

Máté Battay¹ – Diána Pacsi² – Dr. Júlia Zita Fodor³

Evaluating Service Quality and Online Presence in Equestrian Tourism: Insights from a Modified Servperf Model

SUMMARY

In Hungary, equestrian tourism has deep historical roots, dating back to the 19th century. However, in today's digital landscape, traditional service offerings may struggle to meet the evolving expectations of a more tech-savvy, international clientele. This study aims to assess the service quality of Hungarian equestrian tourism businesses by applying a modified SERVPERF model, which integrates digital presence and online marketing elements. By examining these factors, this research provides insights into how modern digital tools can complement traditional service values to enhance competitiveness and sustainability in the equestrian tourism sector.

Keywords: *Equestrian tourism, Service quality, SERVPERF model, Digital marketing, Sustainability*

Jel-Codes: *L83, M31, Q01, Z32*

LITERATURE REVIEW

Equestrian tourism, as an increasingly popular segment of tourism, holds economic, social, and environmental value worldwide. It provides unique experiences that combine the exploration of natural environments and local cultures while contributing to the development of local economies, particularly in rural areas where infrastructure, events, and equestrian facilities generate significant revenue (Lane and Kastenholtz, 2015; Hackbert and Lin, 2011; Pavić et al., 2019; Kline et al., 2015; Helgadóttir and Sigurðardóttir, 2008; Kowalik et al., 2017). In Hungary, the traditions of equestrian tourism date back to the 19th century, from the work of István Széchenyi to the horse shows in Bugac, which were already attracting tourists in the 1930s (Kulcsár and Obádovics, 2015; Németh, 2004; Mácsainé Iván, 2020). The Second World War and the collectivization of farms set back equestrian tourism in Hungary, but international interest revived from the 1960s onward, especially in Hungary behind the Iron Curtain (Lóska, 2021; Lóska, 2022). The privatization processes of the 1990s and quality regulations, such as the introduction of the „Patkós” (Horseshoe) quality certification system, have ensured the high standards

of services (MLTSZ, 2024; Obádovics, 2021). In recent years, the Kincsem – National Horse Program and the Eurohorse network, with its 2,300 km of digital trails, have supported sustainable development and quality assurance (Lóska, 2021; Lóska, 2022). Sustainability and digital marketing are essential for the success of equestrian tourism. In addition to responsible riding programs and the integration of local cultural elements, digital tools such as social media and SEO strategies are cost-effective means of increasing visibility, especially in rural locations (Aman and Papp-Váry, 2022; Deb et al., 2022; Wibawa et al., 2022; Cheuk et al., 2018, Laradi et al., 2023). Strategic collaborations—such as involving influencers and local organizations—can further enhance sustainability and community engagement (Bozsik et al., 2022; Akbar et al., 2020; Utami et al., 2023). Innovative technologies, like GIS, allow a deeper understanding of tourist preferences, forming the basis for targeted marketing strategies (Wicaksono et al., 2021; Mallick, 2023). Engaging local communities and offering authentic experiences not only preserve cultural heritage and landscapes but also strengthen the social and psychological value of equestrian tourism (Che et al., 2021; Pickel-Chevalier, 2015; Schmutte, 2015; Wang and Zou, 2020; Malchrowicz-Mośko et al., 2020; Danby and Grajfoner, 2022; Dashper, 2020; García-Rosell and Tallberg, 2021, Mehmood et al., 2025). The broader implications should not be overlooked either, as adequate public or private welfare services play a significant role, even in economic development (see, e.g. Erdey, 2006).

MATERIALS AND METHODS

The objective of this study was to evaluate the service quality of equestrian tourism businesses using the SERVPERF model. This model assesses service quality based on five dimensions (tangibles, reliability, assurance, responsiveness, and empathy). In the study, we examined 32 equestrian tourism businesses selected based on the “Creation of an Active Equestrian Tourism Network” project by the Hungarian Equestrian Tourism Public Benefit Association, featured in the Eurohorse Equestrian Explorer publication.

Population

The population of the study consisted of businesses embedded in five equestrian tours presented in the publication. This sample targeted key players integrated into the national equestrian tourism network.

¹ PhD Student, Hungarian University of Agricultural and Life Sciences Doctoral School of Economics and Regional Sciences Gödöllő, battay.mate@gmail.com,

² PhD Student, Hungarian University of Agricultural and Life Sciences Doctoral School of Economics and Regional Sciences

³ Associate professor, Hungarian University of Agricultural and Life Sciences Institute of Agricultural and Food Economics Gödöllő

Methodology

The SERVPERF model, developed by Cronin and Taylor (1992) from the SERVQUAL model, was employed to measure perceived service quality (Cronin and Taylor, 1992; Cronin and Taylor, 1994). This model evaluates service quality across five dimensions, providing decision-supporting information for management.

