RESEARCH ARTICLE

Innovations in Short Video Marketing Strategies for Tourism: The Case of The Director of Garzê Culture and Tourism Bureau

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Abstract

Short tourism videos (STVs) can significantly boost the visibility and appeal of tourist destinations, increase tourism revenue, and yield positive social responsibility effects such as poverty alleviation. One notable achievement is that of Liu Hong, the Director of the Culture and Tourism Bureau in Garzê , who has become an Internet celebrity by successfully promoting Garzê 's cultural and tourism resources via his TikTok account with 156 STVs. This study aims to analyze and uncover the characteristics of effective STVs in promoting sustainable tourism and conservation. The STVs were classified into four narrative categories: recommendation-based, introduction-based, display-based, and activity-based. The findings revealed that among the 25 highly engaged STVs, display-based STVs were dominant, accounting for 68%. Comparing short video length, number of scenes, subtitles, background music, and number of characters in association with engagement metrics, revealed that display-based STVs are usually less expensive and require fewer resources to produce. This suggests that destination management organizations can leverage display-based STVs to engage netizens and promote tourist destinations. These findings help promote remote tourism destinations with smaller marketing budgets, fostering sustainable tourism practices, and conserving natural and cultural heritage. The study helps DMOs aiming to use STVs for effective and sustainable destination marketing.

Keywords: cultural, sustainable tourism, short videos

1. Introduction

China Internet Information Centre (CNNIC) released the 52nd Statistical Report on the Development Status of the Internet in China in August 2023, which showed that as of June 2023, the number of Chinese Internet users reached 1.079 billion, with an Internet penetration rate of 76.4%, and the Internet phenomena today has stepped into the era of universal participation [1]. According to the research report on the short video industry in 2023, the scale of short video users reached 1.012 billion, accounting for 93.8% of the overall size of Internet users, and nearly a quarter of Internet users use the Internet because of short videos [2].

With the popularity of smartphones and 5G networks, short videos have become the primary way people acquire knowledge using fragmented time [1]. As a brand marketing tool, short videos rely on social media apps such as YouTube, Twitter, Facebook, Instagram, etc. The length of videos posted on different platforms is inconsistent. However, researchers are of the opinion that it is increasingly difficult to maintain the attention span of users and that the length of videos on video platforms, such as YouTube, should be shorter [3]. China's post-2000s generation are heavy fans of much shorter videos, nearly half of them watching at least two hours of short videos every day, with 48.8% of users preferring short videos of less than 1 minute [2]. This reflects that short videos have a massive and solid user base and hold great dissemination potential, and its transmission channel can be wide and varied, representing strong potential and convenience in marketing [4].

Short video marketing has emerged as a significant driver in the advertising market, holding commercial value in realizing effective advertisement traffic [4]. As e-commerce

development progressed, short videos not only provided entertaining content but also produced substantial economic effects [1].

Research shows that short video marketing drives economic benefits by reducing costs associated with traditional marketing models – encompassing production, dissemination, and maintenance costs – making it particularly suitable for remote areas with limited marketing funds [5-6]. Furthermore, short videos can bring visibility to previously unknown destinations at relatively low costs, creating new opportunities for tourism development in these regions [6-8].

Through cost-effective short video tourism marketing, remote regions have increased tourism revenue, stimulated related industries' growth, created employment opportunities, and generated positive social responsibility effects such as poverty alleviation [5, 7-8], contributing to sustainable development goals. Short videos often emphasize the natural landscapes and unique cultures of remote areas [8], thereby capturing tourists' interest while underscoring the importance of preserving these resources [6].

TikTok is the most representative short video platform in China, popular in over 150 countries and regions around the world. As of 2023, TikTok has more than 1 billion daily active users. Its fragmented content variety and vast information make browsing TikTok short videos a daily leisure activity [9]. According to Wang and Sun [10], TikTok revolutionized short video production, attracting users by making video creation easy, interesting, and low-cost. With an average monthly user size of 700 million and monthly per capita use time of 36.6 hours, TikTok's user base and engaged traffic continue to grow [2].

TikTok has spawned numerous network celebrities, including over 20,000 bloggers with more than one million followers and 3,000 with over five million followers. These influencers, network celebrities, and netizens command significant follower bases, offering enormous commercial value in advertising [11-12].

TikTok has recently extended its marketing influence to the tourism industry. In Q1 2023, TikTok saw an increase in travel interest users, reaching 407 million, a 13% rise from Q1 2022 [13]. Content creators flock to TikTok's 'Travel' section, which accounts for nearly 12% of total content. Travel-related short videos saw a 62% increase in sharing, 33.3% in viewing, and 22.2% in comments [13]. TikTok hosts 38,000 'travel enthusiasts' with over 10,000 followers each, highlighting the platform's vast potential for tourism marketing.

