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Roxas City Tourism Promotional Campaign Towards the Development of A Roblox-Based Virtual Experience

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ABSTRACT: Tourism plays a crucial role in economic development and cultural promotion. In Roxas City, traditional tourism strategies are becoming less effective at engaging modern audiences, underscoring the need for more innovative approaches. Despite the growing use of immersive technologies, limited studies have explored virtual platforms for tourism promotion in developing cities. This study aimed to enhance Roxas City's tourism promotional campaign by developing a Roblox-based virtual experience. It utilized a developmental research approach, emphasizing the systematic creation, implementation, and evaluation of a product or intervention. Data were collected through interviews and evaluations from IT experts and local tourists, using ISO/IEC 25010 Qua Model criteria to assess effectiveness. Results showed that current promotional strategies have low digital engagement, while the developed Roblox-based virtual experience improved user awareness, engagement, and interest in the city's attractions. The Roblox-based virtual experience was found to be effective in terms of functionality, usability, and user experience. In conclusion, immersive virtual platforms can strengthen tourism promotion by increasing engagement and expanding audience reach.

KEYWORDS: digital tourism, immersive experience, metaverse, promotional campaign, tourism promotion, virtual experience

I. INTRODUCTION

Tourism plays a vital role in the economic, cultural, and social development of communities and cities (United Nations World Tourism Organization, 2025). It contributes significantly to local economic growth by generating employment opportunities, supporting local businesses, and increasing government revenue through tourism-related activities. In addition, tourism strengthens cultural preservation by promoting local traditions, heritage sites, festivals, and historical attractions to both local and international visitors. In the Philippines, tourism continues to be one of the major contributors to national and local development, particularly in cities with rich cultural identities and tourism potential, such as Roxas City. Roxas City, known as the "Seafood Capital of the Philippines," is recognized for its cultural heritage, seafood industry, beaches, historical landmarks, and local festivals. The city attracts visitors through destinations such as Baybay Beach, Panublion Museum, Roxas City Plaza, and various seafood restaurants and cultural celebrations. The City Tourism and Information Office continues to implement tourism promotional activities through festivals, social media marketing, brochures, tourism accreditation, and local events. However, despite these efforts, the tourism sector faces challenges in maintaining audience engagement and reaching wider digital audiences in a rapidly evolving technological environment.

The advancement of digital technologies has significantly transformed the tourism industry, particularly in destination marketing and tourism promotion (Gursoy et al., 2023). Modern tourists increasingly rely on online platforms, interactive media, and digital content when exploring destinations and planning travel experiences. As technology continues to evolve, tourism organizations are shifting from traditional promotional approaches to immersive, technology-driven marketing strategies. Digital transformation has enabled tourism stakeholders to utilize innovative tools such as virtual reality (VR), augmented reality (AR), metaverse environments, and interactive gaming platforms to promote destinations in more engaging and accessible ways (Buhalis et al., 2019).

One emerging innovation in digital tourism promotion is virtual tourism (Godovykh et al., 2022). Virtual tourism allows users to explore destinations through digitally generated environments without physically traveling to the location. Through immersive technologies and interactive systems, users can experience attractions, landmarks, and tourism activities within virtual environments. Studies suggest that virtual tourism enhances destination awareness, increases accessibility, and influences users' travel intentions by allowing them to preview tourism experiences before making actual travel decisions (Prados-Castillo et al., 2024).

The emergence of the metaverse has further expanded opportunities for tourism promotion (Dwivedi et al., 2022). The metaverse refers to persistent virtual spaces where users interact through avatars within immersive digital environments. Metaverse platforms combine social interaction, virtual exploration, gaming elements, and user-generated content to create highly engaging experiences. Researchers emphasized that immersive virtual environments improve user engagement, strengthen emotional connection with

destinations, and influence tourism behavior (Flavián et al., 2019). Because of these features, tourism organizations have started utilizing metaverse technologies as part of their tourism marketing strategies. One of the most popular metaverse platforms today is Roblox (Roblox Corporation, 2025). Roblox is an online interactive platform where users can create, share, and explore three-dimensional virtual experiences. The platform supports user-generated content, immersive gameplay, social interaction, and collaborative engagement. Roblox has become widely recognized not only as a gaming platform but also as a digital environment for education, business, entertainment, and tourism promotion. Studies revealed that Roblox-based environments increase user participation, engagement, creativity, and motivation through interactive exploration and gamification (Han et al., 2023). Several tourism organizations and institutions have already adopted Roblox as a tourism promotional platform. International tourism campaigns such as Singapore Wanderland and Qatar Adventure demonstrated how immersive virtual environments can successfully attract millions of users while promoting destinations, cultural heritage, and tourism attractions. These virtual campaigns demonstrated the effectiveness of immersive technologies in boosting tourism awareness and engagement among younger, digitally active audiences. Gamification also plays an important role in promoting virtual tourism (Xu et al., 2017). Through interactive exploration and immersive storytelling, users become more engaged with destinations and develop a stronger interest in visiting them physically.

