Herramientas de comunicación digital y turismo de memoria en Armero

Digital communication tools and memory tourism in Armero

Ferramentas de comunicação digital e turismo de memória em Armero

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Resumen

La presente investigación realiza un proceso de indagación con el fin de describir los sucesos de la tragedia de Armero, ocurrida el 13 de noviembre de 1985 en Colombia. El objetivo de esta investigación es generar un contenido tecnológico para incentivar el turismo de memoria en Armero. Las categorías que aborda esta investigación son las del turismo tecnológico y turismo de memoria a partir de la historia del antes, durante y después de la tragedia. Esta investigación realiza un análisis de cómo generar un contenido tecnológico para incentivar el turismo de memoria en Armero. El enfoqué de esta investigación es cualitativo, el tipo de investigación que se maneja en este proyecto es descriptivo y auditivo. Los instrumentos utilizados son entrevistas con el fin de describir la historia de Armero por medio de un podcast. Los resultados describen la historia de Armero por medio de una herramienta de comunicación digital como lo es el podcast, para esto en se realizó recolección de datos donde se tuvo en cuenta el antes, durante y después de la tragedia de Armero. Esta investigación deja un aporte hacía la comunidad de Armero y hacia la comunidad de comunicación digital sobre la historia del antes, durante y después de la tragedia. En conclusión, mantener viva la memoria de Armero es un acto de respeto y reconocimiento hacia las personas que perdieron la vida y sus familias que sufrieron una pérdida irreparable.

Palabras clave: Turismo de memoria, Herramientas de comunicación digital, Herramienta tecnológica digital

Abstract

The present research carries out a process of inquiry in order to describe the events of the Armero tragedy, which occurred on November 13, 1985, in Colombia. The objective of this study is to generate technological content to encourage memory tourism in Armero. The categories addressed by this research are those of technological tourism and memory tourism based on the history before, during, and after the tragedy. This study analyzes how to generate technological content to encourage memory tourism in Armero. The approach of this research is qualitative, and the types of research used in this project are descriptive and auditive. Interviews were used to describe the history of Armero through a podcast. The results describe the history of Armero using a digital communication tool such as the podcast, and data collection was carried out before, during, and after the tragedy of Armero was taken into account. This research contributes to the community of Armero and to the digital communication community about the history before, during, and after the tragedy. In conclusion, keeping the memory of Armero alive is an act of respect and recognition for the people who lost their lives and their families who suffered an irreparable loss.

Keywords: Memory Tourism, Digital Communication tools, Digital Technological tool

Resumo

A presente pesquisa realiza um processo de investigação para descrever os eventos da tragédia de Armero, ocorrida em 13 de novembro de 1985 na Colômbia. O objetivo dessa pesquisa é gerar um conteúdo tecnológico para incentivar o turismo de memória em Armero. As categorias abordadas por esta pesquisa são as de turismo tecnológico e turismo de memória com base na história de antes, durante e depois da tragédia. Esta pesquisa analisa como gerar conteúdo tecnológico para incentivar o turismo de memória em Armero. A abordagem desta pesquisa é qualitativa, o tipo de pesquisa usado neste projeto é descritivo e auditivo. Os instrumentos utilizados são entrevistas para descrever a história de Armero por meio de um podcast. Os resultados descrevem a história de Armero por meio de uma ferramenta de comunicação digital, como o podcast. Para isso, foi realizada uma coleta de dados que levou em conta o antes, o durante e o depois da tragédia de Armero. Essa pesquisa deixa uma contribuição para a comunidade de Armero e para a comunidade de comunicação digital sobre a história de antes, durante e depois da tragédia. Em conclusão, manter viva a memória de Armero é um ato de respeito e reconhecimento às pessoas que perderam suas vidas e às suas famílias que sofreram uma perda irreparável.

