al. (2003).....(p. 5)
- (Subsequent Citation)
- In-text (John et al., 2003, p. 5)
- (Subsequent Citation)

Reference John, J. A., Whitaker, D., & Johnson, D. G. (2001). *Statistical thinking for managers*. Boca Raton, FL: Chapman & Hall/CRC.

More than 6 Authors

In-text Luffman et al. (2004).....(p. 17)

In-text (Luffman et al., 2004, p. 17)

Reference Luffman, J. M., Bulleen, C. V., Liano, A. D., McLeod, P. K., Nash, E. O., Schell, G.E., & Neuman, C. C. (2004). *Information technology resources management* (2nd ed.). Upper Saddle River, NJ: John & Sons Press.

Editor

In-text Rayanakorn (2011).....(p. 15)

In-text (Rayanakorn, 2011, p.15)

Reference Rayanakorn, K. (Ed.). (2011). *Climate change challenges in the Mekong Region*. Chiang Mai: Chiang Mai University Press.

2. Article in a Book

In-text (McLennan 2001).....(p. 49)

In-text (McLennan, 2001, p. 49)

Reference McLennan, G. (2001). Maintaining Marx. In G. Ritzer & B. Smart (Eds.). *Handbook of social theory*. (pp. 43-53). London: Sage.

3. Research Report

In-text Chitnomrath (2011).....(p. 3)

In-text (Chitnomrath, 2011, p.3)

Reference Chitnomrath, T. (2011). *A study of factors regarding firm characteristics that affect financing decisions of public companies listed on the stock exchange of Thailand* (Research report). Bangkok: Dhurakij Pundit University.

4. Thesis

In-text Darling (1976)..... (p. 5)

In-text (Darling, 1976, p. 5)

Reference Darling, C. W. (1976). *Giver of due regard: The poetry of Richard Wilbur* (Unpublished doctoral dissertation). University of Connecticut, Storrs, CT

5. Article in a Journal

In-text Oposa (1998)..... (p. 11-20)

In-text (Oposa, 1998, p. 11-20)

Reference Oposa, A. (1998). Environmental conflict and judicial resolution in the Philippines. *Asian Journal of Environmental Management*, 6(1), 11-20.

6. Digital Media

In-text	Brown (1994)
In-text	(Brown, 1994)
Reference	Brown, H. (1994). <i>Citing computer references</i> . Retrieved April 3, 1995, from http://neal.ctstateu.edu/history/cite.html

7. Secondary Data

In-text	Willis (1980) as cited in Teper (2011)..... (p.34)
In-text	(Willis, 1980, as cited in Teper, 2011 p.34)
Reference	Teper, J.A. (2001). <i>Selection for Digital Preservation</i> . Newbury Park, CA: Sage.

Reference Ordering Guidelines:

1. Arrange in alphabetical order (A-Z).
2. If the first author's names are identical, prioritize the document authored by a single individual.
3. In cases where the authors have the same name, prioritize the document with the earlier publication year.

Example of Reference

- Harris, M. B. (1995). *Basic statistics for behavioral science research*. Boston: Allyn and Bacon.
- John, J. A., Whitaker, D., & Johnson, D. G. (2001). *Statistical thinking managers*. Boca Raton, FL: Chapman & Hall/CRC.
- Magee, J., & Kramer, J. (2006). *Concurrency state models & Java programs*. West Sussex, UK: John Wiley.
- Oposa, A. (1998). Environmental conflict and judicial resolution in the Philippines. *Asian Journal of Environmental Management*, 6(1), 11-20

Please ensure your manuscript strictly follows the provided guidelines (Font: Times New Roman Single spacing, etc.). **Manuscripts that do not adhere to these formatting rules will not be accepted for the conference evaluation process.**

**Example
Article Preparation**

Top 1 inch

**Total number of pages should not exceed 12 pages,
Use the Times New Roman font with 1.0 space between line
throughout the entire article,
Justify text to left and right side, except Reference**

TITLE IN ENGLISH (Font size: 14 pt., Bold, Uppercase)

} Single line spacing, Font size: 11 pt.

Author's name¹, Co-author's name^{2*}, and Co-author's name³ (Font size: 11 pt.)

(Add an asterisk (*) after the number of a Corresponding author)

^{1,2,3}Faculty/Department, Institution/Organization, Country (Font size: 11 pt.)

(Add superscript numbers on author's affiliations)

Email (a main contact coordinator email) (Add an asterisk () before the email address of corresponding)

} Single line spacing, Font size: 11 pt.

Abstract (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

Keywords: (Font size: 11 pt., Bold)

(Content Font size: 11 pt.)

} Single line spacing, Font size: 11 pt.

Introduction (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

} Single line spacing, Font size: 11 pt.

