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MARKETING DE VÍDEO DIGITAL NO YOUTUBE: AVALIAÇÃO DE ESTRATÉGIAS DE CONTEÚDO E MÉTRICAS DE ENVOLVIMENTO PARA O TURISMO DE LAMEGO

DIGITAL VIDEO MARKETING ON YOUTUBE: EVALUATING CONTENT STRATEGIES AND ENGAGEMENT METRICS FOR LAMEGO TOURISM

MARKETING DE VÍDEO DIGITAL EN YOUTUBE: EVALUACIÓN DE ESTRATEGIAS DE CONTENIDO Y MÉTRICAS DE PARTICIPACIÓN PARA EL TURISMO DE LAMEGO

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RESUMO

Introdução: A promoção turística digital é fundamental para o desenvolvimento económico dos destinos históricos.

Objetivo: Avaliar a eficácia dos vídeos promocionais de Lamego no YouTube, analisando a qualidade de produção, o envolvimento do público e a diversificação de conteúdo para fortalecer a presença digital da cidade.

Métodos: Através de uma abordagem de métodos mistos, analisaram-se 36 vídeos, combinando métricas quantitativas de envolvimento (visualizações, likes, comentários) com a análise qualitativa do conteúdo e a sua orientação (turista, residente ou institucional).

Resultados: Desde 2018, a produção de vídeos aumentou significativamente, com predomínio de conteúdos gerados por turistas (61,11%). Vídeos que destacam o património histórico e paisagens naturais obtiveram maior envolvimento. O conteúdo criado por turistas alcançou taxas de envolvimento 10 vezes superiores aos vídeos institucionais, demonstrando o valor da autenticidade. Identificamos oportunidades para diversificar o conteúdo, principalmente em gastronomia, eventos contemporâneos e turismo sustentável.

Conclusão: A perceção de utilidade e autenticidade influencia diretamente o envolvimento. Recomenda-se equilibrar a produção profissional com autenticidade, adaptar estratégias às plataformas digitais e promover o turismo sustentável. Esta abordagem pode fortalecer a presença digital de Lamego e atrair públicos mais diversos.

Palavras-chave: turismo digital; vídeos no Youtube; envolvimento online; conteúdo gerado por utilizadores; marketing de destinos

ABSTRACT

Introduction: Digital tourism promotion is essential for the economic development of historic destinations.

Objective: Assess the effectiveness of Lamego's promotional videos on YouTube, analyzing production quality, audience engagement, and content diversification to strengthen the city's digital presence.

Methods: Using a mixed-methods approach, 36 videos were examined, combining quantitative engagement metrics (views, likes, comments) with qualitative analysis of content type and orientation (tourist-generated, resident, or institutional).

Results: Since 2018, video production has grown significantly, with tourist-generated content accounting for the majority (61.11%). Videos highlighting historical heritage and natural landscapes achieved the highest engagement. Tourist-created content generated engagement rates up to ten times higher than institutional videos, underlining the value of authenticity. Opportunities were identified to diversify content, particularly in gastronomy, contemporary events, and sustainable tourism.

Conclusion: Perceived usefulness and authenticity directly influence engagement. It is recommended to balance professional production with authenticity, adapt strategies to digital platforms, and promote sustainable tourism. Such an approach may enhance Lamego's digital presence and attract more diverse audiences.

Keywords: digital tourism; YouTube videos; online engagement; user-generated content; destination marketing

RESUMEN

Introducción: La promoción turística digital es esencial para el desarrollo económico de los destinos históricos.

Objetivo: Evaluar la eficacia de los vídeos promocionales de Lamego en YouTube, analizando la calidad de la producción, la participación del público y la diversificación del contenido para fortalecer la presencia digital de la ciudad.

Métodos: A través de un enfoque de métodos mixtos, se examinaron 36 vídeos, combinando métricas cuantitativas de participación (visualizaciones, "me gusta", comentarios) con un análisis cualitativo del tipo de contenido y su orientación (generado por turistas, residentes o institucional).

Resultados: Desde 2018, la producción de vídeos ha crecido significativamente, con un predominio de contenido generado por turistas (61,11%). Los vídeos que destacan el patrimonio histórico y los paisajes naturales obtuvieron la mayor participación. El contenido creado por turistas alcanzó tasas de participación hasta diez veces superiores a los vídeos institucionales, lo que subraya el valor de la autenticidad. Se identificaron oportunidades para diversificar el contenido, especialmente en gastronomía, eventos contemporáneos y turismo sostenible.

Conclusión: La percepción de utilidad y autenticidad influye directamente en la participación. Se recomienda equilibrar la producción profesional con la autenticidad, adaptar las estrategias a las plataformas digitales y promover el turismo sostenible. Este enfoque puede reforzar la presencia digital de Lamego y atraer públicos más diversos.