Despite the growing development of virtual tourism and metaverse technologies, few empirical studies examine the use of Roblox as a tourism promotional platform for local destinations in the Philippines, particularly in Roxas City. Existing tourism promotional strategies in the city remain primarily traditional and may not fully capitalize on the opportunities offered by immersive digital technologies. There is still a need to explore innovative, evidence-based approaches to improve tourism promotion, increase audience engagement, and strengthen destination awareness through interactive digital platforms. This study aimed to address these gaps by developing and evaluating a virtual tourism experience for Roxas City on Roblox. The study focused on creating an immersive digital environment that showcases the city's cultural, historical, and tourism attractions through interactive virtual exploration. The study was guided by the Theory of Planned Behavior (TPB) developed by Ajzen (1991) and the Technology Acceptance Model (TAM) developed by Davis (1989), which explain users' behavioral intention and acceptance of digital technologies. The researchers believed that immersive, interactive virtual experiences can positively influence users' attitudes, engagement, and interest in tourism toward Roxas City.

Specifically, this study sought to determine Roxas City's current tourism promotional activities, identify the challenges and limitations of existing tourism promotion efforts, develop a Roblox-based virtual tourism experience, and evaluate its effectiveness using the ISO/IEC 25010 software quality model. Through this study, the researchers aimed to contribute to the growing field of virtual tourism and provide innovative recommendations that may strengthen tourism promotion strategies in Roxas City.

II. REVIEW OF RELATED LITERATURE

A study by Wijaya et al. (2023) explored the development of virtual tourism in Berastagi, using the Roblox metaverse to address the limitations posed by the COVID-19 pandemic. Due to travel restrictions and reduced mobility, many tourist destinations experienced a significant decline in visitor numbers, prompting the need for innovative digital solutions to promote tourism. The researchers introduced a virtual tourism platform on Roblox that allows users, especially younger audiences, to explore Berastagi in an interactive, immersive environment. This approach provides an alternative way for tourists to experience destinations safely while still maintaining engagement despite physical travel limitations. The study also emphasized that virtual tourism not only serves as a temporary solution during crises but also has the potential to enhance future travel intentions. By offering accessible, engaging digital experiences, it can increase awareness and interest in visiting the destination in person.

Similarly, in the study by Kieanwatana & Vongvit (2024), they examined how virtual reality (VR) influences tourists' travel intentions by focusing on the interplay among virtual experiences, destination image, and travel intentions. Conducted in the context of Thailand's tourism sector, where the COVID-19 pandemic had severely limited physical travel. The research explored how immersive virtual experiences can positively shape perceptions of destinations and encourage future travel decisions. The findings revealed that both virtual experiences and favorable destination images significantly enhance individuals' intentions to visit tourist locations. Furthermore, the results highlighted that high-quality virtual content, accessible information, novelty, and sensory stimulation contribute to more engaging virtual experiences, which in turn strengthen destination appeal. The researchers suggest that VR can be an effective tool for destination marketing by fostering stronger emotional and cognitive connections to places, especially when physical travel is challenging or limited. As such, immersive virtual tourism experiences may help destination marketers attract and influence potential tourists in the post-pandemic landscape.

Dayoub et al. (2024) investigated the role of the metaverse in promoting tourism along the Silk Road within the context of China's Belt and Road Initiative. The study emphasized that immersive technologies can serve as innovative tools for preserving and showcasing cultural heritage while making it more accessible to global audiences. Using a qualitative, interdisciplinary approach, the researchers analyzed how metaverse environments can recreate historical sites and cultural elements as interactive virtual spaces. These digital platforms allow users to explore destinations, engage with cultural content, and participate in virtual experiences without the limitations of physical travel. Furthermore, the findings revealed that the metaverse enhances tourism by improving user

engagement through features such as avatars, interactive storytelling, and virtual tours. It also helps overcome barriers to distance, cost, and accessibility, while supporting the preservation of both tangible and intangible cultural heritage through advanced technologies such as virtual reality and 3D modeling.

Han, Liu, and Gao (2023) conducted a systematic review to examine how Roblox is utilized as a learning platform within the metaverse. The researchers identified that Roblox can support various educational approaches, including collaborative learning, virtual environment-based instruction, and STEM-related activities. The platform allows learners to engage in interactive and immersive experiences that simulate real-world and creative scenarios. The study found that Roblox offers several educational benefits, such as enhancing students' cognitive skills, creativity, and problem-solving abilities, while also improving motivation, engagement, and social interaction. Its game-based and customizable features make learning more enjoyable and accessible, especially for younger users. However, the researchers also identified challenges in using Roblox for educational purposes, including cybersecurity risks, cyberbullying, and a lack of structured instructional design. Without proper guidance, students may become distracted or overly focused on gameplay rather than learning outcomes.