Research Objectives (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

Right 1 inch

} Single line spacing, Font size: 11 pt.

Literature Review (Font size: 11 pt., Bold)

Sub Topic (If any) (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

} Single line spacing, Font size: 11 pt.

Research Methodology (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

} Single line spacing, Font size: 11 pt.

Research Findings (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

} Single line spacing, Font size: 11 pt.

Conclusion and Discussion (Font size: 11 pt., Bold)

Tab (0.5 inch)

(Content Font size: 11 pt.)

Bottom 1 inch

**Do not put
a page
number**

Recommendations (Font size: 11 pt., Bold)

(Content Font size: 11 pt.)

Tab.(0.5 inch)

.....
.....
.....

} Single line spacing, Font size: 11 pt.

References (Font size: 11 pt., Bold) (in accordance with APA 6 format)

XXXX.....

Tab.(0.5 inch)

XXXX.....

Tab.(0.5 inch)

XXXX.....

Tab.(0.5 inch)

XXXX.....

Tab.(0.5 inch)

FACTORS INFLUENCING TOURIST INTENTION TO STAY IN HOTELS FOLLOWING AR/VR TECHNOLOGY EXPERIENCES IN THAILAND

Hongzhe Feng¹ and Nuttawut Rojniruttikul^{2*}

^{1,2}KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Thailand

*nuttawut.ro@kmitl.ac.th

Abstract

This study examines perceived usefulness, perceived ease of use, perceived innovation, and tourist satisfaction of experienced hotels through augmented reality (AR) and virtual reality (VR) technologies, and how they influence the tourists' intention to stay in hotels in Thailand. Specifically, it investigates the relationships between perceived usefulness (PU), perceived ease of use (PE), perceived innovativeness (PI), tourist satisfaction (TS), and intention to stay (TI). Utilizing a quantitative approach, data were collected from 385 respondents through a convenience sampling method and analyzed using descriptive statistics and multiple linear regression. The findings indicate that perceived usefulness, perceived innovativeness, and tourist satisfaction significantly and positively influence tourists' intention to stay in hotels. These factors explained 75.7% of the variance in intention to stay. The study provides insights for the Thai hotel sector on leveraging AR/VR technologies to enhance customer experience and promote revisits.

$$\hat{TI} = 0.343*** + 0.290***(PU) - 0.037(PE) + 0.244***(PI) + 0.429***(TS)$$

Keywords: Perceived Usefulness, Perceived Innovativeness, Tourist Satisfaction, Intention to Stay, Hotel Industry

Introduction

Thailand's recent extension of its visa-free policy to 93 countries, offering a generous maximum stay of 180 days (TAT Newsroom, 2024), has significantly lowered the barrier to entry for international tourists. This policy, coupled with proactive social media promotion in various countries, has positioned Thailand as a highly desirable travel destination, offering reduced time costs and simplified visa application procedures compared to many alternatives. Renowned for its diverse landscapes, cuisine, and rich culture, Thailand consistently ranks as a prominent and frequently considered travel choice globally (Sirivadhanawaravachara, 2024). Regardless of their motivations, a safe and comfortable hotel stay is paramount for tourists and directly influences their overall travel experience and sense of security. Consequently, the choice of accommodation emerges as a critical element of the travel process.

Statistics indicate that by the end of 2024, the number of foreign tourists visiting Thailand will reach 36.2 million, while domestic tourists will number 2.702 million. The average hotel occupancy rate is expected to rise to 72%, an 8% increase compared to 2019. By 2025, the number of foreign tourists is projected to grow to 39.4 million, with domestic tourists reaching 2.756 million. The average hotel occupancy rate is anticipated to increase further to 74%, and the average room rate is likely to adjust by approximately 5%. (Thai Headlines, 2025).

The practicality of VR/AR technology directly promotes the transfer of tourists' propensity to obtain information, thereby improving performance, enhancing satisfaction, and increasing their willingness to choose a hotel. This, in turn, improves the overall customer experience, boosts hotel bookings, and ultimately enhances profitability (Israel, Zerres, & Tscheulin, 2019). VR/AR technology must offer a more practical and effective method of accessing information compared to traditional methods, such as new media. When tourists select a hotel, several factors come into play, including the environment, room size, hygiene, price, geographical location, and surrounding amenities. High-quality rendering in VR/AR technology is crucial, as it enables a fully interactive experience. This ensures that tourists' perceptions align with the actual experience, preventing over-advertisement and enhancing satisfaction with the service. The concept of telepresence in VR emphasizes its ability to enhance the enjoyment perceived by potential hotel customers.