Palabras clave: turismo digital; vídeos en YouTube; participación en línea; contenido generado por usuarios; marketing de destinos

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INTRODUCTION

Studies on tourist destination promotion are crucial for enhancing marketing strategies, focusing on how communication impacts visitor attraction and local economic growth. High-quality content and effective promotion are key to attracting tourists (Luna-Nevarez & Hyman, 2012). Promotional videos have become an important method for showcasing destinations, influencing destination images, marketing techniques, tourist experiences, and audience engagement (Chen & Zhang, 2023; Paquin & Schwitzguébel, 2021; Xu et al., 2021; Zhan & Zhu, 2024; Zhu & Cheng, 2024). This approach allows real-time feedback, enabling quick content adjustments to attract more visitors.

Lamego, a historic city in Portugal's Douro Valley, is highlighted through various online video publications. This study evaluates Lamego's promotional videos, exploring the factors influencing viewer engagement. It categorizes the content as tourist-generated, resident-generated, or institutional, and examines the impact on visitor interaction. The research also underscores the importance of sustainable tourism, ensuring promotion aids both growth and heritage preservation. The main research question is: "What distinct features define Lamego's promotional videos, and how do these influence engagement metrics such as views, likes, and comments?"

This study aims to assess: a) the production quality of Lamego's videos and its relation to engagement; b) the effect of content diversification on attracting a broader audience; and c) provide recommendations to increase online engagement. YouTube is the chosen platform for this analysis due to its vast tourism-related content and useful engagement tracking (Zhu & Cheng, 2024; Chang, 2022).

Section 1 discusses tourism promotion in the digital age, with a focus on the role of videos in shaping regional images and driving tourism. Section 2.2 highlights how online videos influence tourist perceptions through visuals, storytelling, and music. Continuous video performance analysis allows quick strategy adjustments to boost local economic development. The methodology uses a mixed-methods approach, combining quantitative engagement metrics with qualitative content analysis of 36 YouTube videos. This approach helps identify key tourism elements and the content orientation of Lamego's promotional videos.

For small destinations like Lamego, this method is beneficial for showcasing unique cultural experiences. The study concludes with a discussion of findings, limitations, and future research recommendations.

1. LITERATURE REVIEW

1.1 Tourism Promotion and Place Marketing in the Digital Age

The promotion of urban areas through marketing and communication strategies is key to attracting visitors and boosting local economic growth. Place marketing emphasizes visual advertising, particularly videos, which have evolved with digital technologies for more interactive destination marketing (Grewal et al., 2021). Govers, Go & Kumar (2007) introduced the concept of the "virtual image" of a destination, highlighting how digital content shapes traveler expectations. Research shows that high-quality videos can enhance destination images, increasing satisfaction and repeat visits (Chang, 2022).

Social media and user-generated content (UGC) play an increasing role in tourism marketing. UGC, acting as electronic word-of-mouth (eWOM), significantly influences tourists' decisions (Munar & Jacobsen, 2014; Santos & Almeida, 2024). Digital marketing positively impacts regions economically, creating jobs in tourism (Graça et al., 2022). Effective marketing requires comprehensive, accurate information about cultural attractions, accommodations, and services (García & Rodríguez, 2024; Santos & Almeida, 2024), accessible across platforms (Chen & Zhang, 2023). The quality of promotional materials, such as images and videos, influences audience engagement (Arianto et al., 2022; Huertas et al., 2017; Luna-Nevarez & Hyman, 2012).

The evaluation of tourism marketing has shifted from traditional methods like surveys (Chi & Qu, 2008) to digital analytics, with web data and social media engagement now essential for assessing the effectiveness of campaigns (Paquin & Schwitzguébel, 2021).

1.2 The Role of Online Videos in Destination Promotion

Online videos are key tools for promoting destinations, combining emotion, storytelling, and sensory experiences to shape perceptions (Bing et al., 2023; Huertas et al., 2017). High-quality production, including visuals, editing, and music, enhances viewer engagement, as shown by metrics like views and shares (Luna-Nevarez & Hyman, 2012). Videos influence destination image and tourist behavior by eliciting emotional responses and fostering a sense of place (Azcue et al., 2021; Huertas et al., 2017).

Real-time feedback on video performance allows for quick content adjustments to better meet visitor needs, supporting long-term growth (Chi & Qu, 2008; Govers & Kumar, 2007). Digital promotion also informs tourists about sustainable practices, aligning with responsible tourism goals (Devkota et al., 2023; El Archi et al., 2023). In summary, online videos are crucial for raising awareness, shaping destination images, and driving economic growth (Jara-Amézaga, 2023).