III. METHODOLOGY

This study employed a developmental research approach to develop a Roblox-based virtual experience for Roxas City tourism promotion. Developmental research focuses on the systematic process of designing, creating, implementing, and evaluating a product or intervention intended to address specific needs and improve existing systems. In this study, the approach was applied to develop an interactive and immersive virtual tourism platform that can serve as an innovative strategy for promoting Roxas City and increasing user awareness and engagement with its tourist attractions. The study was conducted in Roxas City, focusing on the city's cultural, historical, and natural tourist attractions that served as the primary content for the virtual environment. The researchers selected key destinations and tourism attractions in Roxas City for digital representation on the Roblox platform. The study focused on creating an immersive environment that provides users with a virtual experience of exploring the city and its attractions.

The development process followed the Input–Process–Output (IPO) framework, which served as the guide in designing and implementing the Roblox-based virtual experience. The input stage included identifying challenges and limitations in current tourism promotion efforts, Roxas City's tourism data, user requirements, technical requirements, and design principles. These components served as the foundation for the system's development. The process stage involved systematic procedures consisting of interviews, planning and analysis, design and development, testing and evaluation, and revision and improvement. The output stage resulted in the development of a Roblox-based virtual experience, a validated system, and research findings and recommendations. During the planning and analysis phase, the researchers gathered information on current tourism promotional activities and the challenges faced by tourism stakeholders. This phase was conducted to determine user needs and establish the requirements for developing the virtual environment. The collected information served as the basis for identifying features and functionalities that would improve the effectiveness of the developed platform.

The design and development phase involved creating the Roblox-based virtual environment using Roblox development tools. The researchers developed virtual representations of Roxas City attractions and integrated interactive features to provide users with an engaging, immersive experience. Various system components and tourism-related content were incorporated into the platform to enhance user participation and improve tourism promotion. After the development phase, testing and evaluation procedures were conducted to determine the effectiveness and functionality of the developed system. The researchers implemented revision and improvement procedures to address identified issues and ensure that the developed platform met the intended objectives and quality standards. Data were gathered through interviews and evaluation procedures with IT experts and local tourists. The participants were selected to provide feedback regarding the functionality, usability, and effectiveness of the developed Roblox-based virtual experience. Their responses and evaluations served as the basis for determining the quality and performance of the developed system.

The effectiveness of the developed Roblox-based virtual experience was assessed using the ISO/IEC 25010 Quality Model criteria, specifically functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability. These criteria were used to evaluate the quality of the developed platform and determine whether it effectively met user requirements and achieved the study's objectives. The gathered data were analyzed and interpreted to determine the overall effectiveness of the Roblox-based virtual experience as a tourism promotional tool for Roxas City.

IV. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

Current Tourism Promotion Activities of Roxas City

Table I outlines Roxas City's current tourism promotional activities, detailing its approach to conventional promotional strategies, support for tourism stakeholders, showcasing seafood as a primary attraction, and promotion of cultural festivals.

Major Themes	Emerging Themes	Quotes and Participant
Conventional Promotional Strategies	• Use of social media videos and posts • Distribution of flyers and print media • Participation in trade fairs, travel fairs, and travel month events	"Our office uses the usual methods of promotion. These include social media, where we post videos, print media, flyers, and we participate in trade fairs, travel fairs, and travel month events."
Support to Tourism Stakeholders	• Assistance in hotel and establishment accreditation • Helping tour guides and operators prepare itineraries	"We also assist in the accreditation of hotels and other establishments." "We support tour guides and tour operators by helping them prepare itineraries."
Seafood as Primary Tourist Attraction	• Reputation as the Seafood Capital of the Philippines • Affordable seafood prices for visitors	"What consistently attracts tourists is our seafood because we are known as the Seafood Capital of the Philippines." "Visitors from other places, the prices are still acceptable because seafood is even more expensive where they come from, which is why seafood is a major attraction."
Festivals as Tourism Drivers	• Large number of visitors during festival celebrations • Cultural and seasonal events as attractions	"Another factor that draws tourists is our festivals, such as the Sinadya Festival, Capiztahan, and Kaadlawan Festival every May."

Challenges and Limitations in the City's Current Tourism Promotion Efforts

Table II outlines the challenges and limitations in the City's current tourism promotion efforts, detailing its approach to limited budget allocation, understaffing issues, lack of digital skills and training, absence of dedicated digital personnel, and limited tourism content online.