Palavras-chave: Turismo de memória, ferramentas de comunicação digital, kit de ferramentas de tecnologia digital

Introduction

This study uses a multimedia strategy (podcast) to narrate the history of an agricultural town known for its fertile agriculture. With a population of approximately 28,000 inhabitants (Mora et al., 2023), residents enjoy quiet and peaceful lives. However, the municipality's proximity to the Nevado del Ruiz volcano presented a latent risk, although at the time, it had not been given due attention. However, on November 13, 1985, Nevado del Ruiz erupted after years of volcanic activity. The tragedy, besides being caused by the volcano, was characterized by an avalanche of mud, ashes and rocks that descended rapidly down the slopes of the snow-capped mountain. The torrent of volcanic material reached an astonishing speed, sweeping away everything, Armero was hit hard by this avalanche, destroying houses, streets and infrastructure (Dominiccini et al., 2023)

The disaster left approximately 25,000 people dead in a matter of minutes, including men, women, and children. In addition, heartbreaking images of survivors fighting for their lives and widespread destruction have shocked the entire world. Likewise, the lack of early warning and inadequate response of the authorities became the subject of debate and criticism in the days and months following the disaster. Nevertheless, the Armero tragedy left a deep scar on Colombia. Rescue efforts dragged on for weeks, but hope to find survivors quickly faded. The recovery and reconstruction efforts were enormous, and the Armero community was displaced and fragmented.

This study is important for generating content in a digital communication tool to encourage memory tourism in Armero through two videos and a podcast, considering that the tragedy of Armero left an indelible mark in the history of Colombia. From before, during, and after the disaster, this catastrophe has been a painful but important reminder of human fragility in the face of the forces of nature and the need to take measures to protect at-risk communities.

This research raises the question of how to generate technological content capable of boosting memory tourism in Armero. The purpose is to enrich the landscape of memory tourism by providing a community with new perspectives on the two digital communication tools. The overall objective of this study is to develop innovative communication tools to promote memory tourism in Armero, Tolima. This initiative not only seeks to take advantage of the benefits of technology, but also contributes to the strengthening of the cultural identity and historical recognition of Armero by enriching tourism experiences.

Digital technological tool

Digital tools are programs, applications, or software designed to perform specific tasks or facilitate activities in the digital environment (Amhag et al., 2019). These tools can encompass a wide variety of functions and are used in various contexts, such as work, education, entertainment, and communication (Newman et al., 2019). Thus, one of the tools is the podcast; however, it was not so relevant until today, and the first recordings appeared on cassettes and radios, but previously podcasts took a big step forward in a few years because they can be listened to or watched (in the case of video podcasts) on digital devices (Culqui et al., 2022). In addition, the term podcast originates from two terms, Pod and Broadcast, indicating that in English means Public On Demand and disseminate information via television or radio and can be listened to at any time without interfering with daily activities (Parlatore et al., 2020).

According to Rime et al. (2022), podcast episodes are currently considered one of the most suitable technological tools to use nowadays. Moreover, it should be played on a computer or a personal MP3 player in a downloadable digital audio file (Lindgren & Loviglio, 2022). However, podcasts are easily accessible and can be free or paid, depending on the chosen application (Leite et al., 2022). Similarly, it is a tool that can maintain communication and interaction with people regardless of time and space, allowing them to develop communication skills in a simple and effective manner (Brinson & Lemon, 2022).

Digital technology tools play a fundamental role in modern life by transforming the way people interact, learn, and work. In the context of tourism, these tools have revolutionized the way tourists plan, experience, and share trips (Fetterman, 2022; Guerra & Díaz, 2023). The availability of online information such as interactive maps, traveler reviews, and specialized websites has democratized access to tourism information,

allowing travelers to make more informed and personalized decisions about their destinations (Haleem et al., 2022).

In addition to enhancing the tourist experience, digital technology tools have also benefited tourism professionals, such as tour guides (Nuere & De Muguel, 2021). These tools allow them access to online training and educational resources to improve their knowledge and skills (Tao et al., 2022). They also provide them with communication and promotional tools such as social networks and websites to reach a wider and more diverse audience (Pirola et al., 2020). This has expanded employment opportunities for tour guides and has contributed to the development of the tourism industry in general (Beardsley et al., 2021).