Due to TikTok's powerful influence in short video marketing, many tourism management organizations, under government planning and guidance, have established official accounts on TikTok to promote destinations. A notable example is Sichuan Province's tourism short video marketing. In April 2022, the Sichuan Provincial Department of Culture and Tourism launched a series entitled "Culture and Tourism Bureau Chief Talks on Culture and Tourism," featuring bureau chiefs promoting their destinations through short videos. The campaign involved 121 chiefs producing 170 short videos, amassed over 450 million views. Liu Hong, the cultural and tourism bureau chief of Garzê Tibetan Autonomous Prefecture, achieved significant impact, with his TikTok account attaining about 5 billion exposures and individual videos garnering approximately 13 million views. Liu's achievement was featured and commended by Xinhua News Agency.

As unique Internet celebrities due to their official status, government officials enhance audience trust and security in tourism products [14]. This study uses the STVs of "Director of Garzê Culture and Tourism Bureau Liu Hong" as a case study to explore STV marketing strategies and understand better their characteristics, acknowledging the limited research on effective short video marketing for tourism products. This study aims to:

(1) Investigate the narrative categories of effective short tourism videos based on narrative logic.

(2) Examine the narrative features or characteristics of highly engaging short videos.

This study analyzes how such STVs promote the sustainable and responsible presentation of natural and cultural resources, contributing to their conservation and extending their marketing and economic impact sustainably.

2. Literature Review

2.1. Short tourism videos (STVs)

The development of Internet technology is transforming how people access information and, at the same time, reducing the cost and difficulty of producing short videos [5, 6]. As a result, the quantity and popularity of short videos are on the rise. From 2018 to 2022, the scale of China's short video market has consistently grown, with market sizes of 46.71 billion yuan, 130.24 billion yuan, 205.13 billion yuan, 291.64 billion yuan, and 292.83 billion yuan, respectively [2]. With the growing scale of the short video market at an average rate of 27.8% across the 5-year period, scholars from different industries have conducted research from various research perspectives.

With regards to the definition of short videos, videos ranging from 5 seconds to 5 minutes are considered as short videos [6]. Scholars believed that the low cost, entertainment-oriented nature, and decentralization of short videos are the factors which contributes to the entertaining experience [15-16]. Factors such as user engagement [17-18] and perceived value [19-20] of short videos influence user behavioral intentions. Due to the brevity and ease of understanding, short videos are highly effective dissemination medium compared to the traditional forms of communication [21]. As a result, they are widely used to promote products and services [22-23].

Due to the intangible nature of tourism products, they cannot be "trialed" like regular products, allowing consumers to experience their quality and value in advance. In this context, short videos serve as a means of "pre-experience." By watching short travel videos, potential consumers perceive the image of the tourist destination, get drawn by its content and information, which all aid them in making informed decisions [24]. In addition, videos are considered to have a higher degree of information richness than text and images [25]. This richness can easily stir the emotion, making the audience more likely to fall into the immersive engagement realm [26-27]. As a result, short videos are ideal to be used in promoting tourism products or destinations [28-29].

As social media application such as TikTok primarily focus on the dissemination of short videos TikTok content too has unique rich features such as entertainment value, apart from brevity and ease of sharing which contributed to the vast user base [30]. Relevant studies have indicated that through vivid and intuitive visual language, TikTok short videos can profoundly influence the audience's cognition, emotions and attitudes, which ultimately lead to widespread social influence [31].

In recent years, tourism organizations and destinations have begun using TikTok short videos as a vital marketing promotional tool [32]. Research demonstrated that TikTok short videos provided not only an intuitive, vivid and diverse ways to showcase tourist destinations, it is also shown to be very effective in attracting users' attention and their engagement, thereby it possesses a unique potent force of enhancing a destination's visibility and appeal [29]. With the unceasing spread in the use of social media in daily life, applying short videos for marketing promotion will become a crucial direction for the future development of tourism marketing [33].

In actual fact, many tourist destinations in China have already experienced a significant surge in tourist numbers following short video marketing on the TikTok platform. For instance, Xi'an achieved a massive influx of online traffic through its short video marketing campaign which had focused on its hot tourist events, that sparked a trend of visitors flocking to the city's famous tourist spots after the campaigned was viralled [30]. Similarly, by showcasing distinctive architecture and transportation through short tourism videos, Chongqing garnered extensive online attention to the unique experience which the city can offer, in which it also helps to propel urban tourism development in Chongqing [31].

