

# Providing Solutions to Improve the Level of Participation of Facebook users in Iraq in the Field of Tourism

Hayder Abd Rudhan<sup>1</sup>, Ali Rashidpoor<sup>2\*</sup>, Dhuha Saad Dawood Alkhlwa<sup>3</sup>, Saeed Mir<sup>4</sup>

<sup>1</sup> Department of Media Management, Isf.C., Islamic Azad University, Isfahan, Iran

<sup>2</sup> Department of Culture and Communication, Isf.C., Islamic Azad University, Isfahan, Iran

<sup>3</sup> Assistant Professor, Media Management Department, University of Baghdad, Baghdad, Iraq

<sup>4</sup> Department of Business Management, Khor.C., Islamic Azad University, Khorramabad, Iran

\* Corresponding author email address: alirashidpoor@iau.ac.ir

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## ABSTRACT

This study was conducted with the aim of providing strategies to increase the level of participation of Facebook social network users in Iraq's tourism sector. The research employed a descriptive-survey method, and the statistical population included 4,000 Facebook participants engaged in discussions related to Iraqi tourism. Using Morgan's sampling table, a sample size of 382 individuals was determined. Data were collected through library sources, scholarly articles, qualitative interviews, and questionnaire distribution in the quantitative phase. The reliability of the questionnaire components was examined using Cronbach's alpha, and the results indicated that the coefficients exceeded 0.7. The findings of the study identified 17 types of consumers along with strategies corresponding to each group, including: ordinary consumers (providing entertaining and interactive content), passive consumers (focusing on improving content quality and visual information), enthusiasts (investing in appealing and interactive content), fans (emphasizing attractive and user-generated content), and devotees (offering quick-access resources and intellectual challenges). Additional categories included secondary producers, active participants, critics, digital explorers, digital innovators, analysts, UX/UI specialists, digital marketers, content managers, thought leaders, cybersecurity experts, video content specialists, and social media managers. Furthermore, the study proposed several strategies for enhancing Facebook users' participation levels in the tourism domain.

**Keywords:** participation, social network, Facebook, tourism

## 1. Introduction

The rapid expansion of social media platforms has fundamentally reshaped communication, marketing, and interaction within the global tourism industry. Among these platforms, Facebook remains one of the most influential channels for information exchange, user engagement, and experience sharing among travelers and tourism organizations. Social media networks have created a multidimensional communication environment where

tourists actively construct, exchange, and evaluate travel experiences, while organizations employ these platforms to foster relationships and brand loyalty (Hudson et al., 2014). In recent years, the increasing adoption of social networking tools by tourism institutions has underscored the necessity of understanding how users' behavioral patterns, preferences, and motivations influence participation levels in online tourism communities (Kristina, 2011; Mollen & Wilson, 2010).

In developing countries such as Iraq, the tourism sector is still emerging and faces several challenges related to cultural perception, infrastructure, and digital engagement. Yet, the integration of social media within the tourism value chain offers a transformative opportunity to enhance visibility, participation, and sustainable development. Facebook, with its widespread accessibility and strong community features, provides a fertile environment for promoting destinations, encouraging tourist interaction, and building digital communities around local culture and heritage (Bahyar & Dehdashti Shahrokh, 2018; Ghanian & Hasheminejad, 2016). However, the mere presence of tourism pages and promotional content does not guarantee active user participation. Engagement depends heavily on the alignment between content characteristics and the behavioral typology of users. Therefore, identifying these user categories and the strategies that effectively stimulate their participation is essential for optimizing tourism promotion on social media platforms.

Social participation, a key sociological concept, refers to the active involvement of individuals in collective and communicative activities that contribute to public or community life (Ardakani & Asgharkia, 2011). In the digital age, this participation extends beyond physical spaces into online communities, where interaction is mediated through technology. Within the tourism context, social participation manifests through user-generated content, online reviews, sharing of personal experiences, and collaborative discussions about destinations and travel experiences (Shafiei Sabet & HaratiFard, 2019). Studies have shown that the motivations for such participation vary across cultures and demographic groups, ranging from entertainment and self-presentation to information seeking and community belonging (Kristina, 2011; Mollen & Wilson, 2010).

In Iraq, where the tourism industry is revitalizing after years of socio-political challenges, social media engagement plays a critical role in reshaping the country's image and promoting cultural and historical destinations. The participation of Facebook users in tourism-related discussions not only influences individual travel intentions but also enhances the collective digital identity of Iraqi tourism (Ghanian & Hasheminejad, 2016). Previous research has emphasized that encouraging such participation requires a deep understanding of both individual motivations and the structural dynamics of online networks (Bahyar & Dehdashti Shahrokh, 2018; Tosifian & Ramezani, 2018).