Memory Tourism

Memory tourism is a form of tourism that focuses on visiting historical places or sites related to tragic, historical, or significant events to remember, reflect, and learn about the past (Wei et al., 2019). In addition, they are places associated with critical moments in history, such as wars, genocides, natural disasters, human rights violations, and other important events that have left a mark on collective memory (Farmaki, 2021). Similarly, memory tourism seeks to provide visitors with an educational and emotional experience through which they can better understand the historical context, the importance of the events that occurred, and the need to preserve their memory to avoid repetition in the future (Sthapit et al., 2019).

This type of tourism can be a powerful tool for fostering historical awareness and promoting tolerance, respect, and empathy for victims and the affected communities (Hosany et al., 2022). Likewise, memory tourism can be a deeply emotional and moving experience for those who engage in it and can have a lasting impact on the understanding and appreciation of history and humanity (Amortegio & Mora, 2021; Kim et al., 2018).

Memory tourism is a special form of tourism that focuses on visiting places related to significant historical events such as battlefields, memorial sites, or memorial museums (Farmaki, 2021). This type of tourism is uniquely important in the preservation and transmission of history as it allows people to connect more deeply with past events and better understand their impact on the present (Stone et al., 2022).

Memory tourism plays a crucial role in preserving cultural and historical heritage (Wood 2020). By visiting these places, tourists contribute to their conservation and maintenance, ensuring that future generations can learn from them. In addition, Memory Tourism helps to keep alive the memory of the events and the people involved, preventing them from being lost into oblivion (Peng et al., 2021).

On the other hand, memory tourism also has a significant impact on education and historical awareness (Escobar et al., 203). By experiencing historical sites and events first hand, tourists can develop a deeper and more empathetic understanding of history, which in turn can foster tolerance and understanding between different cultures and societies. In

short, memory tourism is a powerful way to preserve history, foster education and historical awareness, and contribute to reconciliation and peacebuilding (Xu et al. 2023). It is an invaluable tool for remembering and honoring those who have been affected by historical events and to ensure that the lessons of the past are not lost to time.

Methodology

The methodological structure used for this research was based on a qualitative approach, and the type of research was descriptive and auditive, allowing the teaching of reality to the community through a technological tool. For this purpose, two promotional videos and a podcast were created for the community of Armero Tolima in order to analyze the story from another perspective related to technology. This will provide greater relevance to what happened in Tolima. This research transmits the history of Armero from before, during, and after 1985. In addition, this study allows us to bring something innovative to the creation of a podcast.

In the development of this research, the characteristics of how Armero was before, during, and after the tragedy are attributed, which is why its measurement is based on enriching the historical and current context and an operational variable where history will be the instrument to obtain information. In addition, this population is contextualized as vulnerable due to the cause of a natural disaster that was known to occur or the inefficiency of the authorities in not taking measures before, on the other hand, the lack of information.

Results

Table 1. Before, during and after the tragedy of Armero

Elements	Content
Introduction	From the visitor's center of Armero a work of diffusion of the history of Armero is made from the before, during and after the tragedy of November 13, 1985. They are currently located where the fire station of Armero used to be, where they carry out a memory activity contextualizing and making guided tours indicating what happened throughout the history up to this moment. Taking into account, the tragedy has left a lesson for humanity with respect to risk management.
Before	Armero determines the bad location since it was founded in front of where the canyon ends where the Ruiz snow-capped volcano is born, a canyon at 5,390 m of altitude that is the Arenas crater and runs until it reaches Armero founding the city approximately 400 m above sea level. Before the tragedy of 1985 other events had already been recorded, in 1595 where the Spanish chronicler narrating geological events such as eruption of the snowy Ruiz and an avalanche by the canyon that expands, then in 1845 geologists indicate that it was double and this led to a tragedy as there were already inhabitants in Armero registering 1. 000 dead according to a chronicle of a newspaper of the time of the year 1845, however, this tragedy