Thailand's hotel industry continues to face increased competition as tourists increase. The rapid increase in the number of new hotels has created a great challenge for the future survival of the hotel industry. This research endeavors to identify the key determinants influencing tourist intention to stay in hotels. Ultimately, this research aims to foster the integration of innovative technologies within the tourism industry, align with relevant policy initiatives, enhance industry competitiveness, and contribute to the overall advancement of the sector.

Research Objectives

This research aims to achieve the following objectives:

1. To assess the intention of Chinese tourists to stay in hotels in Thailand after experiencing the hotel through AR/VR technology.
2. To identify the factors that significantly influence Chinese tourists' intention to stay in hotels in Thailand after experiencing them through AR/VR technology.

Literature Review

This study uses various theoretical perspectives to comprehend the elements that make up tourists' choice to stay in hotels. The Expectation Confirmation Theory (ECT) proposed by Oliver in 1980, helps to understand customer satisfaction because it involves a comparison of expectations towards a service or product prior to purchase and the perceived performance of such a service or product after purchase by the customer. Following this, the Expectancy Disconfirmation Theory (EDT) was introduced by the researchers Oliver and DeSarbo in 1988.

Besides that, acknowledging the tourist's motivation plays a significant role. Gnanapala (2015) underscores that all tourists are initially motivated by their needs, which makes them look for things that address those needs. The Technology Acceptance Model (TAM), a theory to describe how technology-related behaviors positively affect the adoption of technology, has also been used.

Finally, the Theory of Planned Behavior (TPB) (Ajzen, 1991) is one of the most comprehensive theories addressing the intention of staying. TPB proposes that behavioral intention has three major influences:

Attitude toward the behavior: The tourists' point of view about the hotel they chose to stay in.

Subjective norms: Social pressure or the expectations of people's important others are noted to be the deciding factors for guests to stay.

Perceived behavioral control: The subjective measure of one's ability to complete a task, such as booking a hotel with ease, or if the hotel is readily affordable.

Virtual Reality (VR) and Augmented Reality (AR) are two of the core technologies underpinning the concept of the metaverse, which has gained significant popularity in recent years. The metaverse is built on several foundational technologies: the Internet of Things (IoT), blockchain, interactive technology, artificial intelligence (AI), virtual reality (VR), augmented reality (AR), and 3D Reconstruction, etc. (Takyar, 2022). According to Roblox company, the metaverse is characterized by eight essential elements: identity, friends, immersion, low latency, diversity, accessibility (anytime, anywhere), an economic system, and civilization (Wang et al., 2022).

Among tourists, hotel selection is often driven by curiosity, and enhancing perceived usefulness can significantly stimulate this curiosity (Rachi, Thomas, & Tania, 2022). The acceptance and use of information technology can yield immediate and long-term benefits at both organizational and individual levels, such as improved performance, financial and time efficiency, and convenience (Foley & Curley, 1984; Sharda, Barr, & McDonnell, 1988). Based on the Technology Acceptance Model (TAM), the process of supporting technology acceptance has been elaborated to predict the positive influence of technology behavior from a theoretical perspective (David, 1989).

The ease of use experience when exploring a hotel through VR/AR technology can be summarized by assessing whether users encounter difficulties while using the technology and how they perceive the experience after adopting it. Ease of use can be defined as the degree to which a person feels that using a particular system is effortless (Davis, 1989). This factor directly influences the user's assessment of the desirability of using a specific information system application, thereby affecting their attitude toward its use (Ajzen & Fishbein, 1980).

According to the innovation diffusion theory, these consumers are divided into five stages, namely, the understanding stage, the interest stage, and the decision stage. Evaluation stage, experiment stage, and adoption stage (Rogers, 1950s). The basis of the theory is that in the face of innovation, some people will be more open-minded and willing to adopt innovation than others.

The theoretical foundation for understanding tourist satisfaction in the context of using augmented reality (AR) and virtual reality (VR) technology in hotels stems from the Expectation-Confirmation Theory (Oliver, 1980). This theory explains how the usefulness, ease of use, and innovativeness of AR/VR technology influence tourists' satisfaction.

Here are current cases of AR/VR technology being used in Tourism and Hospitality:

Case 1: Marriott Hotel

In 2015, Marriott launched *VRoom*, the first indoor virtual reality travel experience. Marriott also introduced a new virtual travel content platform called VR Postcards. These postcards offer intimate and immersive travel stories experienced in 360-degree 3D through virtual reality headsets. Each story follows a real traveler on a journey to a unique destination, immersing the audience in the location while sharing personal narratives about why travel is meaningful to them.

Case 2: Sheraton Kuta Resort, Bali

Sheraton has integrated AR/VR technology into its hotel experience to allow potential guests to explore the property before booking. Using high-tech tools, guests can view the hotel's location, room details, entertainment venues, and the overall layout of the lobby.