Thus, these examples have shown that short video platforms have become a new avenue for people to acquire travel information, and also to share their experiences [32]. However, due to the time constraints of TikTok short videos, tourism destination management organizations is faced with the challenge of having to grasp and effectively communicate their products to the consumers within limited time frames [34]. This makes the format and choice

of content crucial [24]. Therefore, as part of its initiative to uncover the technique or formula of producing effective tourism short marketing videos, this study will pay specific attention on the narrative categories and characteristics of the short tourism videos, by exploring how to maximize marketing effectiveness by utilizing different narrative categories and features.

2.2. Social media engagement

An essential metric for measuring the effectiveness of tourism short video marketing on social media platforms is social media engagement [35-36]. Social media engagement refers to the level of interaction and participation between users and content (short videos) on social media platforms, measured through actions such as likes, comments, saves, and shares [37]. Metrics such as click-through rates (views) [38-39] and viewing duration [40-41] are also other important metrics which can be measured and monitored.

In ensuing research on social media engagement on the emerging short video platform - TikTok, the factors and indicators related to engagement mainly encompass metrics including likes, comments, shares and other interactions [42-43], the number of likes signify the audience's approval and liking for a particular piece of content, reflecting their affirmation of the content [44-46]. Comment count represents the extent of audience participation and discussion, indicating their engagement level with specific content [47]. Save count denotes the audience's interest in a particular piece of content, indicating their long-term interests [48-49]. Share count signifies the audience's willingness to share specific content with their social networks, representing the content's reach [48, 50-51]. These four metrics are critical indicators for studying audience behavior on social media. They reflect the extent of audience engagement with the specific short video content. While likes and saves are relatively more straightforward actions, comments and shares require more efforts, resulting in higher levels of engagement [52]. Therefore, in this study, when selecting highly engaging short videos on the TikTok platform, the criteria used will be the four metrics, i.e. to make it consistent with the research methods of the other scholars, using likes, comments, saves, and shares as key reference indicators.
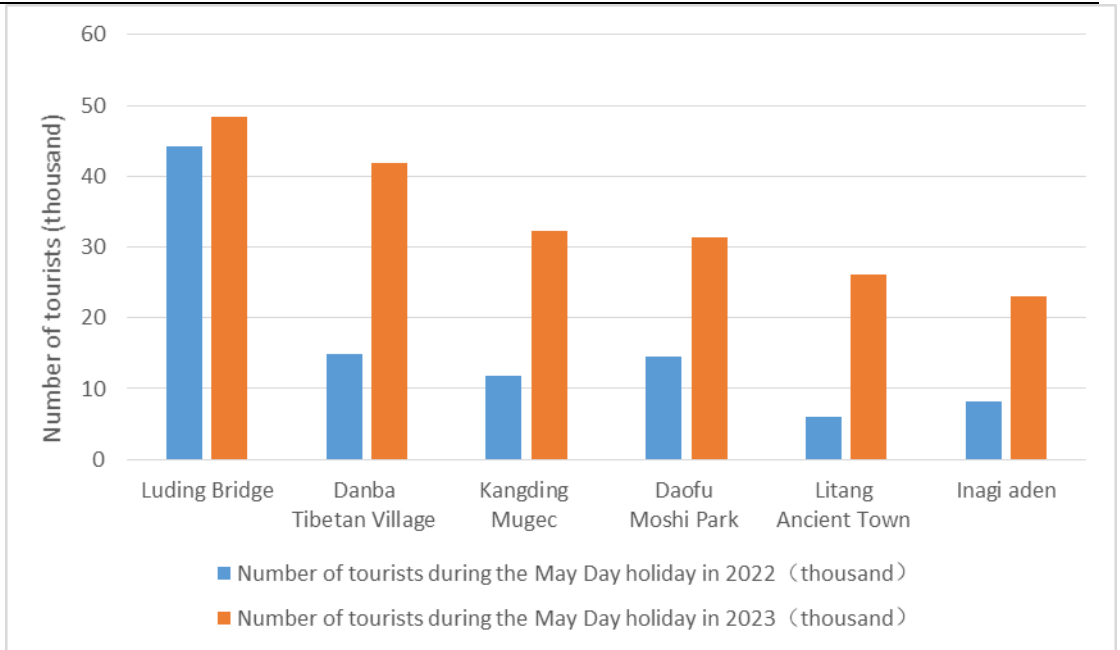
3. Case Study

This study focuses on the TikTok account "Director of Garzê Culture and Tourism Bureau Liu Hong" as the research subject. The collected data comprised 206 short videos that were posted since its opening on April 11, 2021, to September 10, 2023. As mentioned, the account belonged to Liu Hong, the Director of the Culture and Tourism Bureau of Garzê Prefecture in Sichuan Province. Which featured a series of tourism promotional videos. As of September 2023, the account had garnered a following of 2.546 million fans, with 206 tourism promotional videos published. The total exposure of the short videos across all platforms exceeded 5.8 billion, which contributed immensely to the successful marketing of various tourist destinations (Table 1). During the "May Day" holiday in 2023, Garzê Prefecture received a total of 1.0835 million visitors, achieving a comprehensive tourism revenue of 1.191 billion yuan, representing an increase of 153.87% and 153.94% compared to the same period in 2022, and an increase of 54.39% and 64.97% as compared to the same period in 2019, see Figure 1. His presence and influence on the Internet has sparked enthusiastic discussions among netizens.