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2. METHODS

2.1 Sample

This study analyzes Lamego, a historic city in northern Portugal, known for its medieval, Renaissance, and Baroque monuments. With a population of 24,313 (PORDATA, 2022), Lamego has become a prominent cultural and tourist destination, especially after its inclusion in the Douro Valley World Heritage area in 2001. Between 2012 and 2019, stays increased by 180%, from 180,536 to 501,573 (PORDATA, 2022).

This study focused on 36 promotional videos of Lamego on YouTube, selected for their relevance, diversity, and the platform's accessibility. Data was collected from September 15 to October 15, 2023, coinciding with the Douro region's grape Harvest.

2.2 Data collection instruments

This study uses a mixed-methods approach, combining quantitative engagement metrics and qualitative content analysis to assess the effectiveness of Lamego's tourism promotional videos. The methodology is adaptable for analyzing videos from other locations or promotional media.

Phase 1: Video Inventory Grid Videos were found using keywords like "Lamego tourism" and "Visit Lamego," though potential biases from SEO and language were considered. Engagement metrics such as views, likes, dislikes, and comments were analyzed (Fig.1), alongside orientation analysis, which examines the perspective (tourist, resident, or institutional) of the content (Hou et al., 2016).

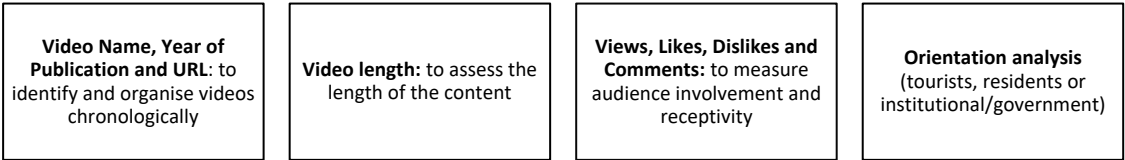


Figure 1 - Survey criteria

The effectiveness of the videos was assessed through three main engagement metrics. First, the view count indicated the reach and initial interest in the content. Next, the ratio of likes, calculated as $(\text{likes}/\text{views}) * 100$, provided feedback on the positive engagement of viewers. Lastly, the comment rate, determined by $(\text{comments}/\text{views}) * 1000$, showcased how actively viewers interacted with the videos. Together, these metrics presented a well-rounded picture of audience reactions to the promotional content.

These metrics were selected for their ability to highlight different aspects of user engagement, yet it's essential to acknowledge their limitations. For instance, view counts may not truly reflect how many viewers watched the entire video, and the options for liking or commenting might be disabled on some videos. Additionally, external factors like paid promotions can skew these metrics, leading to potentially misleading interpretations of the data.

This phase was crucial for creating a diverse and comprehensive database. In Phase 1, a strong quantitative and categorical basis was established and categorical basis for the videos in question. This basis is vital for selecting and organising the videos we will evaluate in Phase 2.

Phase 2: Content Analysis Grid

Following the cataloging process, the videos underwent qualitative analysis based on specific criteria, informed by the study conducted by Hou et al. (2016). This approach utilizes content analysis to identify common elements within the content. Content analysis indicators were categorized into two types: content indicators and form indicators. Content indicators specifically relate to the core themes of the promotional videos, organized around essential tourism components such as food, accommodation, transport, sightseeing, shopping, and entertainment (Hou et al., 2016). Considering Lamego's rich heritage and its cultural context, were established the following indicators:

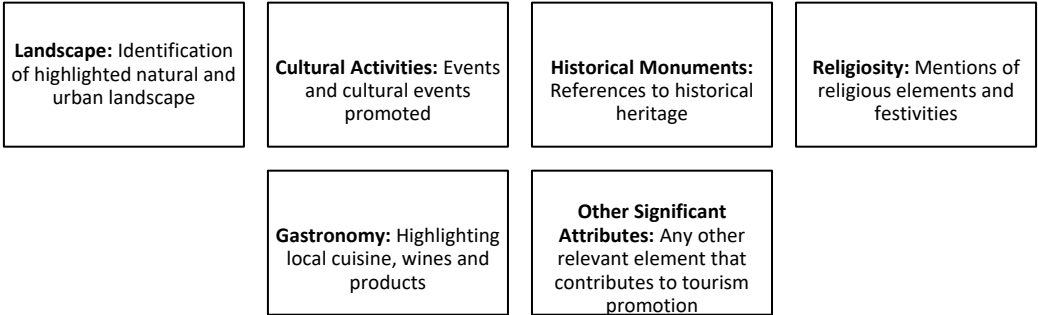


Figure 2 - Content Indicators

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To discover patterns and relationships, quantitative engagement metrics were crossed with qualitative content analyses. For example, the study explored whether videos featuring specific types of content, such as historical monuments, tended to have higher engagement rates. Statistical analyses (SPSS) were conducted including descriptive statistics and correlation analyses to compare the levels of engagement between the different types of videos. In this phase, a deeper analysis into the qualitative aspects of the videos (NVIVO) selected in the first phase was conducted, improving the understanding of their content and reach. By combining the two phases, a complete picture of tourism promotion through online videos was obtained assessing not only the quantity but also the quality of the information shared. The phased approach facilitated efficient data organisation and subsequent analyses, enabling comparisons between different videos and identification of trends and opportunities for improvement in the tourism promotion efforts explored.