Major Themes	Emerging Themes	Quotes and Participant
Limited Budget Allocation	• Tourism offices are not prioritized in government funding • Insufficient funds for promotional activities	"The primary challenge we face is the limited budget allocated to us; the tourism, arts, and culture are not given much priority."
Understaffing	• Difficulty in hiring additional personnel • Small workforce handling multiple tasks	"We are often understaffed. We cannot easily hire additional employees due to budget limitations."
Lack of Digital Skills and Training	• Employees not trained in digital promotion • Older staff have only basic knowledge of social media	"Many employees have not received sufficient training; their knowledge is only basic."
Absence of Dedicated Digital Personnel	• No assigned social media or digital marketing expert • IT office serves the entire city hall, not tourism alone	"Ideally, each office should have a designated expert in digital and social media."
Limited Tourism Content Online	• Infrequent tourism posts due to a lack of trained staff	"You can see we have limited posting of tourism because most of us are not trained."

The Developed Roblox-Based Virtual Experience for Roxas City

Game Detail Page

The game detail page of Roxas City Tambayan serves as an introductory overview of the developed Roblox-based virtual experience, presenting essential information that prepares users before entering the virtual environment. It displays the game title and thumbnail that visually represents the Roxas City setting, the maturity rating, age guidance to inform users of appropriate access, and the creator's name to establish authorship and credibility of the project. A prominent play button provides immediate access to the virtual world, while icons let users favorite, follow, and receive notifications about updates to the virtual experience.

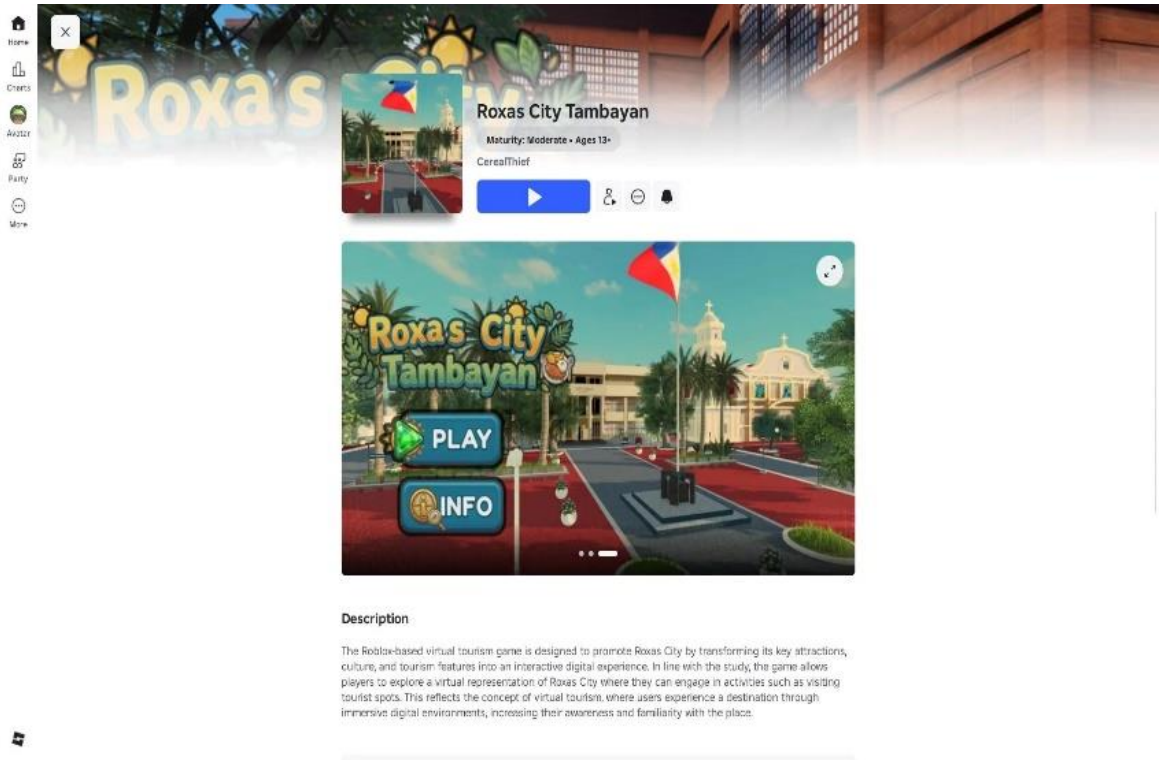


Figure 1. Game Detail Page

Game Main Menu Interface

The game's main menu prominently displays the title Roxas City Tambayan, along with two main interactive buttons: Play, which lets the user start or enter the game immediately, and Info, which provides additional details and background on the Roblox-based virtual experience. This section serves as the primary entry point where players decide how they want to proceed, making it an essential part of the game's navigation and user flow.



Figure 2. Main Menu Interface

In-Game Clothing Shop

The in-game clothing shop provides players with an interactive space to customize their character's appearance while enhancing immersion through a realistic retail environment. The shop includes a clearly defined service counter where a vendor character is positioned, creating a sense of interaction and transaction between the player and the game system. A visible prompt, such as "Pick Outfits Here," acts as a guide, informing players of the shop's function and where customization can take place.