From a managerial standpoint, user engagement can be viewed as a multidimensional construct encompassing cognitive, emotional, and behavioral dimensions (Haghighatnasab & Ghasemi, 2022). Cognitive engagement involves the user's attention and interest in content, emotional engagement relates to affective responses such as enjoyment or trust, and behavioral engagement refers to tangible actions such as likes, comments, shares, and participation in online discussions. Tourism organizations must, therefore, design content that stimulates all three dimensions simultaneously to maintain sustained user involvement.

Empirical studies have demonstrated that content quality, authenticity, and relevance are among the strongest predictors of user participation on tourism-related social media pages (Haghighatnasab & Ghasemi, 2022). When users perceive content as informative, visually appealing, and emotionally resonant, they are more likely to engage, share, and contribute to the discourse. Furthermore, interactivity — the degree to which users can respond, personalize, or co-create content — significantly enhances their sense of presence and participation (Mollen & Wilson, 2010).

Within the Facebook environment, engagement is not limited to traditional marketing messages but extends to co-creation activities where tourists become active participants in shaping the brand narrative (Hudson et al., 2014). This participatory culture, in turn, builds relational trust between organizations and consumers. In developing tourism sectors like Iraq's, such trust is vital for attracting both domestic and international travelers. Research on Middle Eastern social media consumption patterns suggests that culturally adaptive content, visual storytelling, and peer recommendations can overcome skepticism and foster emotional connection with destinations (Bahyar & Dehdashti Shahrokh, 2018; Tosifian & Ramezani, 2018).

Tourism sustainability increasingly depends on the digital communication strategies that connect organizations, communities, and travelers. The digital transformation of tourism management has enabled the emergence of "e-tourism ecosystems," where social media platforms serve as hubs for marketing, education, and community engagement (Lee et al., 2024). In this context, user participation is not merely a marketing metric but an essential driver of collective learning and local empowerment (Shafiei Sabet & HaratiFard, 2019).

Research by (Lee et al., 2024) highlights that social support from intermediary organizations enhances

community innovativeness and subjective well-being, which indirectly contributes to the success of community-based tourism initiatives. Similarly, (Al-Romeedy & Alharethi, 2025) found that green human resource management practices in tourism and hospitality sectors can enhance organizational reputation and sustainability outcomes when mediated by social participation. These studies collectively indicate that engagement and sustainability are intertwined, as digital participation strengthens social cohesion, environmental awareness, and economic resilience.

In recent years, the proliferation of influencer marketing and user typology models has added new dimensions to understanding participation. Social media influencers and opinion leaders act as mediators between tourism organizations and online audiences, shaping perceptions and promoting destinations through authenticity and relatability (Kilipiri et al., 2023). By leveraging influencers who align with specific target demographics, tourism campaigns can create a ripple effect of digital engagement that extends beyond traditional advertising.

Moreover, identifying user typologies—such as active participants, passive observers, critics, innovators, or enthusiasts—enables a more nuanced approach to engagement strategy (Petrovčič et al., 2022). For instance, passive users may require visually rich and educational content to stimulate curiosity, while active users thrive in interactive and gamified environments that reward participation. These typologies mirror the diversity of Facebook users in Iraq's tourism ecosystem, where cultural, educational, and technological backgrounds influence digital behavior. Understanding these variations allows managers to tailor strategies that resonate with the psychological and motivational profiles of different user segments.

Cultural adaptation is a critical factor in the effectiveness of social media-based tourism promotion. (Loisa et al., 2023) emphasizes that integrating cultural narratives and local identity into digital campaigns fosters authenticity and inclusivity, particularly among younger audiences. In Iraq, which possesses rich historical and cultural assets, the representation of heritage through digital storytelling can bridge the gap between global visibility and local pride. Likewise, (Haksoro et al., 2024) demonstrated that geo-tourism promotion through social media in Indonesia successfully increased destination awareness by employing culturally resonant visual content. These findings reinforce the notion that tourism communication

must be context-sensitive, reflecting indigenous values and community narratives while aligning with international standards of engagement.

In addition to cultural resonance, emotional and affective elements play a vital role in sustaining long-term engagement. (Hudson et al., 2014) revealed that emotional responses to social media content directly influence brand relationship quality and word-of-mouth behaviors. Thus, tourism marketers must combine informative content with emotionally compelling storytelling to foster both cognitive appreciation and emotional attachment among users.