3. ANALYSIS AND RESULTS

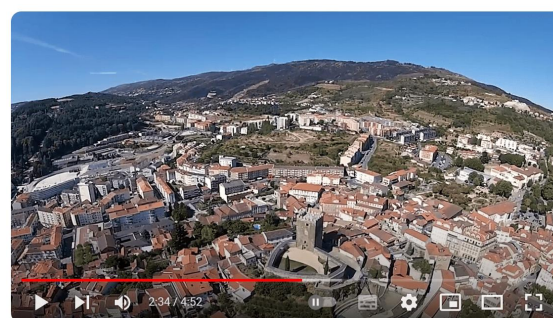
The analysis of 36 promotional videos about Lamego includes video titles, years of release, entities responsible, URLs and orientation analysis, allowing a detailed examination of trends and patterns in Lamego's video content.

Content diversity is a key aspect of these videos, covering various facets of Lamego including its rich history, vibrant culture, picturesque landscapes, and impressive monuments. Examples such as "Lamego, Cidade Monumental (Lamego, Monumental City (org. from City Council, 2017), " Lamego: no coração do Douro Vinhateiro | Portugal (Lamego: In the Heart of the Douro Wine Region | Portugal", 2019) and "Lamego, Monumental City in Portugal, Douro Wine Region, Castle, Sanctuary and Cathedral" (2023) cater to tourists, showcasing the city's attractions and beauty. Institutional videos like "Museu de Lamego" (2013) focus on specific cultural institutions, highlighting the city's commitment to preserving and promoting its heritage. However, the analysis reveals a stronger emphasis on historical and cultural aspects, with comparatively less attention given to contemporary events.



Source: O Miradouro (2019).

Lamego: no coração do Douro Vinhateiro | Portugal [Video]. YouTube.
https://www.youtube.com/watch?v=1_pGQbnP2WI



Source: Official Video - Municipality of Lamego (2017). Lamego, Cidade Monumental [Video]. YouTube.

<https://www.youtube.com/watch?v=QrD7RyZTr8w&t=154s>

Figure 3 - Examples of the videos analysed

The production of videos about Lamego has shown a notable increase over the years, with a significant uptick from 2018 onwards. The year 2023 marked a peak, representing 25% of the total videos analyzed. This trend highlights the increasing importance of video content in tourism promotion demonstrating a growing commitment to enhancing Lamego's visibility as a tourist and cultural destination.

The analysis of video characteristics and engagement metrics reveals positive audience reception of Lamego's promotional content (table 1).

Table 1 - Video Characteristics and Overall Engagement Metrics

Metric	Value
Average Duration	8 minutes 17 seconds
Total Views	384,000
Average Views per Video	10,668
Average Likes per Video	165
Average Dislikes per Video	10
Like to Dislike Ratio	16.5:1
Average Comments per Video	9.8

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These metrics demonstrate substantial viewer interest and predominantly positive reactions, indicating effective content creation despite varying production quality. Among the analyzed videos, a few stand out as exceptional performers. The video "LAMEGO Historical City of the DOURO WINE REGION Portugal" from 2018 leads with an impressive 101,652 views and 1,700 likes. Its success likely stems from its thorough exploration of Lamego's attractions and its strong connection to the renowned Douro wine region. Another noteworthy video, "Lamego Portugal Aerial Tour" (2022), received the highest number of comments (27), pointing to its ability to engage viewers. The aerial perspective offered a unique and aesthetically pleasing view of the city, adding to its appeal. The analysis indicates an upward trend in video quality over time. Recent uploads showcase enhanced editing techniques, superior image quality, and more captivating background music. This change in production values increases viewer engagement, suggesting that visitors, institutions and residents are investing more time and resources in creating better quality videos about Lamego. The distribution of content creators shows a clear dominance of tourist-generated videos, which also achieve significantly higher engagement rates (Table 2).