Case 3: Sofitel Singapore

On March 29, 2017, Sofitel Singapore introduced an augmented reality experience in collaboration with EON Reality and Epson. Using Epson Moverio BT-300 smart glasses powered by EON AVR, guests can immerse themselves in a luxury boutique hotel lobby in France or enjoy an

audiovisual experience in a Sofitel suite. This innovative use of AR enhances the guest experience by blending virtual and physical environments seamlessly.

Research Hypotheses

The following hypotheses are proposed based on the literature review:

H1: Perceived usefulness has a significant positive influence on tourist satisfaction.

H2: Perceived ease of use has a significant positive influence on tourist satisfaction.

H3: Perceived innovativeness has a significant positive influence on tourist satisfaction.

H4: Tourist satisfaction has a significant positive influence on the intention to stay.

These hypotheses are synthesized into a conceptual framework, as shown in Figure 1.1.

Independent Variables

Dependent Variable

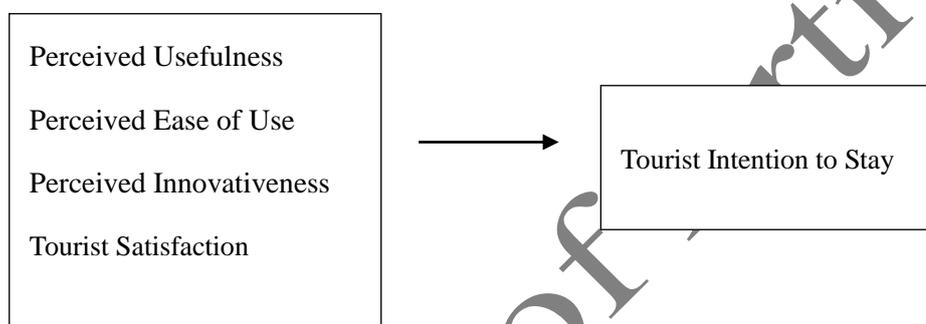


Figure 1.1 Conceptual Framework

Research Methodology

The questionnaire was distributed through the Questionnaire Star platform. Data from the questionnaire were collected by sharing it in WeChat chatting groups focused on travel topics. All respondents were Chinese. The sample size for this survey is 385 people, which aligns with the minimum sample size requirements for data analysis. In other studies related to VR/AR interaction technology, satisfaction, and hotel intentions, small-scale sample research is also common, and the average number of participants in such questionnaire surveys is consistent with the specific characteristics of the research target.

The target population for this study comprised tourists who have visited or intend to visit Thailand. To ensure the representativeness of the sample, data were collected during both peak and off-peak tourism seasons. The required sample size was calculated using Yamane's formula, with a 95% confidence level and a $\pm 5\%$ margin of error.

This study employs a quantitative research approach, utilizing questionnaire surveys to analyze data from a defined sample. Quantitative methods are appropriate for this research as they enable the quantification of customer behaviors and attitudes concerning service and product demand. This approach facilitates the analysis of customers through quantitative characteristics, relationships, and changes. Based on the literature review, hypotheses were formulated, and the relationships between variables were established. The questionnaire served as the primary tool for data collection.

To ensure the questionnaire's effectiveness, the design process adhered to the following principles:

1. Clarity of Structure: The questionnaire was designed to have clear and understandable structures for the research purposes. The research direction and labels for the hypotheses were provided, leading to a direct connection of the said hypotheses.

2. Hypothesis Alignment: Each question is crafted to be in line with one of the hypotheses explicitly, and thus all answers strengthen that particular argument.

Research Objective Fulfillment: The questionnaire incorporates all research objectives so that the results can be used to reflect the original intent of the research.

The questionnaire was organized into two main sections:

Part 1: Demographic profile

This section gathered demographic information and data regarding the purpose of travel through a set of questions. This information was used for grouping travelers and understanding the justification for their viewpoints. The questions in this part of the survey aimed to collect data on tourists' gender, age, purpose of visit to Thailand, occupation, education level, monthly income, and chosen hotel star rating.

Part 2: Measurement of Variables

This section included questions that measured tourists' experiences with AR and VR participatory technology within hotels. This study specifically investigates the following variables:

Perceived Usefulness: The extent to which tourists believe the AR/VR experience in the hotel is beneficial to them.

Perceived Ease of Use: The perceived facilitation and user-friendliness of the AR/VR technology for tourists.

Perceived Innovativeness: The perceived novelty of the AR and VR experience by tourists.

Additionally, this part aimed to examine the level of hotel experience satisfaction and tourists' willingness to return to the hotel for future stays.