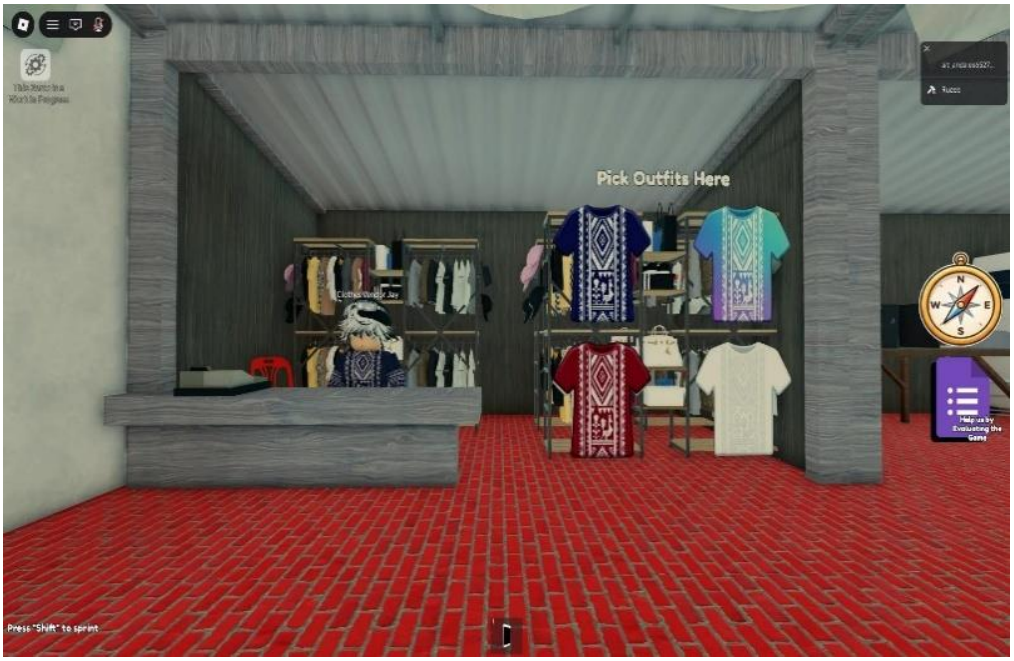


Figure 3. In-Game Clothing Shop

Game Controls

The game controls panel provides players with a clear, intuitive guide for navigating and interacting within the game. The W, A, S, and D keys are used to move the character in different directions, and the *shift key* allows the player to sprint for faster movement. The *space bar* lets the character jump over obstacles or reach higher areas, ensuring smooth, responsive gameplay.



Figure 4. Game Controls

Landmarks

The landmarks serve as central visual and cultural elements in the game environment, representing important locations and enhancing the player's sense of place and exploration. It is typically positioned in a prominent area, making it easily recognizable and acting as a point of interest that naturally draws the player's attention. Its structure and overall design contribute to the location's identity, adding depth and realism to the virtual setting.



Figure 5. Landmarks

Landmarks Interactive Information Board

The landmarks information represents an interactive information board placed near important locations, specifically designed to present the history and background of a particular place within the Roblox-based virtual game. It serves as a storytelling element that helps players understand the environment's significance and context, transforming the space from a simple visual setting into a meaningful and informative experience. By incorporating this, the game creates a connection between the player and the virtual environment, encouraging curiosity and deeper engagement with the surroundings.



Figure 6. Interactive Information Board

Billboard

The billboard serves as a virtual promotional poster, strategically placed within the environment to immediately communicate the project's purpose to players. Displaying the statement, "*Visit Roxas City, Where Your Virtual Experience Becomes Reality",* it combines visual elements of recognizable local attractions into a single composition that captures the identity of Roxas City. The design mirrors real-world tourism tarpaulins and posters, allowing users to feel as if they are encountering actual promotional material in a public space, thereby strengthening realism and immersion.



Figure 7. Billboard

Teleportation Feature

The Teleportation feature enables players to instantly travel between locations through an interactive, immersive system that simplifies in-game navigation while maintaining engagement. An on-screen prompt provides clear instructions, guiding players toward available destinations and helping them understand their current objective. This is supported by a designated teleportation marker, typically represented by a visible ground indicator that clearly identifies where the feature can be activated. By interacting with this teleportation marker, players can initiate transport, creating a smooth transition between locations without breaking immersion. The marker's visual clarity also reinforces intuitive gameplay, allowing players to quickly recognize points of interaction without complex instructions.

The use of a tricycle as the main transport element adds a layer of cultural authenticity, reflecting a common mode of transportation in the Philippines, particularly in cities like Roxas City, making the experience more relatable and contextually grounded.