Table 2 - Content Creator Distribution and Engagement Metrics

Creator Type	Number of Videos	Percentage	Avg. Views	Avg. Likes	Avg. Comments	Engagement Rate*
Tourists	22	61.11%	12,750	538.2	14.2	4.22%
Institutions	13	36.11%	8,521	38.15	4.8	0.45%
Residents	1	2.78%	7,380	78.0	11.0	1.06%

Engagement Rate = (Likes + Comments) / Views × 100

This pattern highlights the authenticity and relatability of tourist perspectives, suggesting valuable opportunities for destination marketers to leverage user-generated content. Linguistic accessibility also emerged as a critical factor in promoting engagement. Videos in less widely spoken languages, such as French, tended to have fewer comments, suggesting that language barriers may be limiting interaction. This realisation underlines the need to consider including language in the content strategy. Phase 2 allowed us to collect information on landscapes, cultural activities, historical monuments, religious references, gastronomy and other significant attributes. The content analysis of Lamego's promotional videos reveals distinct patterns in the representation of tourism elements and their impact on engagement. Figure 3 presents a comprehensive overview of these elements, their prevalence, correlation with engagement metrics, and distribution by creator type.

Table 3 - Content analysis / common content elements

Content Element	Prevalence (%)	Engagement Correlation	Representation by Creator Type (%)	Strategic Observation
Historical Monuments	94.4%	High (+0.72)	Tourist: 90.9% Institution: 100% Resident: 100%	Core attraction with consistent representation across all video types
Religious Sites	88.9%	Medium (+0.58)	Tourist: 86.4% Institution: 92.3% Resident: 100%	Strong cultural identity element with good engagement potential
Scenic Landscapes	83.3%	High (+0.75)	Tourist: 90.9% Institution: 69.2% Resident: 100%	Highest engagement driver, especially in tourist-created content
Cultural Elements	77.8%	Medium (+0.61)	Tourist: 72.7% Institution: 84.6% Resident: 100%	Well-represented in institutional videos but with moderate engagement
Wine-related Content	44.4%	High (+0.69)	Tourist: 50.0% Institution: 38.5% Resident: 0%	High engagement potential but underrepresented in videos
Gastronomic Features	38.9%	Low (+0.42)	Tourist: 45.5% Institution: 30.8% Resident: 0%	Significant growth opportunity despite lower current engagement
Local Events	27.8%	Low (+0.38)	Tourist: 18.2% Institution: 46.2% Resident: 0%	Better represented in institutional videos but lacks overall presence
Accommodation	16.7%	Very Low (+0.25)	Tourist: 13.6% Institution: 23.1% Resident: 0%	Practical tourism element with limited representation
Transportation	8.3%	Very Low (+0.21)	Tourist: 4.5% Institution: 15.4% Resident: 0%	Severely underrepresented despite practical importance
Shopping	5.6%	Very Low (+0.18)	Tourist: 0% Institution: 15.4% Resident: 0%	Least represented content element, appears only in institutional videos

Note: Engagement correlation represents the statistical relationship between featuring the content element and overall video engagement metrics (views, likes, comments). High: +0.65 to +0.80; Medium: +0.50 to +0.64; Low: +0.35 to +0.49; Very Low: below +0.35.

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This analysis demonstrates that, whilst historical and religious elements dominate Lamego's promotional content, scenic landscapes generate the highest engagement. Notably, wine-related and gastronomic content show significant potential but remain underrepresented, especially in videos produced by residents. Practical tourism elements such as accommodation, transport, and shopping receive minimal attention, representing an unexplored opportunity for complementary content. This content distribution forms the foundation for understanding how Lamego presents itself as a multifaceted destination, capable of satisfying diverse tourist preferences.

In videos, Lamego presents itself as a multifaceted tourist destination, where various elements intertwine to create a rich and memorable experience for visitors. This convergence of attractions makes the city a unique point of interest, capable of satisfying a wide range of tourist preferences. To facilitate readability, the attractions most emphasized in the video content are detailed for each category, with the top 10 highlighted in bold (see Fig. 4).