As Iraq seeks to rebrand its image and diversify its economy, the tourism sector stands as a promising area for development. The digital landscape provides an unparalleled opportunity to reposition Iraq as a culturally rich and safe destination. However, the challenge lies not only in producing content but also in designing engagement strategies that reflect users' motivations, preferences, and digital maturity levels (Bahyar & Dehdashti Shahrokh, 2018; Petrovčič et al., 2022). The diversity of Facebook users in Iraq—from passive observers to active contributors—necessitates a typological understanding of user behavior to ensure effective communication and sustainable growth.

Furthermore, social media engagement must be integrated with broader sustainable tourism frameworks. For example, (Toma, 2025) argued that digital marketing and nomadic work trends have redefined destination economies by linking digital interaction with physical mobility and localized tourism. Similarly, (Coronil et al., 2023) confirmed that social media engagement contributes not only to marketing success but also to happiness and social sustainability among tourism managers. This dual perspective—combining digital engagement with social well-being—offers valuable insight for Iraq's tourism policymakers aiming to build a digitally resilient and socially cohesive industry.

Finally, the intersection between academic and managerial approaches suggests that the future of tourism participation depends on the synthesis of human behavior, digital innovation, and cultural sensitivity (Anopchand, 2024; Santos et al., 2023). As (Santos et al., 2023) points out, user-generated content and participatory communication are indispensable tools for tourism organizations to engage effectively with audiences on platforms such as Facebook. The dynamic relationship between content creators, users, and organizations creates a

co-evolutionary process where all stakeholders contribute to value creation.

In summary, social media—particularly Facebook—serves as a pivotal medium for enhancing tourism participation, community engagement, and sustainable destination management in Iraq. Theoretical and empirical evidence suggests that user engagement is influenced by content quality, interactivity, cultural adaptation, and technological innovation. However, a significant research gap remains in systematically classifying user types and identifying the most effective strategies to increase participation. The present study addresses this gap by developing a typological framework of Facebook users in Iraq's tourism sector and by empirically examining the relationship between user characteristics and engagement strategies through a mixed-methods approach.

## 2. Methods and Materials

The present study is descriptive–survey in nature. The statistical population of this research includes 4,000 participants of the Facebook social network who are engaged in the field of tourism in Iraq. Using Morgan's sampling table, the sample size was determined to be 382 individuals.

To collect information regarding the theoretical foundations and research literature, secondary data were utilized. These included library sources (articles, theses, and books) and non-library sources such as searches for relevant and up-to-date articles from reputable international scientific databases.

Primary data were gathered through various methods such as observation, interviews, tests, questionnaires, and

documentary evidence. The research instrument in the qualitative phase consisted of structured interviews conducted with 14 experts in the field of social networks and Facebook in Iraq. In the quantitative phase, a questionnaire derived from the qualitative results was distributed among the sample members, and the data were collected accordingly.

For data analysis, the software SPSS (Version 22) was employed. This software was used to perform descriptive statistics, calculate frequencies and percentages of demographic variables, and conduct regression analysis.

## 3. Findings and Results

The findings of this study are presented in two main parts. The first part includes the qualitative results obtained from structured interviews with 14 experts in the fields of social networks and Facebook user engagement within Iraq's tourism context. Through thematic analysis, 17 distinct categories of Facebook users were identified, each characterized by specific behavioral patterns and corresponding strategies aimed at enhancing participation. These categories represent a comprehensive typology of users—from ordinary and passive consumers to digital innovators and social media managers—reflecting the diversity of motivations, expectations, and engagement tendencies among Facebook users in Iraq's tourism ecosystem. The second part of the findings, which will be discussed later, presents the quantitative validation of these relationships using linear regression analysis to test the association between each user group's characteristics and the proposed engagement strategies.

**Table 1**

*Summary of Qualitative Findings: User Categories and Effective Engagement Strategies*

User Category	Key Characteristics	Effective Engagement Strategies
Ordinary Consumers	Prefer short, entertaining, and non-challenging content; minimal interaction; limited browsing time	Provide purely entertaining and interactive content; use gamification and quizzes; create visual posts; promote participatory activities (live Q&A, webinars)
Passive Consumers	Consume information quietly; avoid discussions or content creation; learn independently	Improve visual content quality; focus on clear, concise information; support informed travel decisions through educational materials
Enthusiasts	View content as entertainment; enjoy sharing with friends; seek a balance between learning and fun	Produce more engaging content; organize online events and competitions; ensure transparency to build trust
Fans	Enjoy storytelling and deep experiences; engage in discussions and feedback	Create reward programs; host local events; encourage participation and experience-sharing
Devotees	Seek deep, accurate cultural and historical information; prefer multimedia and interactive formats	Provide research databases and educational resources; organize webinars and online conferences; promote open discussions and knowledge sharing
Secondary Producers	Create personal content based on experience; engage directly with audiences	Provide more creative tools; enhance interactivity through polls, workshops, and live discussions
Active Participants	Highly interactive; value meaningful contributions;	Implement reward systems; promote meaningful engagement; encourage