Figure 8. Teleportation

Interactive Non-Player Characters

Interactive non-player characters (NPCs) are programmed to communicate with players through visible dialogue boxes and choice prompts displayed on-screen. These prompts typically ask a simple question and provide selectable responses, such as accepting or declining an offered action, allowing the player to participate rather than passively observe the environment. By selecting a response, the player can trigger a specific in-game function, like receiving contextual information about the place they are visiting.



Figure 9. Interactive Non-Player Character

The Effectiveness of Roblox-Based Virtual Experience

The results of the study were presented separately for IT experts and local tourists to provide a more comprehensive and accurate evaluation of the Roblox-based virtual experience. This separation is essential since the two groups represent different perspectives, experiences, and evaluation criteria when assessing the Roblox-based virtual experience.

Functional Suitability.

Table III presents the effectiveness of the Roblox-based virtual experience in terms of functional suitability. The findings revealed a high level of effectiveness, with a grand mean of 4.52, signifying excellent functionality. The scores for individual indicators ranged from 4.20 to 5.00, highlighting the platform's strong, reliable functional capabilities. The relatively low standard deviation further demonstrates consistency in respondents' evaluations.

Table III. Effectiveness of Roblox-Based Virtual Experience as to Functional Suitability

Functional Suitability	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual accurately presents Roxas City tourist attractions.	4.70	.58	Excellent
2. The Roblox-based virtual provides tourism information about Roxas City.	4.70	.58	Excellent
3. The features of the Roblox-based virtual support tourism promotion.	5.00	.00	Excellent
4. Users can explore different tourist destinations within the Roblox-based virtual world.	4.70	.58	Excellent
5. The Roblox-based virtual represents the identity of Roxas City tourism.	4.70	.58	Excellent
Sub Mean	**4.76**		**Excellent**
Local Tourists			
1. The Roblox-based virtual accurately presents Roxas City tourist attractions.	4.30	.79	Excellent
2. The Roblox-based virtual provides tourism information about Roxas City.	4.20	.74	Very Good
3. The features of the Roblox-based virtual support tourism promotion.	4.30	.78	Excellent
4. Users can explore different tourist destinations within the Roblox-based virtual world.	4.30	.79	Excellent
5. The Roblox-based virtual represents the identity of Roxas City tourism.	4.30	.76	Excellent
Sub Mean	**4.28**		**Excellent**
Grand Mean	**4.52**		**Excellent**

Performance Efficiency. Table IV presents the effectiveness of the Roblox-based virtual experience in terms of Performance Efficiency. The findings revealed a high level of effectiveness, with a grand mean of 4.41, interpreted as Excellent. The mean scores across indicators ranged from 4.20 to 4.70, indicating that the Roblox-based virtual experience performs efficiently in terms of speed, responsiveness, and stability during use. The standard deviation values suggest consistent responses, indicating reliable platform performance across users.

Table IV. Effectiveness of Roblox-Based Virtual Experience on Performance Efficiency

Performance Efficiency	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual loads quickly when accessing the virtual tourism environment.	4.70	.58	Excellent
2. The Roblox-based virtual responds immediately when users interact with objects or locations.	4.30	.58	Excellent
3. The Roblox-based virtual runs smoothly without delays.	4.70	.58	Excellent
4. The Roblox-based virtual maintains good performance during exploration.	4.70	.58	Excellent
5. The Roblox-based platform operates efficiently during continuous use	4.70	.58	Excellent
Sub Mean	**4.62**		**Excellent**
Local Tourists			
1. The Roblox-based virtual loads quickly when accessing the virtual tourism environment.	4.20	.79	Very Good
2. The Roblox-based virtual responds immediately when users interact with objects or locations.	4.20	.74	Very Good
3. The Roblox-based virtual runs smoothly without delays.	4.20	.82	Very Good
4. The Roblox-based virtual maintains good performance during exploration.	4.20	.71	Very Good
5. The Roblox-based platform operates efficiently during continuous use	4.20	.73	Very Good
Sub Mean	**4.20**		**Very Good**
Grand Mean	**4.41**		**Excellent**

Compatibility. Table V outlines the effectiveness of the Roblox-based virtual experience in terms of compatibility. The findings revealed a high level of effectiveness, with a grand mean of 4.47, interpreted as excellent. The mean scores across the indicators ranged from 4.10 to 4.70, indicating that the Roblox-based platform performs effectively across different devices and operating systems. The standard deviation values suggest consistency in the responses, reflecting reliable platform compatibility across users.