The questionnaire comprised a total of 17 questions for the measurement of five variables. The answers were scored on a 5-point Likert scale, where:

5 = "Strongly Agree"

4 = "Agree"

3 = "Neutral"

2 = "Disagree"

1 = "Strongly Disagree"

Data Analysis

To ensure the rigor of the research, the validity of findings was ensured by analyzing the data collected using questionnaire surveys through appropriate statistical tools and techniques. This procedure keeps us in line with the academic standards, as well as the epistemological integrity of the research findings (Smith, 2020; Johnson et al., 2019). Analyzing the answers of the "Likert scale knows" questionnaire was also carried out according to the mean values known in science.

Considering that the present study is a multiple independent variable research, it became important to determine whether there is multicollinearity. Multicollinearity in a multiple regression model means high correlation among the independent variables. Multicollinearity of a high level can yield distorted results of regression analyses, because different predictor and outcome variables are misinterpreted. To detect multicollinearity, the variance inflation factors (VIFs) were computed using standard methods (Smith, 2020; Johnson et al., 2019).

Research Findings

This section presents the findings of the study based on the analysis of the collected survey data.

Table 1 Demographic Profile of Respondents Traveling to Thailand

Demographic Profile		Frequency	Percent
Gender	Male	210	54.5
	Female	175	45.5
	Total	385	100
Age	Less than or equal 20 years old	10	2.6
	21-30 years old	142	36.9
	31-40 years old	89	23.1
	41-50 years old	63	16.4
	51-60 years old	65	16.9
	Over 60 years old	16	4.2
	Total	385	100
Purpose of Visit	Leisure/Vacation	304	79
	Business	51	13.2
	Family/Friends Visit	25	6.5
	Other	5	1.3
	Total	385	100
Occupation	Employed (Full-time)	210	54.5
	Employed (Part-time)	37	9.6
	Self-employed	28	7.3
	Unemployed/Job-seeking	17	4.4
	Student	57	14.8
	Retired	36	9.4
	Total	385	100
Education	Diploma or Lower	112	29.1
	Bachelor's Degree	229	59.5
	Master's Degree	37	9.6
	Doctoral Degree	7	1.8
	Total	385	100
Monthly Income (Baht)	Less than or equal 15,000	86	22.3
	15,001 -25,000	123	31.9
	25,001 -35,000	101	26.2
	More than 35,000	75	19.5
	Total	385	100
Chosen Hotel Star Rating	3-star or lower (budget/mid-range)	140	36.4
	4-star (upscale)	147	38.2
	5-star (luxury)	49	12.7

Demographic Profile		Frequency	Percent
	I do not consider star ratings when choosing a hotel	49	12.7
	Total	385	100

The demographic data reveal that the majority of respondents were male (54.5%), aged between 21 and 30 years (36.9%), visiting Thailand for leisure and vacation purposes (79.0%), and employed full-time (54.5%). The highest level of educational attainment among respondents was a Bachelor's degree (59.5%), and the most frequent monthly income bracket was 15,001 - 25,000 baht (31.9%). When choosing hotels in Thailand, the largest proportion of respondents typically opted for 4-star hotels (38.2%).

Table 2 Mean and Standard Deviation of Study Variables

Variable	Mean	S.D.
Perceived Usefulness	3.845	0.702
Perceived Ease of Use	3.813	0.719
Perceived Innovativeness	3.823	0.734
Tourist Satisfaction	3.906	0.684
Intention to Stay	3.924	0.692

Table 2 presents the means and standard deviations for the study's key variables, revealing generally positive perceptions among respondents regarding VR/AR technology in hotels and their intention to stay in those hotels. Tourist Intention to Stay (mean = 3.924, S.D. = 0.692) and Tourist Satisfaction (mean = 3.906, S.D. = 0.684) exhibited the highest mean scores, indicating strong positive sentiments and intent, while Perceived Usefulness (mean = 3.845, S.D. = 0.702), Perceived Innovativeness (mean = 3.823, S.D. = 0.734), and Perceived Ease of Use (mean = 3.813, S.D. = 0.719) also showed positive, though slightly lower, average ratings. The relatively low standard deviations across all variables suggest consistency in respondents' perceptions, with Perceived Ease of Use showing the lowest average agreement among the independent variables.