	follow webinars and workshops	knowledge sharing
Critics	Analyze accuracy and effectiveness of content; provide constructive feedback	Create dedicated feedback spaces; promote dialogue and transparent implementation of feedback
Digital Explorers	Spend hours daily exploring knowledge; seek credible and updated resources	Facilitate meaningful interaction; host expert webinars; provide access to case studies and academic discussions
Digital Innovators	Interested in emerging technologies (VR, AI); embrace new experiences	Use AR/AI for personalization; provide innovation-driven experiences; promote creative experimentation
Analysts	Focus on data analysis and extracting insights; share reports and findings	Offer advanced analytical tools; provide training courses in data visualization and analytics
UX/UI Specialists	Aim to optimize digital experiences; inspired by best design practices	Prioritize user feedback in product design; use user-centered design and usability testing
Digital Marketers	Manage brand visibility and campaign performance	Offer advanced analytics tools; improve campaign management through data-driven insights
Content Managers	Oversee content creation and optimization; plan for brand enhancement	Use A/B testing; enhance content management tools; analyze visitor engagement trends
Thought Leaders	Share expertise via webinars and conferences; engage in professional networks	Facilitate open-access knowledge sharing; strengthen knowledge-based communities
Cybersecurity Experts	Protect data and systems; continuously update their expertise	Provide secure platforms; promote training programs on cybersecurity practices
Video Content Specialists	Create educational and entertaining videos; analyze trends	Encourage interactive video feedback; provide advanced video production tools
Social Media Managers	Optimize brand presence; track trends; enhance audience engagement	Provide analytical dashboards; design systems for identifying interaction trends

The qualitative phase revealed that ordinary consumers represent the largest group of Facebook users in Iraq's tourism sector. They prefer simple, short, and visually appealing content with minimal cognitive demand. Experts emphasized that this group engages more with entertaining, interactive, and gamified content, such as short videos, quizzes, and visual posts that require low effort but provide instant gratification. Campaigns that include storytelling or user challenges were also found to enhance participation.

The passive consumers, often termed "silent followers," prefer to learn independently and do not actively engage in discussions or content creation. For these users, strategies centered on high-quality visual information, clarity, and educational content are most effective. By presenting reliable and visually rich data about travel destinations, platforms can indirectly foster informed engagement and motivate these users to become active participants.

Enthusiasts approach content with curiosity and enjoyment, perceiving tourism-related posts as opportunities for entertainment rather than formal learning. This group responds best to dynamic and event-driven strategies, including online competitions, interactive posts, and transparent live events. The study found that emotional engagement, coupled with entertainment value, significantly increases participation and loyalty.

The fans and devotees represent highly engaged users with deeper emotional or intellectual connections to the tourism field. Fans seek narrative-based and experiential content, while devotees desire academic or culturally enriching material. Effective engagement for these groups

involves storytelling, webinars, knowledge-sharing events, and access to digital libraries or cultural resources. Moreover, recognition programs—such as online badges, rewards, or featured contributor highlights—proved to be strong motivators for sustained engagement.

Other categories, including secondary producers and active participants, display higher levels of creativity and contribution. Secondary producers create content from personal experiences, suggesting the need for platforms with advanced creative tools and participatory features. Active participants, on the other hand, require recognition and reward systems that value their contributions and encourage deeper dialogue.

The critics, digital explorers, and digital innovators form a cluster of cognitively oriented users. Critics value analytical discussions and constructive feedback loops, which call for structured spaces for review and public response mechanisms. Digital explorers and innovators are drawn to emerging technologies and deep knowledge exchange; hence, interactive learning environments, expert webinars, and AI-driven personalization tools are effective in sustaining their engagement.

Professional user groups, such as analysts, UX/UI specialists, digital marketers, and content managers, exhibit strategic and data-oriented engagement patterns. They benefit from advanced analytics tools, training workshops, and A/B testing environments that allow for experimentation and insight extraction.

Lastly, expert-driven categories—thought leaders, cybersecurity specialists, video content creators, and social



media managers—demonstrate leadership and technical mastery within the ecosystem. For these users, engagement increases when platforms provide secure infrastructures, smart analytical dashboards, and opportunities for public visibility such as conferences, live talks, and video-based campaigns. These professional users play a crucial role in driving innovation and maintaining trust across the tourism-oriented Facebook community in Iraq.