	was forgotten and years later in 1908 the town of San Lorenzo was founded where it began to expand from the train station of San Lorenzo. Armero before November 13, 1985 had a population of 30,000 inhabitants.
During the tragedy	On November 13, 1985, Nevado del Ruiz erupted catastrophically. A mixture of gases, ash and hot lava moved rapidly down the slopes of the volcano, melting the snow and ice accumulated on its peak. This mixture left a deluge of mud, rocks and debris known as lahars, which rushed at high speed toward nearby valleys and towns. One of these flows struck Armero directly, submerging the town under an avalanche of mud and debris. The speed of the lahar was so devastating that the residents of Armero did not have enough time to evacuate and many were trapped in their homes, leaving approximately 25,000 people dead.
After the tragedy	The situation in the region and the country has changed. The Colombian government and international agencies will provide humanitarian and rescue aid to assist those affected. Rescue teams and medical personnel were quickly deployed to assist survivors and search for missing persons. Following the tragedy, efforts were initiated to rebuild the affected area and relocate survivors. However, the magnitude of the destruction and logistical difficulties made reconstruction a slow and complex process.
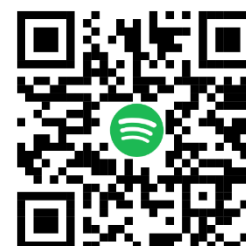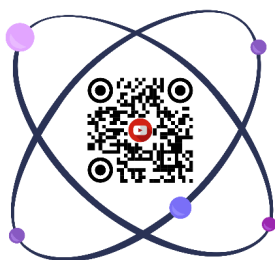
Obtain the history of Armero Podcast: What is your perception of Armero?   Podcast

Discussions and Conclusions

The analysis of digital content focused on identifying a stronger motivation to encourage interest in visiting Armero through digital communication tools. It is recognized that, for many people, viewing and listening to stories through videos or audio are particularly attractive, facilitating understanding and saving time in the midst of daily routines. In this context, the digital content developed in the framework of this research emerges as a key instrument for encouraging memory tourism in Armero and Tolima. This material is configured as a narrative that covers the events prior to the tragedy, through its development, to the subsequent consequences, providing a complete experience that not only educates but also commemorates on the history of Armero in its entirety.

Based on the results of this research article, the history of Armero is described by means of a digital communication tool such as the podcast, and data collection was carried out before, during, and after the tragedy of Armero was considered. The information

collected was provided by the visitors' house of Armero, in this way, the results obtained also show that the tragedy became a symbol of positive impact since the story remains and is remembered by survivors, relatives and people whose interest is to know what happened on November 13, 1985.

Through this communication tool, it is spread through YouTube and Spotify to promote memory tourism in Armero, in addition to analyzing the impact of this digital communication tool on listeners. This research is important because it tells the story through a technological tool, considering that most information is not relevant to some communication tools. Likewise, the contribution that this research leaves is first to the community of Armero and second to the digital communication community regarding the history of before, during, and after through two videos and a podcast.

The discussion of the results obtained in this study reveals the crucial importance of digital communication tools in boosting memory tourism in Armero. The preference for visual and auditive formats to convey stories has proven to be a significant motivating element, highlighting the need to adapt content strategies according to the preferences of the target audience. Likewise, comprehensive digital storytelling spanning from before to after the tragedy has proven effective in providing an enriching and contextually meaningful tourism experience. In this context, future research can deepen the optimization of digital strategies, explore new formats, and evaluate the long-term impact of these initiatives on the perception and sustainability of memory tourism. These reflections open opportunities for continued contribution to scientific literature, especially in fields such as tourism, digital communication, and heritage management, where the lessons learned in Armero may offer valuable insights for future research.

The future lines of research framed in this study offer a promising perspective to contribute to the scientific field, particularly in specialized journals. Continuing this research could explore the effectiveness of various digital content strategies in the promotion of memory tourism in Armero. Comparative studies could be conducted to evaluate the receptivity of the public to different formats, such as videos, audio, or even virtual reality experiences. In addition, it is relevant to investigate the long-term impact of these digital tools on the perception and appreciation of historical heritage as well as on the sustainability of memory tourism in the region. These possible lines of research could provide valuable contributions to the understanding and application of digital strategies in the context of cultural tourism, being of interest to scientific journals specializing in tourism, digital communication, and heritage management.

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