Table 3 Multiple Regression Analysis of Factors Influencing Tourist Intention to Stay

Variable	Unstandardized Coefficients		Standardized Coefficients	t	p-value	VIF
	B	Std. Error	Beta			
(Constant)	0.343	0.106		3.243	0.001***	
Perceived Usefulness (PU)	0.29	0.046	0.294	6.259	0.000***	3.455
Perceived Ease of Use (PE)	-0.037	0.051	-0.038	-0.713	0.476	4.448
Perceived Innovativeness (PI)	0.244	0.044	0.259	5.574	0.000***	3.374
Tourist Satisfaction (TS)	0.429	0.052	0.424	8.196	0.000***	4.194

R=0.87, R²= 0.757, Adj. R²=0.755, S.E.est=0.34, F=296.528, p-value= 0.000, Durbin Watson = 1.890

***p<0.001

Table 3 presents the multiple regression analysis results, revealing that Perceived Usefulness ($B = 0.290, p < 0.001$), Perceived Innovativeness ($B = 0.244, p < 0.001$), and Tourist Satisfaction ($B = 0.429, p < 0.001$) significantly and positively influence Tourist Intention to Stay, supporting Hypotheses 1, 3, and 4, with Tourist Satisfaction demonstrating the strongest effect; however, Perceived Ease of Use ($B = -0.037, p = 0.476$) does not significantly affect intention to stay, thus not supporting Hypothesis 2. The model explains a substantial 75.7% of the variance in Tourist Intention to Stay, and the overall model fit is significant ($F = 296.528, p < 0.001$), with no evidence of autocorrelation (Durbin-Watson = 1.890).

$$\hat{TI} = 0.343*** + 0.290***(PU) - 0.037(PE) + 0.244***(PI) + 0.429***(TS)$$

Conclusion and Discussion

This research investigated the key factors influencing tourists' intention to stay in hotels when utilizing VR and AR technologies. The findings from the data analysis indicate that perceived usefulness, perceived innovativeness, and tourist satisfaction have significant positive influence on tourists' intention to stay. Together, these factors account for 75.7% of the variance in tourists' intention to stay.

Perceived usefulness was found to have a strong and positive influence on tourists' intention to stay. As described by Bandura in 1982, perceived usefulness refers to an individual's conception regarding the potential of technology to contribute to their performance. Thus, this study contributes to the understanding that tourists' intention to select a specific hotel offering VR/AR technology stems from their perception of its benefits. Rachi, Thomas, and Tania (2022) highlight curiosity as a potential motivation behind hotel selection, while perceived usefulness can significantly stimulate it. Moreover, Israel, Zerres, and Tscheulin (2019) determined that the application of VR and AR technology provides tourists with practical information, which increases their satisfaction and encourages them to choose a specific hotel. Beyond enhancing the customer experience, this also leads to more hotel bookings and higher profitability levels for hotels. In other words, VR/AR can be perceived by tourists as a functional tool rather than just a gimmick, leading to a greater willingness to engage with and return to hotels that offer this kind of technology.

Perceived innovativeness also has a significant positive influence on tourists' intention to stay. Tourists' assessment of the innovativeness of VR/AR technology in hotels hinges on its novelty at the time of use. In this research, VR/AR in the hospitality industry is considered a marketing tool. Innovativeness, as a marketing concept, relates to a company's ability to rapidly develop and introduce new products (Hurley & Hult, 1998). For the hotel industry, VR/AR technology serves as a means to attract customers. While many hotels still rely on traditional new media for customer acquisition, VR/AR offers a novel channel that captures consumer interest (Goldsmith & Hofacker, 1991). The novelty of this customer acquisition strategy positively influences tourists' intention to stay in hotels.

Tourist satisfaction significantly and positively influences tourists' intention to stay. Satisfaction studies focus on the dynamic relationship between tourists' expectations and their actual experiences with products or services in the tourism and hospitality industry. The results of this study demonstrate that higher tourist satisfaction strongly correlates with an increased intention to stay in hotels, fostering sustainable customer relationships. Maintaining a strong reputation and positive reviews is crucial for the long-term success of hotels, as positive reviews, often linked to product

quality, excellent service, and brand reputation, cultivate customer loyalty. Essentially, tourist satisfaction refers to the consumer finding their experience to be worthwhile and reflecting positively on how they feel after their experience (Pizam et al., 1978). The Expectation-Confirmation Theory (Oliver, 1980) serves as the basis for theories exploring tourists' satisfaction in the context of augmented/virtual reality tourism-related applications.

Recommendations

Having discovered this study, recommendations are suggested for the hotel industry in Thailand for the following:

Ensure that the Maintenance and Information Accuracy of VR/AR Technology Remain a Priority: It will be of great benefit if the hotels make addressing the maintaining and permanently updating their VR/AR technology a priority to ensure a flawless user experience. This comprises recurring software upgrades, hardware reviews, and fast troubleshooting assistance. Moreover, in order to ensure seamless navigation within VR/AR applications, it is paramount to routinely update all content such as hotel facts, amenities, and list of sights. Hence, although this study indicated that the tourists' perception of the interface failed to support the intention of usage, we cannot overlook the fundamental requirement of the system that is intended to make the use much more convenient and seamless. VR/AR services for technical aspects boosting the service's overall value proposition.