Table V. Effectiveness of Roblox-Based Virtual Experience in Compatibility

Compatibility	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual works properly on different devices.	4.70	.58	Excellent
2. The Roblox-based virtual tourism integrates well with the Roblox-based platform.	4.70	.58	Excellent
3. The Roblox-based virtual functions properly across different operating systems.	4.70	.58	Excellent
4. The Roblox-based virtual operates without compatibility issues	4.70	.58	Excellent
5. The Roblox-based virtual works smoothly with other supporting software.	4.70	.58	Excellent
Sub Mean	**4.70**		**Excellent**
Local Tourists			
1. The Roblox-based virtual works properly on different devices.	4.10	.75	Very Good
2. The Roblox-based virtual tourism integrates well with the Roblox-based platform.	4.30	.78	Excellent
3. The Roblox-based virtual functions properly across different operating systems.	4.20	.77	Very Good
4. The Roblox-based virtual operates without compatibility issues	4.30	.77	Excellent
5. The Roblox-based virtual works smoothly with other supporting software.	4.30	.79	Excellent
Sub Mean	**4.24**		**Excellent**
Grand Mean	**4.47**		**Excellent**

Usability. Table VI presents the effectiveness of the Roblox-based virtual experience in terms of usability. The findings revealed a high level of effectiveness, with a grand mean of 4.54, interpreted as Excellent. The mean scores across indicators ranged from 4.20 to 5.00, indicating that the Roblox-based platform is easy to use, understand, and visually appealing to users. The standard deviation values suggest consistency in the responses, reflecting a reliable and user-friendly system experience.

Table VI. Effectiveness of Roblox-Based Virtual Experience as to Usability

Usability	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual tourism is easy to navigate.	5.00	.00	Excellent
2. The instructions and controls of the Roblox-based virtual are easy to understand.	5.00	.00	Excellent
3. Users can easily learn how to use the Roblox-based virtual tourism platform.	5.00	.00	Excellent
4. The design of the Roblox-based virtual is visually appealing.	4.30	.58	Excellent
5. The Roblox-based virtual provides an enjoyable user experience.	4.70	.58	Excellent
Sub Mean	**4.80**		**Excellent**
Local Tourists			
1. The Roblox-based virtual tourism is easy to navigate.	4.30	.79	Excellent
2. The instructions and controls of the Roblox-based virtual are easy to understand.	4.30	.79	Very Good
3. Users can easily learn how to use the Roblox-based virtual tourism platform.	4.20	.80	Excellent
4. The design of the Roblox-based virtual is visually appealing.	4.30	.74	Excellent
5. The Roblox-based virtual provides an enjoyable user experience.	4.30	.71	Excellent
Sub Mean	**4.28**		**Excellent**
Grand Mean	**4.54**		**Excellent**

Reliability. Table VII presents the effectiveness of the Roblox-based virtual tourism experience in terms of reliability. The findings revealed a high level of effectiveness, with a grand mean of 4.44, interpreted as Excellent. The mean scores across indicators ranged from 4.10 to 5.00, indicating that the Roblox-based platform performs consistently, operates smoothly, and maintains stability during use. The standard deviation values suggest consistency in the responses, reflecting dependable system performance across users.

Table VII. Effectiveness of Roblox-Based Virtual Experience as to Reliability

Reliability	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based runs smoothly during the virtual tourism experience.	4.30	.58	Excellent
2. The Roblox-based virtual performs consistently during repeated use.	4.70	.58	Excellent
3. The Roblox-based virtual experience rarely experiences technical errors.	4.70	.58	Excellent
4. The Roblox-based virtual recovers quickly when minor problems occur	4.70	.58	Excellent
5. The Roblox-based platform provides a stable virtual tourism experience.	5.00	.00	Excellent
Sub Mean	**4.68**		**Excellent**
Local Tourists			
1. The Roblox-based runs smoothly during the virtual tourism experience.	4.10	.77	Very Good
2. The Roblox-based virtual performs consistently during repeated use.	4.20	.75	Very Good
3. The Roblox-based virtual experience rarely experiences technical errors.	4.20	.81	Very Good
4. The Roblox-based virtual recovers quickly when minor problems occur	4.20	.79	Very Good
5. The Roblox-based platform provides a stable virtual tourism experience.	4.30	.76	Excellent
Sub Mean	**4.20**		**Very Good**
Grand Mean	**4.44**		**Excellent**

Security. Table VIII presents the effectiveness of the Roblox-based virtual experience in terms of security. The findings revealed a high level of effectiveness, with a grand mean of 4.36, interpreted as Excellent. The mean scores across indicators ranged from 4.00 to 4.70, indicating that the Roblox-based platform provides adequate protection of user data, prevents unauthorized access, and ensures a safe virtual experience. The standard deviation values suggest consistency in the responses, reflecting dependable system security across users.