Table 1. Short video marketing data from Liu Hong's TikTok account

Tourist spot	Number of videos	Number of likes (thousand)	Number of comments (thousand)	Number of Collections (thousand)	Number of Forwards (thousand)
Luding Bridge	25	11,031.5	252.1	246.7	316.9
Danba Tibetan Village	11	2,333.0	88.7	43.3	85.9
Kangding Mugec	33	11,718.0	552.2	177.2	603.1
Daofu Moshi Park	2	210.0	21.2	2.4	5.9

Litang Ancient Town	2	149.0	8.2	3.2	16.9
Inagi aden	8	1,084.0	37.4	13.1	62

Figure 1. Changes in the number of tourists due to Liu Hong's promotion

4. Methodology

As the research is to deduce the reasons from observable evidences, the qualitative analysis approach is much suited to analyze the content of short tourism videos. Initially, a sample of 207 short videos from the viral TikTok account of Garzê Tourism Bureau, managed by Mr. Liu Hong, was selected as the overall dataset, as his account is found to be the most influential among similar government official accounts on the TikTok platform.

In order to be in line with the marketing research theme, the presence of specific short videos primarily serving as personal work records were manually screened out as they did not align with the research objectives. Consequently, this resulted in a subset of 156 short videos left which were used in the research. Subsequently, three experts in tourism marketing were invited to view and categorize these short tourism videos. As narrative forms the foundation any stories, they were asked to classify the short videos into several narrative categories based on the narrative content and logic. Simultaneously, metadata information for the short videos was collected manually. This included video titles, video captions, video content, and video engagement data consisting of likes, comments, saves, and shares.

Subsequently, short videos with relatively high-engagement levels were identified, and their critical features were extracted using manual techniques. The specific steps and procedures for the research methods are outlined in the sections below.

4.1. Narrative category classification of short tourism video

An essential metric for measuring the effectiveness of tourism short video marketing on social media platforms is social media engagement [35-36]. Social media engagement refers to the level of interaction and participation between users and content (short videos) on social media platforms, measured through actions such as likes, comments, saves, and shares [37]. Metrics such as click-through rates (views) [38-39] and viewing duration [40-41] are also other important metrics which can be measured and monitored.

4.1.1. Recommendation-based

The presentation format of such short videos involved listing one or more tourist destinations and showcasing the main recommended attractions through transitions between scenes. Typically, only one person appeared in the short video. The text labels are prominently displayed, supplemented by brief introductions. The voice-over narration is detailed and generally lacked background music. The narrative structure unfolds in the order in which the tourist destination appears. Example in V136: Caption: "Let us set off on a journey. Drive on the northern route 317 and experience every scenery and culture which are available along route 317." Voice-over: "In the past few days, many friends have asked me, what are the good places to be recommended for a trip to Garzê this season? Today, I recommend to you a gorgeous route. Apart from our route G318, the scenic avenue for the Chinese, we also have the most beautiful route G317 in Garzê. So, what is the best way to go about with this route? Starting from Kangding to Xinduqiao, then head to Daocheng and then Luhuo; after that head to Dege and finally you will arrive at Baiyu. Following such a circular route, it happens to be the season of mountain flowers blooming. Apart from tht, we can also see snow-capped mountains, lakes, grasslands, forests, hot springs, and more. I hope everyone can walk on our route G317, which is China's most beautiful Silk Road cultural corridor."

4.1.2. Introduction-based

The presentation format of this category of short videos revolves around the themes of tourism resources, distinctive local products, intangible cultural heritage, and other subjects related strongly to the tourist destination. The video introduces contents with a visual focus on the theme being discussed. The text labels prominently highlight the theme of the introduction. The video is accompanied by a certain amount of voice-over narration and background music to set the tone and atmosphere. Example in V99: Caption: "To truly love someone, you must accompany them to Inagi Aden. The autumn of Inagi Aden is so enchanting. Have you been there?" Voice-over: "There is a place called Inagi Aden. I want to go there with the one I love the most, to see the azure sky, the white snow-capped mountains, and the golden grasslands."