Reinforce Operational Excellence in Order to Maximize Tourist Satisfaction: Since the positive correlation between tourist satisfaction and intent to return is considerable, hotels are urged to concentrate on improving their operations so as to increase the overall guest experience. VR/AR technologies may be crucial for this because they allow for changes in demand and quality through means that are both more intuitive and interactive. For instance, VR tours can exhibit the hotel rooms and areas available, while AR apps can supply automated information about the services and a virtual concierge. The intelligent incorporation of VR/AR as a tool instead of the replacement of human services can lead to an increase in customer satisfaction and hotel revenue by improving occupancy rates.

Establish Social Sharing Options and Revolutionize Digital Usage: With millennial generation tourists often choosing hotels as the backdrop for their social media content, it's worth considering additional options for social sharing and digital interaction within the hotel space. Simple check-in tools on the hotel's digital platforms or VR applications, along with the sharing of experiences through social networks, can be stimulated. Hotels can also leverage the nature of their views – such as decorations or room vistas – as a basis for VR experiences to create highly shareable content. Through user-generated content on social media, a hotel can gain "private domain traffic," a type of exposure generated by existing guests. Consequently, this approach attracts new visitors and fosters much stronger connections with guests.

References

- Ambalov, I. A. (2021). Decomposition of perceived usefulness: A theoretical perspective and empirical test. *Technology in Society*, 64, 101520. <https://doi.org/10.1016/j.techsoc.2020.101520>.
- Bartels, J., & Reinders, M. J. (2010). Consumer innovativeness and its correlates: A propositional inventory for future research. *Journal of Business Research*, 64 (6), 601–609. <https://doi.org/10.1016/j.jbusres.2010.05.002>.

- Shahrivar, R. B. (2012). Factors that influence tourist satisfaction. *Journal of Travel and Tourism Research*, 12, 61-79.
- Blanchard, C., Burgess, S., Harvill, Y., Lanier, J., Lasko, A., Oberman, M., & Teitel, M. (1990). Reality built for two: a virtual reality tool. *ACM SIGGRAPH Computer Graphics*, 24 (2), 35–36. <https://doi.org/10.1145/91394.91409>.
- Carter, M., & Egliston, B. (2024). *Fantasies of virtual reality*. The MIT Press. <https://doi.org/10.7551/mitpress/14673.001.0001>.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>.
- Dieck, M. C. T., Jung, T. H., & Loureiro, S. M. C. (2021). *Augmented reality and virtual reality: New Trends in Immersive Technology*. Springer Nature.
- Ebrahimabad, F. Z., Yazdani, H., Hakim, A., & Asarian, M. (2024). Augmented Reality versus Web-Based shopping: How does AR improve user experience and online purchase intention? *Telematics and Informatics Reports*, 15, 100152. <https://doi.org/10.1016/j.teler.2024.100152>.
- Eswaran, M., & Bahubalendruni, M. V. a. R. (2022a). Challenges and opportunities of AR/VR technologies for manufacturing systems in the context of industry 4.0: A state of the art review. *Journal of Manufacturing Systems*, 65, 260–278. <https://doi.org/10.1016/j.jmsy.2022.09.016>.
- Faisal, A. (2017). Computer science: Visionary of virtual reality. *Nature*, 551(7680), 298–299. <https://doi.org/10.1038/551298a>.
- Farooq, B., & Cherchi, E. (2024a). Workshop synthesis: Virtual reality, visualization, and interactivity in travel survey, where we are and possible future directions. *Transportation Research Procedia*, 76, 686–691. <https://doi.org/10.1016/j.trpro.2023.12.092>.
- Gefen, D., & Straub, D. (2000a). The relative importance of perceived ease of use in IS adoption: A study of E-Commerce Adoption. *Journal of the Association for Information Systems*, 1 (1), 1–30. <https://doi.org/10.17705/1jais.00008>.
- Haar, R. (2019). Neal Stephenson: Snow Crash (1992) Das Metaversum ist überall. In *Edition Kulturwissenschaft* (pp. 161–188). <https://doi.org/10.14361/9783839445556-011>.
- He, Y., Chen, Q., & Kitkuakul, S. (2018). Regulatory focus and technology acceptance: Perceived ease of use and usefulness as efficacy. *Cogent Business & Management*, 5(1), 1459006. <https://doi.org/10.1080/23311975.2018.1459006>.
- Ho, W. T., & So, J. C. H. (2016). Issues in measuring generic skills using the Self-Administered Questionnaire in a community college in Hong Kong. *OALib*, 03(07), 1–8. <https://doi.org/10.4236/oalib.1102796>.
- Huang, T., & Liao, S. (2014). A model of acceptance of augmented-reality interactive technology: the moderating role of cognitive innovativeness. *Electronic Commerce Research*, 15 (2), 269–295. <https://doi.org/10.1007/s10660-014-9163-2>.
- Israel, K., Zerres, C., & Tscheulin, D. K. (2019). Presenting hotels in virtual reality: does it influence the booking intention? *Journal of Hospitality and Tourism Technology*, 10(3), 443–463. <https://doi.org/10.1108/jhtt-03-2018-0020>.
- Jahangir, N., & Begum, N. (2008). The role of perceived usefulness, perceived ease of use, security and privacy, and customer attitude to engender customer adaptation in the context of electronic banking. *African Journal Of Business Management*, 2(2), 032–040. <https://doi.org/10.5897/ajbm.9000634>.