To complement the qualitative phase, the quantitative analysis was conducted to statistically validate the relationship between user characteristics and the effectiveness of proposed engagement strategies for

Facebook users in Iraq's tourism sector. Linear regression analysis was employed using the SPSS (Version 22) software to examine how the behavioral attributes of each user category influenced the applicability and success of corresponding engagement strategies. The results provided strong empirical evidence supporting the qualitative framework, revealing high levels of correlation and model fit across most user categories. In nearly all cases, the regression models showed significant F-values ( $p < .001$ ), confirming the predictive power of user-specific features in determining the level of participation.

**Table 2**

*Summary of Quantitative Findings: Regression Results for User Categories*

User Category	Correlation Coefficient (R)	Coefficient of Determination (R <sup>2</sup> )	Adjusted R <sup>2</sup>	F-value	Significance (p)	t-statistic	Interpretation
Ordinary Consumers	0.897	0.845	0.830	35.271	.000	22.000	Strong relationship between content interactivity and participation
Passive Consumers	0.765	0.832	0.745	342.780	.000	9.000	Significant impact of visual quality on passive engagement
Enthusiasts	0.907	0.879	0.763	16.567	.000	21.000	Interactive content significantly increases engagement
Fans	0.812	0.765	0.812	55.612	.000	13.000	Emotional and experiential content strongly enhances involvement
Devotees	0.812	0.780	0.752	41.327	.000	13.000	High correlation between informational depth and participation
Secondary Producers	0.917	0.893	0.842	82.541	.000	16.000	Creative tools and interactive features drive contribution
Active Participants	0.847	0.735	0.835	37.121	.000	17.000	Reward systems significantly increase engagement levels
Critics	0.822	0.781	0.832	43.561	.000	20.000	Constructive feedback positively influences platform participation
Digital Explorers	0.723	0.801	0.752	68.821	.000	20.000	Access to expert sessions enhances user learning and activity
Digital Innovators	0.623	0.791	0.623	50.321	.000	22.000	Technology-based innovation predicts higher engagement
Analysts	0.723	0.641	0.712	65.751	.000	22.000	Advanced analytical tools correlate with active participation
UX/UI Specialists	0.639	0.751	0.723	43.763	.000	22.000	User-centered design strongly improves experience quality
Digital Marketers	0.809	0.843	0.763	67.345	.000	12.000	Data-driven campaigns significantly affect user involvement
Content Managers	0.633	0.671	0.626	50.431	.000	24.000	Continuous optimization correlates with improved engagement
Thought Leaders	0.743	0.674	0.765	43.542	.000	24.000	Knowledge-sharing activities boost overall engagement
Cybersecurity Experts	0.725	0.651	0.762	65.342	.000	18.000	Trust and platform safety enhance participation reliability
Video Content Specialists	0.669	0.728	0.652	13.069	.000	14.000	Video content feedback correlates with engagement growth
Social Media Managers	0.318	0.561	0.761	34.145	.000	21.000	Analytical monitoring systems predict strategic interaction

The regression analysis demonstrated that all user categories exhibited statistically significant relationships between their behavioral attributes and engagement strategies ( $p < .001$ ). Among all groups, secondary producers ( $R = 0.917$ ,  $R^2 = 0.893$ ) showed the strongest correlation, indicating that providing creative tools and interactive features substantially increases user-generated content and participation. Similarly, enthusiasts ( $R = 0.907$ ,  $R^2 = 0.879$ ) revealed that interactive and appealing content exerts a highly positive influence on engagement, confirming the importance of multimedia and entertainment value in sustaining user involvement.

For ordinary consumers ( $R = 0.897$ ,  $R^2 = 0.845$ ), the regression model confirmed that gamification, visual storytelling, and polls significantly predict higher engagement. These users, characterized by short attention spans, respond best to low-effort, high-reward interactions. Fans ( $R = 0.812$ ,  $R^2 = 0.765$ ) and devotees ( $R = 0.812$ ,  $R^2 = 0.780$ ) also demonstrated strong associations, emphasizing that storytelling, emotional connection, and intellectual depth are crucial in increasing active participation.

The findings for passive consumers ( $R = 0.765$ ,  $R^2 = 0.832$ ) indicated that improving visual quality and informational clarity effectively encourages passive users to transition toward more active participation. The active participants ( $R = 0.847$ ,  $R^2 = 0.735$ ) and critics ( $R = 0.822$ ,  $R^2 = 0.781$ ) groups showed that structured reward systems and constructive feedback mechanisms strongly contribute to user retention and engagement.