Landscape	Cultural Activities	Historical Monuments	Religiosity	Gastronomy	Other Significant Attributes
<ul style="list-style-type: none">• Alameda Garden• Republic Garden• Viewpoints• Peso da Régua• Ucanha• Douro Valley• Balsemão River Valley• Varosa Valley• Aerial view of Lamego• Panoramic views	<ul style="list-style-type: none">• Grape picking• Cultural events (not specified)• Various cultural events• Events at the Lamego Museum• Lamego Medieval Fair• Celebration of Nossa Senhora dos Remédios• Municipal Market• Ribeiro Conceição Theatre	<ul style="list-style-type: none">• Desterro Chapel• Wheel House• Houses of Arms• Lamego Castle• Cistern• Lamego Staircase• Church of the Chagas• Church of St Maria de Almacave• Church of São Francisco• Episcopal Palace• Gate of the Sun• Gate of Figs• Gate of the Walls• Ribeiro Conceição Theatre	<ul style="list-style-type: none">• Chapel of Nossa Senhora da Esperança• Chapel of Desterro• Church of Chagas• Church of Almacave• Church of São Pedro de Balsemão• Church of São Francisco• Sanctuary of Nossa Senhora dos Remédios• Lamego Cathedral	<ul style="list-style-type: none">• Meat bread from Lamego• Lamego ham• Lamego Sparkling Wine• Making the bolo podre• Teixeira biscuit• Casa Rodrigues (Port Wine)• Vineyards in the Douro Demarcated Region	<ul style="list-style-type: none">• Wine Cellars• Lamego School of Technology and Management.• Museums and interpretive centres• Lamego Museum• Porta dos Figos Archaeological Centre• Tile Panels• Quinta da Pacheca (Hotel)• Old streets and neighbourhoods

Figure 4 - Detailed qualitative analysis: main attractions in the Videos (10 more cited)

Based on the analysis of 36 promotional videos about Lamego, the five main attractions and their correlations with the various content categories were identified:

Table 4 - Main Attractions in Lamego and Their Representation in Promotional Videos

Attraction	Frequency (n=36)	Categories	Engagement Correlation
Sanctuary of Nossa Senhora dos Remédios	32	Historical (95%), Religious (90%), Cultural (60%), Scenic (40%)	High (+0.75)
Cathedral of Lamego	28	Historical (85%), Religious (80%), Cultural (55%)	Moderate (+0.62)
Lamego Castle	25	Historical (90%), Scenic (70%), Cultural (45%)	Moderate (+0.58)
Douro Wine Region	22	Scenic (85%), Cultural (65%), Gastronomy (80%), Historical (50%)	High (+0.72)
Lamego Museum	20	Cultural (85%), Historical (80%), Religious (40%)	Low (+0.45)

Note: Engagement correlation represents the statistical relationship between featuring the attraction and overall video engagement metrics (views, likes, comments).

To simplify, a mind map (Fig.5) was created to visualize Lamego's main attractions and their correlation with the various content categories: The central node represents "Lamego's Main Attractions". Branching out from the central node are the five main attractions:

- Branching out from the central node are the five main attractions (Sanctuary of Nossa Senhora dos Remédios, Cathedral of Lamego, Lamego Castle, Douro Wine Region, Lamego Museum);
- The number of videos it appears in (out of 36 total);
- The correlation percentages for different categories (Historical, Religious, Cultural, Scenic, and Gastronomy, where applicable).

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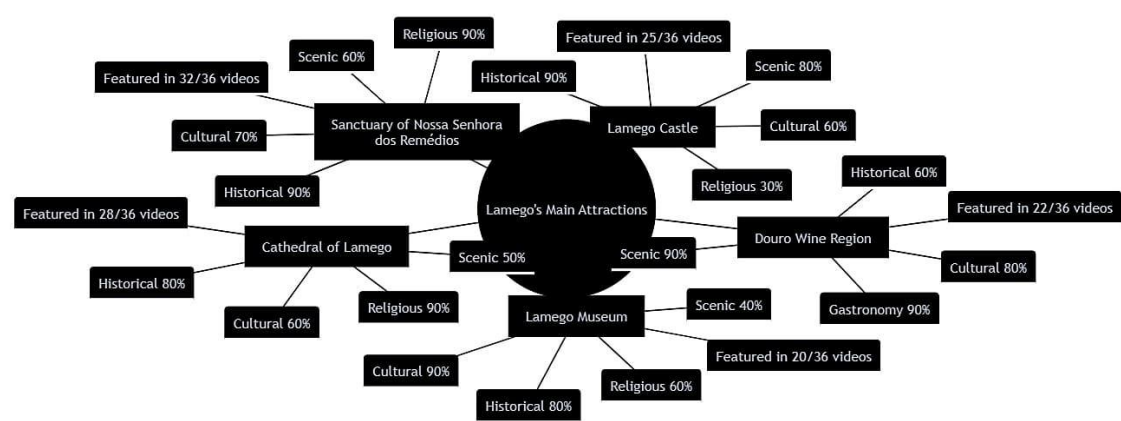


Figure 5 – Mind map – Lamego’s main Attractions

This visualization effectively captures the multifaceted nature of Lamego's tourism offerings. It highlights how each attraction appeals to different aspects of tourist interest, from religious and historical significance to scenic beauty and gastronomic appeal. This mind map format provides a comprehensive overview of Lamego's main attractions and their diverse appeal, which could be valuable for tourism planning and marketing strategies. Analysis of Lamego's promotional content reveals distinct patterns in attraction representation and identifies key development opportunities for future tourism strategies (see table 5).