I'm very sorry, after careful inspection, I found that there is an extra letter 'of' in the acknowledgements section. Please find attached the revised version. Additionally, I noticed that Figure 1 does not seem to be my final revised draft. Please find attached the revised Figure 1

4.1.3. Display-based

This category of short video typically focuses on a specific unique attraction, using a distinctive presentation to capture the audience's attention. It may use a traditional "one-shot" filming style or employ a novel "costume change" approach. The narrative logic of such short videos skips the story beginning and directly enters the climax, providing the audience with a strong visual impact. The text labels are prominently displayed, usually with brief voice-over narration or none, but accompanied by background music that matches the visuals well to set the atmosphere. Example: in V88. Caption: "Winter in Garzê is the perfect time. Welcome everyone to come and see the snow in Garzê." Voice-over: "Which day will it be? The next time? How long in the future? To experience, to reminisce, to maintain passion, not to disappoint profound love."

4.1.4. Activity-based

The presentation format of this category of short video involves selecting a specific event and showcasing a distinctive tourism resource, unique ethnic culture, or regional speciality during the event. The text labels prominently display and identify the event. The narrative scenes have multiple transitions, involve several individuals, and with feature-rich background music that aligned well with the event's ambience, and either have no voice-over or a brief voice-over. Example: V2. Caption: "Accompanying a 96-year-old war hero, returning to Luding Bridge, I was crying." Data Labels: "Long March National Cultural Park, Garzê Section, Luding 120 km."

This study categorized and summarized the 156 short tourism videos based on the four narrative categories described above. The specific characteristics are captured and detailed in Table 2:

Table 2. Narrative categories of short tourism videos

Narrative Categories	Number of Videos	Video Content	Presentation Form	Characteristic
Recommendation-based	22	The main narrative logic is to recommend one or more tourist destinations	The number of people appearing on the screen is generally one, and the recommended tourist destination is displayed on the screen as a landmark landscape.	Narrator: Many Background music: None
Introduction-based	27	To introduce the tourism resources, unique products, and intangible cultural heritage of tourist destinations	The number of people appearing on the screen is generally one, with explanations as the main focus, and the screen display is specific to the target audience.	Narrator: Many Background music: None or a small amount of light music
Display-based	74	Concentrate on showcasing a unique attraction in a specific way	No, or only one person appeared on the screen. The shooting method is either a "one-shot" filming style of the scenery or a" costume change" of the actor.	Narrator: None Background music: available and highly matched with the screen
Activity-based	33	Display a unique attraction with a scene of a specific activity	Many people appeared on camera, and the shooting method is to switch between multiple scenes of the activity.	Narrator: None Background music: available, and the score matches the atmosphere of the event well.

From the 156 short tourism video samples obtained from Liu Hong's TikTok account, Table 2 showed that the primary form found within these short video series is the display-based category, accounting to 47.4% of the total video count. From the production perspective, display-based narrative category short videos are characterized by their short duration, minimal scenes, and simple production. As they typically need more voice-over or dialogue, they require lower language proficiency from the individuals appearing on-screen. Next is the activity-based category of short tourism videos, constituting 21.2% of the total video count. Activity-based category short videos will involve numerous scene changes and individuals on-screen, and requiring careful coordination between scenes and individuals, making the production costs of this category relatively higher. The recommendation-based and introduction-based category, accounted for 14.1% and 17.3%, respectively. These two categories of videos primarily relied very much on the narrative ability of the individuals appearing on-screen, necessitating a higher level of knowledge and expressive ability. Obviously, the production cost of the two categories are relatively higher. Moreover, these videos generally have a longer duration than display-based or activity-based short videos. It is noted that for social-media audiences accustomed to receiving "fragmented" information, it can be challenging for them as they may have to extend their concentration duration longer than what they are normally used to.

4.2. High-engagement short video screening

In order to proceed with our next level of investigation, i.e. from the perspective of high engagement rate, the 156 short tourism videos samples were numbered and the number of likes, saves, comments, and shares of each video was collected. Next, the upper quartile (Q3)

of the number of likes, comments, saves, and shares for each short video was used as a threshold in which, the short tourism video samples were categorized into high-engagement and low engagement. As a result, as shown in Table 3, 25 short tourism videos with the highest high-engagement rate were selected as the study subjects. They were used as key samples to analyze the characteristics of highly engaging short videos.