The applied dimensions and their contents are as follows:

- *Tangibles*: the appearance of facilities, equipment, and personnel.
- *Reliability*: consistent, high-quality service delivery.
- *Assurance*: the expertise and courtesy of personnel.
- *Responsiveness*: prompt and efficient handling of customer requests.
- *Empathy*: understanding and considering customers' needs.

In this study, we extended the original SERVPERF model with a customized primary data collection method, which included the businesses' marketing and online presence. The evaluation parameters are detailed below.

Evaluation Parameters

In the study, the SERVPERF dimensions were assessed based on the following factors, with particular emphasis on online presence and sales solutions (Table 1.).

Analytical Methods

In this study, we examined the relationship between the SERVPERF model dimensions and the online presence of equestrian tourism businesses. The selection of analytical methods focused on assessing the reliability of the variables and evaluating the impact of online marketing factors on service quality:

- *Cronbach's alpha test*: This method was used to evaluate the internal consistency of the SERVPERF model dimensions, commonly applied to measure the reliability of scales. The goal was to determine how consistently the dimensions measure the same quality concept for equestrian tourism businesses. The results indicated low internal reliability, suggesting a weak association between the SERVPERF dimensions and online presence in this context.
- *Simple regression analysis*: We examined the impact of various online presence elements (e.g., website existence, mobile-optimized website, social media presence, SSL certificate, Google Analytics) on the "Responsiveness" dimension. The

regression model allowed us to assess the extent to which digital presence elements contribute to the speed and accessibility of services, thereby enhancing guest satisfaction.

Using these methods, we conducted a detailed analysis to determine whether online marketing factors are indeed associated with service quality and to assess the applicability of the SERVPERF model for evaluating online presence in the equestrian tourism sector.

Differences from the original SERVPERF Model

The modified SERVPERF model used in this study, which includes online presence and marketing activities, emphasizes the importance of online presence. The following factors were considered in the online presence analysis:

- *Website existence and mobile optimization*: essential for a modern user experience.
- *SSL certification*: enhances online security.
- *Social media activity*: evaluation of presence on Facebook and Instagram.
- *Marketing analytics tools*: Google Analytics and Facebook Pixel, which enable targeted online campaigns.

These factors are becoming increasingly important in the equestrian tourism sector, as online platforms and digital tools can significantly impact customer reach and the market competitiveness of businesses.

ANALYSES AND RESULTS

Several analytical methods were applied in this study to gain a deeper understanding of the relationship between the quality of online presence and service quality in equestrian tourism businesses. The following section provides a detailed overview of the main methodological steps and their outcomes.

Cronbach's Alpha Value

In examining the online presence and service quality of equestrian tourism businesses based on the SERVPERF model, Cronbach's alpha was calculated to determine the internal consistency of the elements measured in the study. Cronbach's alpha is a widely used metric for assessing the internal consistency of scales, indicating how consistently individual elements measure the same concept.

The Cronbach's alpha value can be calculated using the following formula:

$$\alpha = \frac{k}{k - 1} \left(1 - \frac{\sum \text{item variance}}{\text{total variance}} \right)$$

Where k is the number of items, "item variance" represents the variance of each item, and "total variance" refers to the overall variance of the scale. Based on this calculation, the SERVPERF dimensions assigned a Cronbach's alpha value

of $\alpha=0.0074$, indicating very low internal reliability. This value falls significantly below the commonly accepted threshold of 0.70 for research analyses (Cronbach, 1951). The low Cronbach's alpha suggests that there is a weak internal consistency among the variables examined; in other words, the marketing parameters related to online presence do not show a strong, consistent relationship with the quality dimensions of the SERVPERF model.

This result suggests that online marketing parameters may not be appropriately applied for analyzing the SERVPERF di-

Table 1. Dimensions of the SERVPERF model

SERVPERF Dimension	Evaluation Factors
Tangibles	Website existence, mobile optimization, SSL certification, "Horse shoe" rating
Reliability	Use of Google Analytics, presence of Facebook Pixel, average and count of Google My Business reviews
Assurance	Provision of guided tours, accommodation and catering, horse shows, gastronomy
Responsiveness	Presence on Facebook and Instagram, existence of Google My Business profile
Empathy	Active communication, CTAs, reservation systems

Source: own summary

mensions within this sample. The findings indicate that evaluating service quality using the SERVPERF model may be less valid in this context, and online marketing factors only exhibit a weak correlation with the quality dimensions of the SERVPERF model.

Results

of the Simple Regression Model

One of the research objectives was to examine the impact of various elements of online presence on the “Responsiveness” dimension of the SERVPERF model. To achieve this, a simple linear regression was conducted, where predictor variables included different aspects of online presence (such as website existence, mobile optimization, social media presence, SSL certification, and Google Analytics), and the outcome variable was the responsiveness dimension.