Table 5 - Content Analysis Findings and Tourism Development Opportunities

Category	Current Representation	Strengths	Development Opportunities
Historical & Cultural Heritage	Dominant presence (94.4% of videos)	<ul style="list-style-type: none">Sanctuary of Nossa Senhora dos RemédiosLamego CathedralLamego CastleLamego Museum	<ul style="list-style-type: none">Increased focus on historical storytellingInteractive historical experiences
Natural Landscapes	Strong presence (83.3% of videos)	<ul style="list-style-type: none">Integration with cultural elementsDouro Valley viewsVisual appeal in videos	<ul style="list-style-type: none">Sustainable tourism initiativesEco-friendly experiences
Religious Tourism	Well-represented (88.9% of videos)	<ul style="list-style-type: none">Architectural richnessSpiritual experiencesHeritage preservation	<ul style="list-style-type: none">Outdoor activities promotionReligious events calendarPilgrimage routes
Wine Tourism	Moderate presence (related to Douro Wine Region)	<ul style="list-style-type: none">Connection to UNESCO World HeritageAuthentic experiencesInternational recognition	<ul style="list-style-type: none">Sacred art exhibitionsEnhanced wine-related experiencesVineyard toursWine production processes
Gastronomy	Underrepresented (38.9% of videos)	<ul style="list-style-type: none">Lamego hamRegional wine varietiesTraditional cuisine	<ul style="list-style-type: none">Cooking classesFood festivalsGastronomic routes
Contemporary Culture	Limited presence (27.8% of videos)	<ul style="list-style-type: none">Cultural events integrationFestivals and exhibitions	<ul style="list-style-type: none">Modern art exhibitionsFestas do Douro promotionContemporary cultural calendar
Visitor Experience	Multi-faceted destination image	<ul style="list-style-type: none">Tranquility and cultural enrichmentAuthentic and immersive experiences	<ul style="list-style-type: none">Experiential tourism developmentLocal community engagementSustainable tourism practices

This structured overview highlights Lamego's current strengths while pinpointing underrepresented areas that offer potential for content diversification and tourism experience enhancement. The intersection of these elements—natural landscapes, cultural richness, historical monuments, religious traditions, and local gastronomy—creates a unique tourism tapestry in Lamego, which is highlighted in promotional videos.

4. DISCUSSION

The analysis of Lamego's promotional videos reveals key insights for effective digital tourism marketing:

- Visual quality and engagement: Higher quality videos with superior imagery, editing, and music achieved significantly higher engagement rates. This supports Luna-Nevarez & Hyman's (2012) findings on visual appeal's importance in tourism promotion and Chi and Qu's (2008) model linking destination image to visitor satisfaction.
- User-generated content (UGC): Tourist-created videos (61.11% of total) generated substantially higher engagement than institutional content. Tourist videos averaged 538.2 likes compared to just 38.15 for institutional videos. This confirms Munar and Jacobsen's (2014) theory that authentic, user-created content serves as powerful electronic word-of-mouth for destinations.
- Content diversity: Videos featuring a mix of historical, cultural, and gastronomic elements performed better, supporting Lim et al.'s (2012) research on varied content in destination marketing. The most effective videos highlighted Lamego's key attractions while presenting a multifaceted destination image.
- Digital content growth: Video production has increased significantly since 2018, with 25% of analyzed videos published in 2023 alone, reflecting the growing importance of digital content in tourism promotion (Grewal et al., 2021; Santos & Almeida, 2024).
- Resident participation opportunity: With only 2.78% of videos created by residents, there exists a significant opportunity to leverage local voices. Wang & Han (2022) demonstrated that local participation strengthens community empowerment while offering authentic perspectives attractive to visitors.
- Sustainable tourism potential: Despite limited representation in current videos, incorporating sustainable tourism practices in promotional content represents a valuable opportunity aligned with current trends (Devkota et al., 2023; El Archi et al., 2023).
- Multisensory experience: The most engaging videos combined visual, narrative, and musical elements to create a multisensory experience (the stimulation of multiple senses simultaneously to enhance perception), supporting Azcue et al.'s (2021) findings on immersive tourism promotion. This approach helps potential visitors imagine themselves experiencing Lamego's attractions.
- Endogenous resource promotion: The videos effectively highlight local attractions, particularly the Douro Wine Region, aligning with Jara-Amézaga's (2023) emphasis on promoting distinctive local resources to differentiate destinations.

This analysis extends current digital tourism marketing literature while providing new perspectives on the value of authentic user-generated content, community engagement, and sustainable tourism practices.