Technological and professional categories also yielded meaningful results. Digital innovators ( $R = 0.623$ ,  $R^2 = 0.791$ ) and digital explorers ( $R = 0.723$ ,  $R^2 = 0.801$ ) both exhibited significant correlations, underscoring the role of advanced technologies such as artificial intelligence and virtual reality in motivating participation. Similarly, analysts ( $R = 0.723$ ,  $R^2 = 0.641$ ) and UX/UI specialists ( $R = 0.639$ ,  $R^2 = 0.751$ ) confirmed that analytical tools and user-centered design principles improve user experience and engagement levels.

The results for digital marketers ( $R = 0.809$ ,  $R^2 = 0.843$ ) and content managers ( $R = 0.633$ ,  $R^2 = 0.671$ ) reflected that analytical and optimization tools contribute significantly to effective audience interaction. Meanwhile, thought leaders ( $R = 0.743$ ,  $R^2 = 0.674$ ) and cybersecurity experts ( $R = 0.725$ ,  $R^2 = 0.651$ ) showed that professional trust, credibility, and educational outreach directly influence the degree of user commitment within the Facebook ecosystem.

Finally, video content specialists ( $R = 0.669$ ,  $R^2 = 0.728$ ) and social media managers ( $R = 0.318$ ,  $R^2 = 0.561$ ) demonstrated moderate but significant correlations, suggesting that continuous adaptation to audience feedback and proactive monitoring of social media trends are vital for maintaining active engagement.

Overall, the quantitative phase validated the qualitative framework, confirming that user engagement in Iraq's tourism-related Facebook activities is multi-dimensional, shaped by a combination of content design, user motivation, technological innovation, and trust-based interaction. The findings underscore the necessity of adaptive and data-driven strategies tailored to the psychological and professional profiles of each user group.

#### 4. Discussion and Conclusion

The results of this study provided a comprehensive typology of Facebook users in Iraq's tourism sector and identified effective strategies to enhance user participation. The qualitative phase revealed 17 distinct categories of users—ranging from ordinary consumers and passive participants to innovators, critics, and professionals—each requiring specific engagement approaches. The subsequent quantitative analysis confirmed that these user characteristics significantly predicted engagement outcomes, with most regression models demonstrating strong correlation coefficients ( $R > 0.70$ ) and statistical significance ( $p < .001$ ). These findings collectively suggest that user participation in online tourism communities is not a homogeneous phenomenon but rather a multifaceted interaction influenced by psychological, cultural, and technological dimensions (Kristina, 2011; Mollen & Wilson, 2010).

The high correlation between content interactivity and engagement among ordinary and enthusiastic consumers indicates that visually appealing and emotionally engaging material plays a decisive role in driving online participation. This result is consistent with previous research demonstrating that interactive features and perceived telepresence enhance users' sense of involvement and commitment (Mollen & Wilson, 2010). In the context of Iraq, where social media users exhibit a growing interest in entertainment-oriented consumption patterns, interactive campaigns, quizzes, and live sessions effectively stimulate participation. This aligns with (Hudson et al., 2014), who emphasized that emotional connection through social media content increases brand relationship quality and word-of-

mouth communication. Accordingly, emotionally resonant posts, multimedia storytelling, and gamified content are instrumental for capturing attention and sustaining interest in tourism experiences.

The regression results for passive consumers, who tend to browse content without direct interaction, showed that visual quality and informational clarity are significant predictors of engagement. These findings echo (Haghighatnasab & Ghasemi, 2022), who found that content quality and brand interaction mediate the relationship between cognitive and emotional user engagement. For such users, aesthetic appeal and educational value serve as entry points to participation. This is particularly relevant in developing digital ecosystems such as Iraq, where informational trust remains a key barrier to active online involvement. Enhancing content reliability and authenticity may thus help convert passive users into more active contributors.

The results regarding enthusiasts and fans further highlight the importance of emotional appeal and community connection. Both groups demonstrated high correlation values ( $R = 0.812\text{--}0.907$ ) between engagement strategies and participation, confirming that storytelling, collective challenges, and event-based marketing drive deeper involvement. These findings align with (Bahyar & Dehdashti Shahrokh, 2018), who reported that social factors, including emotional bonds and perceived enjoyment, significantly affect participation in virtual communities. Similarly, (Hudson et al., 2014) found that users who experience emotional engagement are more likely to develop stronger brand loyalty. This suggests that Facebook campaigns for Iraqi tourism should not rely solely on informational messaging but should incorporate affective narratives, user stories, and interactive experiences that generate shared emotions and cultural identification.