Regression Model Parameters

The equation of the model is structured as follows:

$$Responsiveness = \beta_0 + \beta_1 \cdot Website + \beta_2 \cdot Mobile - optimized Website + \beta_3 \cdot Social Media Presence + \beta_4 \cdot SSL Certificate + \beta_5 \cdot Google Analytics + \epsilon$$

The results are summarized as follows (Table 2):

The results indicate that website presence, mobile-optimized websites, and social media presence each have a significant positive impact on the responsiveness dimension. This suggests that having a website and mobile optimization, as well as maintaining a social media presence, enhances the speed and accessibility of services, thereby improving responsiveness. These variables show a strong effect on the “Responsiveness” dimension, as indicated by p-values less than 0.001, which implies a high level of significance.

Conversely, SSL certification and the use of Google Analytics did not show a significant relationship with the responsiveness dimension (p-values > 0.05). This may imply that elements related to data security and analytics tools do not substantially affect the prompt and effective service provision for customers in this sector.

The R-squared value of 0.862 suggests that the variables associated with online presence explain 86.2% of the variance in the responsiveness dimension, indicating a strong relationship. Thus, the findings confirm that certain elements of online presence (notably website and social media presence) have a significant impact on the speed and accessibility of services, which is a key factor for customer satisfaction in equestrian tourism businesses.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The primary aim of this research was to assess the service quality management of equestrian tourism businesses and provide recommendations for enhancing their competitiveness through a modified version of the SERVPERF model. The study was driven by a desire to contribute to the long-term sustainability and economic viability of these businesses, particularly in a sector where sustainability and connections with local communities are crucial. The Eurohorse program and the associated network aim to increase the appeal of equestrian tourism on both a domestic and international level, with online presence development playing a critical role. The choice of the SERVPERF model was primarily due to its structure, which allows for quality assessment across various dimensions, such as tangibles, reliability, assurance, responsiveness, and empathy. However, I had to modify the original model to accommodate online marketing factors, which are crucial in modern tourism communication. Although my initial hypothesis was that increased use of online marketing tools would enhance perceived service quality, the analyses showed that this relationship is more limited in the equestrian tourism sector compared to other industries. The analysis results indicate that visitors to equestrian businesses primarily seek nature-based, authentic experiences and are less concerned with the presence or absence of online marketing tools. Among the SERVPERF dimensions, empathy and responsiveness had a greater impact on customer satisfaction, whereas online tools such as SSL certification, Google Analytics, and Facebook Pixel played a lesser role.

Recommendations

- 1. Establishing a Basic Online Presence:** It is recommended that each business create at least a simple introductory website. Google My Business can provide a basic online presence, which, while not equivalent to a full-scale website, effectively communicates essential information about the business.
- 2. Regular Use of Facebook:** Businesses should consider establishing a more active social media presence, with at least one post per month. This can increase customer awareness and encourage experience sharing, ultimately fostering a more loyal customer base.
- 3. Implementation of Basic Analytics Tools:** Google Analytics and Facebook Pixel can assist in analyzing visitor behavior and developing targeted ads. Although these tools showed limited effectiveness in the analyses, they can still contribute to strategic planning.
- 4. Achieving the “Horse shoe” (Patkós) Rating:** The Patkós rating serves as a quality indicator, helping businesses receive

Table 2. Results of Regression model

Predictor Variable	Regression Coefficient (β)	Standard Error	t-value	p-value	Significance
Intercept	β ₀	0,152	1,371	0,174	n.s.
Website Presence	β ₁ = 0,56	0,122	4,598	< 0,001	**
Mobile-optimized Website	β ₂ = 0,44	0,118	3,703	< 0,001	**
Social Media Presence	β ₃ = 0,49	0,115	4,279	< 0,001	**
SSL Certificate	β ₄ = -0,05	0,104	-0,433	0,665	n.s.
Google Analytics	β ₅ = -0,11	0,106	-1,057	0,292	n.s.

R-squared: 0.862, F-statistic: 12.63 (p < 0.001)

Source: own research

clear feedback on their service standards. It is a recognized, easily communicated quality metric that should be regularly updated and optimized.

5. Utilizing the Eurohorse Program and Central Information Platform:

Until all equestrian businesses can establish the expected online presence, the Eurohorse central website should serve as the primary information source where guests can learn about tour routes and the services of participating stables.

Overall, the research highlights that in assessing the quality of equestrian tourism services, the importance of customer-centered and authentic experiences outweighs that of online presence. Digital marketing does not appear to be an immediate priority for rural stables, as many are in a monopolistic or oligopolistic position within their regions. However, the Eurohorse program may bring about a shift by making services accessible to a broader, potentially international audience, who expect online presence and digital communication. By considering these recommendations, equestrian businesses may be able to adapt to modern tourism expectations while preserving their traditional, authentic values.

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