- Jiang, J. J., & Klein, G. (2009). Expectation-Confirmation theory. In *IGI Global eBooks* (pp. 384–401). <https://doi.org/10.4018/978-1-60566-659-4.ch022>.
- Kieanwatana, K., & Vongvit, R. (2024). Virtual Reality in Tourism: The impact of virtual experiences and destination image on travel intention. *Results in Engineering*, 24, 103650. <https://doi.org/10.1016/j.rineng.2024.103650>.
- Kim, J. J., Kim, I., & Hwang, J. (2020). A change of perceived innovativeness for contactless food delivery services using drones after the outbreak of COVID-19. *International Journal of Hospitality Management*, 93, 102758. <https://doi.org/10.1016/j.ijhm.2020.102758>.
- Kunz, W., Schmitt, B., & Meyer, A. (2010). How does perceived firm innovativeness affect the consumer? *Journal of Business Research*, 64(8), 816–822. <https://doi.org/10.1016/j.jbusres.2010.10.005>.
- Lowe, B., & Alpert, F. (2015). Forecasting consumer perception of innovativeness. *Technovation*, 45–46, 1–14. <https://doi.org/10.1016/j.technovation.2015.02.001>
- Mogull, S. A. (2021). Technical content marketing along the technology adoption lifecycle. *Communication Design Quarterly*, 9(2), 27–35. <https://doi.org/10.1145/3453460.3453463>.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460. <https://doi.org/10.2307/3150499>.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue), 33–44. <https://doi.org/10.2307/1252099>.
- Oort, Decentralized Cloud. (2022, January 6). *The metaverse: A brief history – Oort | Decentralized Cloud – Medium*. Medium. Retrieved from <https://medium.com>.
- Oyman, M., Bal, D., & Ozer, S. (2021). Extending the technology acceptance model to explain how perceived augmented reality affects consumers' perceptions. *Computers in Human Behavior*, 128, 107127. <https://doi.org/10.1016/j.chb.2021.107127>.
- Pillai, R., Sivathanu, B., & Rana, N. P. (2025). Unveiling virtual interactive marketplaces: Shopping motivations in the Metaverse through the lens of uses and gratifications theory. *Journal of Business Research*, 190, 115219. <https://doi.org/10.1016/j.jbusres.2025.115219>.
- Prescott, M. B. (1995). Diffusion of innovation theory. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, 26(2–3), 16–19. <https://doi.org/10.1145/217278.217283>.
- Rogers, E. M. (1962). *Diffusion of innovations*. Retrieved from <https://blogs.unpad.ac.id/teddykw/files/2012/07/Everett-M.-Rogers-Diffusion-of-Innovations.pdf>
- Roodposhti, M. S., & Esmaeelbeigi, F. (2024). Viewpoints on AR and VR in heritage tourism. *Digital Applications in Archaeology and Cultural Heritage*, 33, e00333. <https://doi.org/10.1016/j.daach.2024.e00333>.
- Sun, J., Wang, Y., Miao, W., Wei, W., Yang, C., Chen, J., & Gu, C. (2023). A study on improving users' perceived playfulness in and continuance intention with VR technology to paint in virtual natural landscapes. *Heliyon*, 9(5), e16201. <https://doi.org/10.1016/j.heliyon.2023.e16201>.
- Venkatesh, N., Morris, N., Davis, N., & Davis, N. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>.
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342–365. <https://doi.org/10.1287/isre.11.4.342.11872>.

Wiangkham, A., Kieanwatana, K., & Vongvit, R. (2024). Journey into virtual reality: Identifying behavioral intentions to use virtual reality in tourism through spectral clustering. *Journal of Open Innovation: Technology, Market, and Complexity*, 10, 100442. <https://doi.org/10.1016/j.joitmc.2024.100442>.

Zhang, T., & Xiong, S. (2024). Exploring the influence of expectancy, valence, and instrumentality on VR tourism intention: A framework based on TAM and expectancy theory. *Acta Psychologica*, 250, 104541. <https://doi.org/10.1016/j.actpsy.2024.104541>.

Example of Article