Table 3. High-engagement video data statistics

Video Number	Number of Likes（thousand）	Number of Comments（thousand）	Number of saves (thousand)	Number of shares (thousand)
V1	1,197.00	39.00	20.00	58.00
V2	2,182.00	42.00	61.00	36.00
V3	2,355.00	460.00	65.00	87.00
V25	3,46.00	25.00	4.87	7.68
V28	2,428.00	92.00	44.00	142.00
V30	275.00	17.00	4.01	8.79
V34	350.00	46.00	5.98	11.00
V39	460.00	24.00	5.93	46.00
V40	1,563.00	54.00	37.00	108.00
V41	357.00	16.00	4.81	14.00
V43	457.00	8.78	5.50	10.00
V49	1,255.00	37.00	19.00	40.00
V58	514.00	14.00	8.29	18.00
V62	881.00	32.00	17.00	43.00
V68	1,167.00	46.00	20.00	85.00
V75	1,886.00	45.00	44.00	82.00
V99	223.00	15.00	4.78	28.00
V133	675.00	34.00	11.00	34.00
V134	760.00	94.00	11.00	19.00
V135	526.00	38.00	7.71	14.00
V141	1,029.00	24.00	23.00	12.00
V143	242.00	18.00	4.17	15.00
V145	282.00	14.00	4.06	11.00
V146	570.00	26.00	6.87	29.00
V147	765.00	35.00	11.00	40.00

4.3. Features of short tourism videos with high-engagement

The critical points in the content analysis process of high-engagement short tourism videos lie in the video content. For this, we employed the video content analysis scale designed by Cao et al. [55]. This include video duration, number of scenes, use of subtitles, background music, and character features, The analysis results from the 25 short-listed high-engagement short tourism videos are summarized and presented in Table 4.

Table 4. Characteristics of high-engagement short tourism videos

Video number	Narrative categories	Duration (second)	Number of scenes	Number of subtitles (Y/N)	Background music (Y/N)	Character features
V1	Activity-based	38	18	Y (simple)	Y	19 characters, all dressed in traditional ethnic costumes with distinct characteristics.
V2	Activity-based	12	5	N	Y	Numerous authentic characters, using group to enhance the atmosphere.
V3	Activity-based	13	7	N	Y	A large number of characters, creating an atmosphere through character image comparison and role-playing.

Video number	Narrative categories	Duration (second)	Number of scenes	Number of subtitles (Y/N)	Background music (Y/N)	Character features
V25	Display-based	19	2	N		The number of characters is six, all of which are authentic characters. They take turns showcasing their unique products through a "one-shot" filming style.
V28	Display-based	8	3	N	Y	The number of characters is one, switching between authentic and imaginary characters to attract attention and highlight the characteristics of the tourism attractions by changing the form of dressing up.
V30	Display-based	11	2	N	Y	The number of characters is one, switching between authentic and imaginary characters, attracting attention, by changing the form of dressing up, and highlighting the characteristics of tourism attractions through distinctive dressing up.
V34	Display-based	10	2	N	Y	The number of characters is one, and unique tourism attractions are introduced through authentic character images.
V39	Display-based	9	4	N	Y	The number of characters is one, and unique tourism attractions are introduced through authentic character images.
V40	Display-based	11	3	N	Y	The number of characters is one, highlighting unique tourism attractions through character changing the form of dressing up.
V41	Display-based	9	4	N	Y	The number of characters is one, and unique tourism resources are introduced through authentic character images.
V43	Activity-based	10	9	N	Y	The number of characters is multiple, showcasing local characteristics through traditional clothing.
V49	Activity-based	8	5	N	Y	The number of characters is multiple, interacting with multiple people through changing the form of dressing up to showcase unique tourism resources.
V58	Display-based	7	5	N	Y	The number of characters is multiple, interacting with multiple people through changing the form of dressing up to showcase unique tourism resources.
V62	Display-based	10	3	N	Y	The number of characters is two, and interaction is carried out through changing the form of dressing up.

Video number	Narrative categories	Duration (second)	Number of scenes	Number of subtitles (Y/N)	Background music (Y/N)	Character features
V68	Activity-based	8	6	N	Y	The number of characters is multiple, and interaction is carried out through changing the form of dressing up.
V75	Display-based	8	4	N	Y	The number of characters is two, and interaction is carried out through changing the form of dressing up.
V99	Introduction-based	12	9	Y (detail)	N	The number of characters is one, and the screen is switched through the rhythm of character commentary.
V133	Display-based	8	4	N	Y	The number of characters is one, highlighting unique tourism resources through changing the form of dressing up.
V134	Display-based	10	4	N	Y	The number of characters is one, highlighting unique tourism resources through virtual character costumes.
V135	Display-based	8	4	N	Y	The number of characters is one, highlighting unique tourism resources through virtual character costumes.
V141	Activity-based	31	8	N	Y	The number of people is multiple, all of which are authentic character images.
V143	Display-based	9	4	N	Y	The number of characters is one, highlighting unique tourism resources through changing the form of dressing up.
V145	Display-based	8	4	N	Y	The number of characters is one, showcasing unique tourism resources through changing the form of dressing up and dialogue.
V146	Display-based	8	4	N	Y	The number of characters is one, showcasing unique tourism resources through changing the form of dressing up.
V147	Display-based	8	4	N	Y	The number of characters is one, showcasing unique tourism resources through changing the form of dressing up.