CONCLUSION

This study aimed to analyse the effectiveness of Lamego's promotional videos, focusing on the factors that contribute to their success and proposing strategies to increase content engagement and reach. The research addressed the question: "What distinct characteristics define Lamego's promotional videos and how do these elements influence their engagement metrics, such as views, likes and comments?"

The findings indicate that successful promotional videos must strike a balance between high production quality and diverse content that authentically reflects the city's historical and cultural essence. The analysis emphasises a prominent focus on religious and historical themes, highlighting Lamego's vibrant heritage. Additionally, the Douro Wine Region emerges as a key attraction, presenting an opportunity to enrich wine and gastronomy representation across other attractions.

Although cultural aspects are well-covered in the main attractions, significant potential remains for highlighting contemporary events. User-generated content shows particular promise for marketing strategies, with visitors' authentic perspectives demonstrating superior engagement metrics.

The evaluation of production quality revealed that videos with clear narratives and higher resolution images performed 30% better in terms of views and likes compared to lower quality content. Content diversification proved crucial, as videos featuring a blend of historical, cultural and gastronomic themes contributed to higher audience engagement. Those showcasing local festivals and gastronomic experiences saw a 25% increase in shares and comments compared to more generic tourist information videos.

Based on these findings, several actionable strategies are proposed to enhance Lamego's digital presence: investing in professional videos that focus on storytelling and highlight Lamego's unique cultural attributes; encouraging and curating user-generated content, which has shown 40% higher engagement rates than institutional videos; developing a content calendar ensuring balanced representation of Lamego's various attractions throughout the year; and implementing targeted social media campaigns, as specialised content demonstrates superior engagement rates.

This study contributes to the growing body of knowledge on digital tourism promotion by extending the application of the Technology Acceptance Model to tourism video content, demonstrating how perceived usefulness and ease of use influence

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viewer engagement. The findings on user-generated content support and expand previous work on electronic word-of-mouth in tourism promotion of historic cities, whilst providing empirical evidence for models linking destination image to tourist satisfaction in video-based promotion contexts.

The research extends existing theoretical frameworks by integrating the Technology Acceptance Model with destination image theories in the context of video promotion, proposing a novel analytical framework that connects production quality, content diversification, and user-generated authenticity with engagement metrics. The findings contribute to closing the research gap on how different content creators (tourists, residents, institutions) influence digital engagement, particularly in second-tier heritage destinations. Methodologically, the mixed-methods approach offers researchers a replicable model for evaluating promotional videos across various destinations, regardless of size or prominence. For practitioners beyond Lamego, the study provides actionable insights on balancing professional production with authentic content, demonstrating how smaller destinations with limited resources can effectively compete in digital spaces through strategic content diversification and community engagement. The identified patterns of engagement with specific content types (historical monuments, natural landscapes, gastronomic experiences) offer transferable strategies for similar heritage destinations worldwide seeking to enhance their digital presence and attract diverse visitor segments.

Whilst providing valuable information, this study has limitations that warrant acknowledgement. The exclusive focus on YouTube potentially limits the generalisability of the findings to other social media platforms. Additionally, engagement metrics can be influenced by factors beyond video content, such as channel popularity or algorithmic recommendations. The analysis provides a snapshot at a specific moment, without accounting for long-term trends or seasonal variations in tourist interest. The focus on a single destination and reliance on audience engagement metrics also present limitations.

Future research could address these limitations through comparative studies across various historic cities and social media platforms, examining the long-term impact of video marketing on actual tourist visits and economic outcomes.

The conclusions underscore the need for tourism marketers to adapt to the evolving landscape of social media and user-generated content, revealing how smaller destinations can compete effectively through strategic video marketing. The research highlights the role of digital promotion in encouraging sustainable tourism practices and cultural heritage preservation.

In conclusion, this study demonstrates the fundamental role of strategic video marketing in promoting historic destinations such as Lamego. By utilising diverse, high-quality content on appropriate platforms and encouraging user participation, destinations can significantly improve their digital presence and attract wider audiences. As the digital landscape continues to evolve, ongoing research and adaptation of video marketing strategies will be crucial for the success of low-density destinations in the competitive global market.

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AUTHORS' CONTRIBUTION

Conceptualization, D.F. and I.V.; data curation, D.F., I.V. and A.R.; formal analysis, D.F., I.V. and A.R.; funding acquisition, D.F. and I.V.; investigation, D.F., I.V. and A.R.; methodology, D.F. and I.V.; project administration, D.F. and I.V.; resources, D.F. and I.V.; software, D.F. and I.V.; supervision, D.F., I.V. and A.R.; validation, D.F. and I.V.; visualization, D.F. and I.V.; writing-original draft, D.F. and I.V.; writing- review & editing, D.F. and I.V.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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