Table VIII. Effectiveness of Roblox-Based Virtual Experience in terms of Security

Security	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual protects the privacy of users while using the platform.	4.00	.00	Very Good
2. The Roblox-based platform provides a safe virtual experience for users.	4.70	.58	Excellent
3. The Roblox-based virtual environment prevents unauthorized access.	4.70	.58	Excellent
4. Users feel secure when interacting with the Roblox-based virtual.	4.30	.58	Excellent
5. The Roblox-based virtual experience ensures the protection of user data.	4.70	.58	Excellent
Sub Mean	**4.48**		**Excellent**
Local Tourists			
1. The Roblox-based virtual protects the privacy of users while using the platform.	4.20	.77	Very Good
2. The Roblox-based platform provides a safe virtual experience for users.	4.20	.72	Very Good
3. The Roblox-based virtual environment prevents unauthorized access.	4.30	.77	Excellent
4. Users feel secure when interacting with the Roblox-based virtual.	4.20	.74	Very Good
5. The Roblox-based virtual experience ensures the protection of user data.	4.30	.79	Excellent
Sub Mean	**4.24**		**Excellent**
Grand Mean	**4.36**		**Excellent**

Maintainability. Table IX presents the effectiveness of the Roblox-based virtual experience in terms of maintainability. The findings revealed a very high level of effectiveness, with a grand mean of 4.64, interpreted as Excellent. The mean scores across indicators ranged from 4.20 to 5.00, indicating that the Roblox-based platform can be easily updated, modified, and enhanced over time. The standard deviation values suggest consistent responses, reflecting a flexible, well-structured Roblox-based virtual design.

Table IX. Effectiveness of Roblox-Based Virtual Experience as to Maintainability

Maintainability	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual world can easily be updated with a new tourism location.	5.00	.00	Excellent
2. The Roblox-based virtual can be improved with additional features.	5.00	.00	Excellent
3. Developers can modify the Roblox-based virtual world without difficulty.	5.00	.00	Excellent
4. The platform supports future Roblox-based virtual tourism enhancements.	5.00	.00	Excellent
5. The Roblox-based virtual structure allows easy maintenance.	5.00	.00	Excellent
Sub Mean	**5.00**		**Excellent**
Local Tourists			
1. The Roblox-based virtual world can easily be updated with a new tourism location.	4.30	.76	Excellent
2. The Roblox-based virtual can be improved with additional features.	4.30	.75	Excellent
3. Developers can modify the Roblox-based virtual world without difficulty.	4.20	.74	Very Good

4. The platform supports future Roblox-based virtual tourism enhancements.	4.30	.74	Excellent
5. The Roblox-based virtual structure allows easy maintenance.	4.30	.77	Excellent
Sub Mean	**4.28**		**Excellent**
Grand Mean	**4.64**		**Excellent**

Portability. Table X presents the effectiveness of the Roblox-based virtual experience in terms of portability. The findings revealed a high level of effectiveness, with a grand mean of 4.55, interpreted as Excellent. The mean scores across indicators ranged from 4.20 to 5.00, indicating that the Roblox-based virtual experience can be easily accessed, transferred, and operated across different devices and environments. The standard deviation values suggest consistency in the responses, reflecting dependable platform portability across users.

Table X. Effectiveness of Roblox-Based Virtual Experience as to Portability

Portability	Mean	SD	Verbal Interpretation
IT Experts			
1. The Roblox-based virtual world can be accessed using different devices.	4.70	.58	Excellent
2. The Roblox-based virtual tourism can be used in different environments.	4.70	.58	Excellent
3. The Roblox-based virtual can easily be transferred or adapted to other platforms	5.00	.00	Excellent
4. The Roblox-based virtual can be installed or accessed without difficulty.	5.00	.00	Excellent
5. The Roblox-based virtual works properly in various digital settings.	5.00	.00	Excellent
Sub Mean	**4.88**		**Excellent**
Local Tourists			
1. The Roblox-based virtual world can be accessed using different devices.	4.20	.75	Very Good
2. The Roblox-based virtual tourism can be used in different environments.	4.20	.75	Very Good
3. The Roblox-based virtual can easily be transferred or adapted to other platforms	4.30	.79	Excellent
4. The Roblox-based virtual can be installed or accessed without difficulty.	4.20	.75	Very Good
5. The Roblox-based virtual works properly in various digital settings.	4.20	.78	Very Good
Sub Mean	**4.22**		**Excellent**
Grand Mean	**4.55**		**Excellent**

V. CONCLUSIONS

Based on the study's findings, it was concluded that Roxas City's current tourism promotional activities primarily rely on conventional approaches that have limitations in reaching and engaging broader digital audiences. The identified challenges and limitations in the city's tourism promotion efforts underscore the need for more innovative, technology-driven strategies. The development of a Roblox-based virtual experience successfully created an immersive, interactive platform that digitally represented Roxas City's attractions and cultural destinations. Furthermore, the developed virtual experience was evaluated as effective against the ISO/IEC 25010 Quality Model criteria, demonstrating satisfactory performance across functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability. Therefore, the study concludes that integrating immersive virtual technologies into tourism promotional campaigns can enhance user engagement, increase awareness, and strengthen Roxas City's tourism marketing efforts.

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