

Webometric Analysis of Indian State Tourism Websites

Ekta Singh*, Sibi P.S

Department of Tourism Studies, Pondicherry University, Puducherry, INDIA.

ABSTRACT

Official state tourism websites serve as primary sources of information for travelers. The digital presence maximizes their online visibility, provides appealing and uplifting content, and optimizes their online presence. Despite numerous studies on website usability and interaction features, a gap remains in comprehensively evaluating the state tourism websites in India. To analyze all 28 Indian state tourism websites, the current study utilizes webometric tools to collect data. The analysis incorporates metrics such as domain authority, page authority, Simple Web Impact Factor (SWIF), Google page rank, language accessibility, and social media presence. The results indicate substantial variation in website performance despite the widespread use of similar domain extensions, suggesting an overall homogeneity in URL structure but divergence in digital strength. Overall, the results demonstrate that the state's capacity to market and promote tourism in the digital age is closely tied to its online presence and multilingual accessibility. Lastly, the study highlights the practical and theoretical implications.

Keywords: Webometrics, Websites, Tourism, Web Impact Factor, Destination Management Organizations (DMO).

INTRODUCTION

The travel and tourism industry has undergone numerous changes as a result of the substantial development of the Internet and Communication Technology (ICT). The development of the internet and technology has led to changes in people's travel patterns. Among its many effects, the Internet's widespread reach has significantly changed the field of tourism (Xanthakis *et al.*, 2024) and tourism marketing (Attallah, 2011). The internet has also emerged as a vital resource for both travelers and companies, by making online reservations for accommodation (hotels), travel (flights, trains, and other forms of transportation), and all other travel-related services easier (Pulamte & Ramasamy, 2024). The internet facilitates communication and sharing information quickly and cost-effectively. One of the key components of the Internet is the World Wide Web (WWW), a vast and easily accessible information space on the Internet. The WWW is a network of linked hypertext pages that may be accessed online (Nandi *et al.*, 2023). There has long been discussion about the role of WEB1 technology, which first appeared in the 1990s. It also led to significant and transformative changes in the travel industry (Chakravarty, 2024).

These debates have been ongoing, and simultaneously, WEB2 technology (social media networks) has rapidly transcended everyday existence and become an essential element of people's daily routines (Şengel & İşkin, 2024). Nowadays, travel platforms like MakeMyTrip, Goibibo, and Yatra have gained widespread recognition by simplifying the travel experiences of millions of customers and establishing standards for digital adoption in the travel industry. In the early 21st century, a distinct technical advancement known as Artificial Intelligence (AI) began to gain significant attention (Şengel & İşkin, 2024). Peer-to-peer communication was made possible by the internet, including social media, travel forums, and tourism websites, empowering people to make well-informed travel decisions (Li & Wang, 2010). Due to this internet connectivity, a wide range of websites are accessible, making it easier to compare different hotels, flights, and locations (Xanthakis *et al.*, 2024). Hence, a destination website provides convenience and round-the-clock accessibility from any location at any time, and also helps distant users learn about the destination without physically being there.

The website of any destination holds the potential to be the decisive factor in whether to visit or continue the search elsewhere, making it a key factor in the decision. In today's world, creating a website for any destination is no longer an option, but rather a necessity for all destinations (Choi *et al.*, 2007). Using the official webpages of the destination is the most frequently used source for information gathering (Iványi, 2021). As points of reference, websites are essential for disseminating knowledge, attracting tourists, and promoting travel destinations worldwide.



DOI: 10.5530/jcitation.20250243

Copyright Information:

Copyright Author (s) 2025 Distributed under
Creative Commons CC-BY 4.0

Publishing Partner : Manuscript Technomedia. [www.mstechnomedia.com]

As a result, the effectiveness of the information shared on the official destination website becomes crucial, and Destination Management Organizations (DMOs) are mostly responsible for this (Lončarić *et al.*, 2013). Travelers can directly access multiple pieces of information on the websites, enabling them to find the most relevant and detailed information. Hence, destination websites serve as an organization's online storefront and are the center of its online marketing activities (Digiorgio, 2016).