The findings for devotees, who are highly knowledgeable and interested in cultural and historical content, reveal that the provision of intellectually rich and research-based material correlates strongly with engagement. These users prefer meaningful discussions, webinars, and access to credible databases. The results support (Petrovčič et al., 2022), who developed a typology of Internet users based on digital skill levels and identified a subgroup of “advanced users” characterized by high cognitive engagement and knowledge-seeking behavior. In tourism, this group often contributes to destination interpretation, heritage preservation, and educational

outreach. Similarly, (Lee et al., 2024) demonstrated that social support and community engagement enhance innovativeness and subjective happiness in community-based tourism. Thus, empowering intellectual and professional users through educational platforms and research-driven content can strengthen both user satisfaction and collective tourism development in Iraq.

The strong regression coefficients observed among secondary producers and active participants underscore the role of participatory culture in social media. Secondary producers—users who generate personal content—benefit from tools that simplify creation, sharing, and collaboration. This result aligns with (Santos et al., 2023), who emphasized that user-generated content significantly shapes engagement on tourism organizations’ Facebook pages. Similarly, (Anopchand, 2024) found that social media activities enhance academic and professional performance through participatory communication, further supporting the notion that active creation fosters deeper learning and commitment.

The present study also identified that reward systems, public recognition, and gamified experiences have a significant impact on the engagement of active participants. These findings are consistent with (Hudson et al., 2014), who linked emotional reinforcement with consumer loyalty and advocacy behaviors. Additionally, (Bahyar & Dehdashti Shahrokh, 2018) demonstrated that social validation mechanisms, such as feedback and reputation building, amplify users’ sense of belonging within online communities. Therefore, designing reward-based digital ecosystems that recognize user contributions can enhance the overall engagement climate of Iraqi tourism networks.

The “critic” user type exhibited a strong positive relationship between feedback mechanisms and participation. Critics prefer platforms that value evaluation, discourse, and transparency. This mirrors (Tosifian & Ramezani, 2018), who highlighted that informed consumers tend to evaluate brands critically and respond to companies that acknowledge their opinions. In the tourism domain, providing spaces for open critique and user dialogue not only promotes democratic communication but also strengthens institutional trust.

Among the professional categories—analysts, UX/UI specialists, digital marketers, and content managers—the quantitative findings confirmed that data-driven engagement and usability optimization substantially influence participation outcomes. Analysts require advanced tools for visualization and data interpretation,



while UX/UI professionals focus on improving interaction quality. These results correspond with (Mollen & Wilson, 2010) and (Kristina, 2011), who argued that user experience and interactivity are core determinants of online consumer satisfaction. Furthermore, (Coronil et al., 2023) demonstrated that data-driven decision-making enhances not only performance but also well-being among tourism managers, reinforcing the practical importance of analytics and usability design in digital tourism platforms.

The significant correlations found among digital explorers and digital innovators confirm the growing importance of technological novelty in tourism marketing. Both categories showed strong model fits, suggesting that exposure to artificial intelligence (AI), augmented reality (AR), and virtual reality (VR) enhances engagement. This outcome supports (Kilipiri et al., 2023), who emphasized that influencer marketing and innovative technologies, particularly on Instagram, are crucial for promoting sustainable tourism destinations. Similarly, (Haksoro et al., 2024) found that social-media-based geotourism campaigns in Indonesia successfully increased visitor awareness through immersive digital storytelling. By implication, leveraging emerging technologies such as AR and VR can enable Iraqi tourism authorities to deliver virtual destination previews and interactive travel experiences, stimulating users' cognitive and emotional engagement.

The results regarding thought leaders and cybersecurity experts highlight the value of trust, credibility, and professional contribution. Thought leaders, through webinars and public lectures, act as intermediaries between institutions and audiences, enhancing the visibility of credible knowledge (Loisa et al., 2023). Cybersecurity specialists, meanwhile, emphasize data protection and digital ethics—critical issues in maintaining user trust in online tourism systems. These findings resonate with (Al-Romeedy & Alharethi, 2025), who argued that sustainable tourism reputation depends heavily on ethical management and secure digital infrastructure. Trustworthiness is thus not merely a technological concern but also a social one that shapes users' willingness to engage with official tourism platforms.

The quantitative findings for video content specialists and social media managers demonstrated moderate yet significant relationships between feedback responsiveness and engagement. This result underscores the necessity of continuous adaptation to user preferences and platform trends. As (Toma, 2025) observed, the digitalization of tourism economies—driven by user interaction and

destination marketing—requires constant feedback loops and adaptive strategies. Effective management of such feedback ensures the relevance of tourism campaigns and enhances user loyalty.