Based on the analysis of Table 4, in terms of the classification made by the narrative categories, the display and activity-based types were noted to be those with the highest high-engagement rate. Among the 25 high-engagement short tourism videos, 17 belonged to the display-based, seven fell into the activity-based, and one is the introduction-based type. Notably, display-based short videos constituted the majority, accounting for approximately 68% of all highly engaging videos.

Regarding video duration, all videos aligned well with the definition of short videos provided by [6], Within the activity category, the video durations vary significantly, with the longest being 28 seconds and the shortest being 8 seconds. However, longer videos are predominant, with an average duration of 17.2 seconds. On the other hand, display-based short videos

exhibited a more balanced duration, typically 8 to 10 seconds, with an average duration of 9.5 seconds.

Analyzing the number of scenes in the short videos, display-based short videos feature a relatively small number of scene transitions, maintaining an even distribution at around four scenes per video. In contrast, activity-based videos displayed more scene transitions, averaging 8.2 scenes per video. Introduction-based short videos demonstrate 9 scene transitions. It is obvious that the quantity of scenes significantly impacts the level of difficulty in production. Capturing multiple scenes involves different shooting angles, locations, props, etc., necessitating careful planning and coordination. In the editing stage, integrating material from multiple scenes will also requires more time and skill. Thus, in terms of production difficulty, display-based short videos are considered the least challenging among the various short video categories.

Looking at the use of subtitles in short videos, only introduction-based short videos include detailed subtitles. Subtitles can assist viewers with difficulty understanding the video content, including those with hearing impairments, non-native speakers, or unfamiliar accents. Presenting critical information through text makes it easier for the audience to comprehend the video's content [24]. Apart from one activity-based short video and one display-based short video with simple subtitles, all other highly engaging videos do not utilize subtitles. This clearly showed that visually impactful activity-based and display-based short videos, subtitles are not an essential component.

Examining the use of background music in short videos, all 24 high-engagement videos, except for the sole introduction-based short video, are accompanied by background music. In the specific case, the background music aligned well with the overall video ambience, helping convey specific emotions and atmosphere, as well as producing emotional resonance with the audience by strengthening the experience of the video content. It is determined that the absence of background music in the introduction-based short video is due to the presence of verbal descriptions about the tourist destination, and it is believed that the background music might interfere and disrupt the verbal informative content.

Regarding the visual portrayal of characters in short videos, the primary character is Director Liu Hong. In activity-based short videos featuring multiple individuals, Director Liu Hong prominently occupied the leading role. This is because his image is attractive, and as a key government official promoting the tourism events or destinations carried a heavier weight. In the short videos, the presentation of characters predominantly involves a switch between real and virtual roles, a technique known as "disguise." Director Liu Hong transitions from his role as a director to ancient heroes or Khampa men, cleverly combined with the captivating landscape, and often with local ethnic flavors, delivered not only a powerful visual effect but also impact that is more and reliable.

In terms of the video analysis, it is noted that the highly engaging short videos are predominantly the activity and display-based categories. In these two categories of short tourism videos, the characters actually had minimal dialogue and conveyed relatively little information. The videos primarily showcased the unique tourist attractions, with most of the information conveyed through direct visual presentation, they are highly effective in their engagement strategy, requiring the audience to spend less time and effort to be connected with the video information, making subtitles redundant in a way. In addition, the video duration does not vary significantly, but in activity-based short videos, the number of scene transitions is noticeably more significant than in display-based short videos.

Additionally, the number of characters in activity-based short videos is significantly higher than in display-based short videos. Hence, shooting, coordination, and production are more challenging and will incur higher costs. Furthermore, the character portrayal in the short videos is highly distinctive. As an internet personality with a special identity of being a key government official, Director Liu Hong's lively, entertaining and government-official-tagged character image, piques the audience's interest and enhances their motivations which often extended into their personal involvement and engagement with the short videos.

In the list of highly engaging short videos, it can be observed that there are numerous sequentially numbered videos, such as V1, V2, V3, V133, V134, V135, or V145, V146, V147,

etc. These sequentially numbered short videos display the same tourist attraction in a serial manner. Therefore, this analysis also showed that short videos series are more likely to have an effect in attracting and garnering greater audience attention and engagement.

5. Results and discussion

This study primarily focused on the highly influential self-media account "Director of Garzê Culture and Tourism Bureau Liu Hong" on the TikTok platform. It analyzed short tourism videos from four narrative angles. By selecting the top 25 videos based on social media engagement, the study explored the characteristics of these highly engaging short tourism videos, aimed at uncovering useful features to guide tourism destination marketing organizations (DMOs) in making informed decisions about narrative categories and desired content characteristics, with an emphasis on sustainable and conservation-friendly practices. Several key conclusions can be derived:

First, the study identifies four primary narrative categories of short tourism videos: recommendation, introduction, display, and activity. Display and activity-based videos constitute a significant proportion and demonstrate higher engagement capabilities. Display-based short videos, aligning with findings from recent research utilizing machine learning for video classification [24], have lower production costs, and their straightforward content presentation enhances their engagement and transmission capabilities. These videos effectively highlight natural landscapes and cultural heritage, promoting conservation and sustainable tourism.

Secondly, the research found that video duration and the number of scenes significantly impact production difficulty and cost. Display-based short videos tend to have shorter durations and fewer scenes but exhibit high engagement rates on social media. This suggests that high social media engagement does not necessitate longer videos or numerous scenes. Thus, for tourism destination organizations in remote areas with limited budgets, focusing on display-based short videos can be an efficient and sustainable marketing strategy. By emphasizing the natural beauty and cultural uniqueness of these areas, such videos can foster a deeper appreciation and stewardship for these environments.

Thirdly, highly engaging short videos often feature distinctive characters. Supported by narrative theory and previous research [56], engaging characters significantly enhance narrative impact. Liu Hong's varied portrayals effectively showcased local features and created visually captivating narratives, enhancing audience engagement while promoting the cultural and natural heritage of the Garzê region. These portrayals can foster a sense of pride and responsibility toward conserving these assets.

The study highlights that continuous promotion and serialized content create lasting impressions. A series of videos, rather than standalone clips, maintain higher engagement by consistently showcasing specific tourist attractions. This strategy can significantly aid conservation efforts by continually drawing attention to the importance and beauty of natural and cultural sites, thus encouraging sustainable tourism practices.

For remote areas with limited marketing funds, the study's insights are invaluable. DMOs can achieve effective and sustainable marketing impact by adopting successful strategies from Garzê Tibetan Autonomous Prefecture. Selecting influential individuals and creating contrasting images are essential in capturing attention and promoting conservation via engaging, relatable content. In the era of short video proliferation and information overload, content that emphasizes conservation and sustainability stands out and attracts a broader audience, fostering a commitment to preserving natural and cultural resources.

This study showed that the efficacy of display-based short videos align with recent research on short video classification [24] and narrative theory [56]. Continuous promotion and marketing of specific content are more likely to garner attentions and generate a buzz [57]. Traditional tourism videos tend to focus on rational explanations and formal presentations, often failing to engage a wide audience [58]. In contrast, this research demonstrates the advantages of personalized, emotionally engaging content that highlights daily life and natural beauty, thereby promoting conservation and sustainable tourism practices.

In summary, this study categorizes short tourism videos based on narrative logic, providing valuable guidelines for tourism marketing that can leverage social media short videos for greater impact. By focusing on sustainable development and conservation, DMOs in remote areas can benefit from these insights, achieving better audience engagement and contributing to the long-term preservation of natural and cultural heritage, as exemplified by the success in Garzê Tibetan Autonomous Prefecture.

6. Conclusions

In conclusion, this study highlights the integration of diverse elements in tourist destinations, emphasizing deep cultural connotations to enrich audience experiences. The presentation of gastronomy and scenic beauty in tourism-related short videos should reflect the profound cultural and ecological implications encompassing humanities, geography, history, and culture [58]. The homogenization and oversimplification of content are critical bottlenecks restricting the development of tourism short videos [59]. However, the research case of "Director of Garzê Culture and Tourism Bureau Liu Hong" addresses this issue effectively by combining natural landscapes with human history and cultural arts. This approach enriches the cultural and ecological narrative of tourism short videos, meeting the audience's desire for genuine exploration and fostering a multidimensional appreciation of Garzê. These findings provide valuable insights for destination marketing organizations in promoting sustainable tourism.

The research does have limitations. It focuses exclusively on one influential account on the TikTok platform, potentially limiting the generalizability of the results. The study also considered a limited number of narrative categories. There are many short tourism video types across various platforms. Additionally, this study did not delve into the broader impacts of short videos on audience behavior and attitudes beyond preliminary engagement metrics. Future studies could explore how these short videos influence sustainable behavior and attitudes toward conservation.

Future research should investigate the narrative mechanisms of short tourism videos in greater depth, providing insights into both the process and the impacts on the audience. Additionally, understanding how different categories of short tourism videos contribute to various stages of the tourism decision-making process is crucial. Such research could elucidate the role of short video marketing strategies in promoting sustainable tourism practices and conserving natural and cultural resources. These areas of exploration have the potential to enhance our understanding of effective, sustainable tourism marketing.

Author Contributions

HL: Conceptualization, Methodology, Software, Investigation, Writing - Review & Editing;

KXT: Writing - Review & Editing, Supervision.

Conflicts of interest

There are no conflicts to declare.

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