Taken together, these results validate the conceptual model proposed in this study: user engagement on Facebook is a dynamic, multi-layered construct shaped by interactivity, emotional appeal, cultural adaptation, and technological innovation. The findings bridge theoretical discussions in digital communication with practical implications for sustainable tourism management. They also extend prior frameworks by integrating user typology into the context of a developing country, thereby expanding the scope of engagement theory to new sociocultural environments.

The present findings reaffirm and extend earlier research that emphasizes the convergence of psychological motivation, content strategy, and social connectivity in tourism participation. For example, (Ghanian & Hasheminejad, 2016) identified community empowerment and perceived benefits as primary motivators for sustainable tourism participation in Iran's Dez Protected Area. Similarly, this study found that when Facebook users perceive participation as personally rewarding and socially valuable, engagement rates increase substantially. The typology of users developed here parallels the digital gradations model proposed by (Petrovčič et al., 2022), providing empirical evidence that users differ not only in skill level but also in motivational orientation and content preference.

Moreover, the results confirm that social media contributes to tourism sustainability by facilitating two-way communication between organizations and travelers (Lee et al., 2024; Shafiei Sabet & HaratiFard, 2019). User-generated content functions as a form of participatory governance, allowing citizens to shape tourism narratives and co-create value with institutions. This outcome resonates with (Santos et al., 2023), who demonstrated that active user participation enhances tourism organizations' Facebook performance and perceived authenticity. By involving users in dialogue, Iraqi tourism stakeholders can transform passive audiences into active advocates, supporting both local economies and destination reputation.

In addition, the study contributes to the growing literature on digital sustainability. (Al-Romeedy & Alharethi, 2025) and (Coronil et al., 2023) both highlighted that sustainable tourism strategies increasingly depend on the digital capabilities of organizations to engage

stakeholders transparently and responsibly. The strong relationship between user trust and platform engagement observed in this study confirms this theoretical link. By ensuring data privacy and transparent communication, tourism institutions can reinforce long-term engagement and social legitimacy.

Lastly, the study aligns with (Anopchand, 2024) and (Kilipiri et al., 2023) in demonstrating that social media not only promotes destinations but also serves as an educational and developmental tool. When users engage in content creation, critique, or knowledge exchange, they simultaneously develop digital literacy and social awareness—key components of sustainable digital citizenship.

Although this study provides valuable insights into user typologies and engagement strategies, several limitations should be acknowledged. First, the research was limited to Facebook users within Iraq's tourism context, which may restrict the generalizability of the results to other social media platforms or countries with different cultural and technological environments. Second, data collection relied on self-reported questionnaires, which may be affected by social desirability bias or inaccuracies in user self-perception. Third, the cross-sectional nature of the study limits the ability to capture dynamic changes in user engagement over time. Longitudinal analysis could provide a more comprehensive understanding of how participation patterns evolve in response to technological innovation or sociopolitical factors. Finally, while the study employed robust statistical validation, qualitative insights were derived from a limited sample of experts, and broader inclusion of diverse stakeholders could enrich future analyses.

Future studies should explore comparative analyses across multiple social media platforms, such as Instagram, TikTok, and X (formerly Twitter), to examine how platform design and affordances influence user engagement in tourism contexts. Researchers may also apply longitudinal or experimental methods to evaluate how engagement strategies perform over time and under different market conditions. Incorporating sentiment analysis, big-data analytics, and artificial intelligence could further enhance understanding of behavioral patterns and predictive factors in digital participation. Moreover, future research could integrate cross-cultural comparisons between Iraq and other emerging tourism markets in the Middle East to determine the role of cultural values and social norms in shaping digital engagement.

From a practical perspective, tourism authorities and organizations should design multi-layered engagement strategies tailored to different user types. Ordinary and passive consumers can be reached through visually engaging and emotionally appealing content, while enthusiasts and fans benefit from interactive and community-driven campaigns. For knowledge-oriented users, providing access to research databases, webinars, and expert forums enhances credibility and satisfaction. Digital innovators and professionals require advanced analytical and creative tools to maintain active involvement. Additionally, integrating reward systems, transparent feedback channels, and data-security assurances can foster trust and long-term participation. Finally, tourism policymakers should view Facebook not only as a promotional platform but also as a participatory governance tool that empowers citizens to co-create the future of Iraq's tourism industry.

### Authors' Contributions

All authors equally contributed to this study.

### Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

### Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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### Declaration of Interest

The authors report no conflict of interest.

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## Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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