Effective website content is characterized by providing relevant, comprehensive, and regularly updated information (De Rosa *et al.*, 2019; Labanauskaitė *et al.*, 2020). A high level of state/institutional control over the published content increases a website's dependability and credibility as a digital information source (Jiménez-Barreto *et al.*, 2020). Quality content on official tourism websites is perceived as more reliable than social media content (Jiménez-Barreto *et al.*, 2020). The effective use of Search Engine Optimization (SEO) enhances website visibility (Haneef, 2017). Hence, websites are essential for establishing a destination's image because they maximize its online visibility, provide appealing and uplifting content, and also optimize its online presence (Rizky *et al.*, 2017; Kim *et al.*, 2017). In order to engage potential visitors and change their attitudes, websites must communicate effectively (Marine-Roig, 2022). Therefore, by providing thorough information on various websites, it is possible to enhance tourists' impressions and ultimately increase the number of visitors to the location. In conclusion, it is impossible to overstate the critical role that websites play in shaping destination images, and deliberate efforts should be made to utilize online resources to inspire and influence prospective travelers in selecting a location for their trip.

The visibility, accessibility, and credibility of state tourism websites influence their digital tourism performance. Established frameworks, such as Destination Competitiveness (Ritchie & Crouch, 2003) highlights destinations with superior information quality, technology infrastructure, and digital branding attain higher competitiveness in the global market, which can help explain this relationship. The study also draws on Symes, (1999) Public Value Theory, which posits that government-run digital platforms must provide value through accessibility, transparency, and reliable information, serves as another source of inspiration for the study. By enabling inclusive and dependable access to tourism information, state tourism websites with higher scores and rankings, as well as more multilingual support, exhibit greater public value. The Digital Inclusion Theory (Warschauer, 2003) emphasizes the importance of reducing information asymmetry by creating digital environments that are mobile-friendly, multilingual, and accessible. When considered as a whole, these theoretical stances reveal a direct connection between webometric performance and the efficacy of digital tourism, indicating that increased online visibility, broader social media reach, and more

extensive hyperlink networks significantly enhance a state's ability to compete, engage tourists, and deliver public value.

Webometric analysis is one of the newest and growing subfields of metric research. The terms "Web" and "metrics" were combined to create the phrase Webometrics. The term Webometrics was first coined in 1997 by Almind and Ingwersen. Webometrics is the quantitative study of web-related phenomena in scientific communication processing, employing bibliometric, Scientometric, and informetric techniques, as illustrated in Figure 1. It is the study of the quantitative components of web resources, which provides important insights into how websites are constructed and accessed. Webometric studies examine various features, including websites, web pages, linkages, and search engine results, using informetric techniques (Thiruppathi & Muthumani, 2024). As discussed by Björneborn and Ingwersen (2004) Webometric research is divided into four main areas: web usage analysis, web technology analysis (including search engine performance), web link structure analysis (e.g., hyperlinks, self-links, external links, and in-links), and webpage content analysis.

As identified in the previous literature, despite growing scholarly interest in research on tourism and webometrics, there remains a digital gap in the comprehensive evaluation of India's state tourism websites. The current study addresses this digital gap by conducting a comprehensive webometric analysis to assess the state's digital performance and visibility, by combining elements of qualitative and quantitative methods. The study is divided into six sections, namely Introduction, Methodology, Results, Discussion, Implications, and Conclusion.

REVIEW OF LITERATURE

The online presence of any individual, organization, institution, company, or other entity on the World Wide Web (WWW) is referred to as its web presence. Each web presence has its own unique web address known as a Uniform Resource Locator (URL). In the sphere of webometrics, with reference to the tourism industry, various studies have been conducted to assess the usability and accessibility status of India's official state tourism websites (Agrawal *et al.*, 2022). From an accessibility perspective, Kabeer & Anandkumar (2024) utilized the Automatic Web Accessibility Evaluation Tool (AWAET) to assess the accessibility of Regional Tourism Organization (RTO) websites for People With Visual Impairments (PWVI) and investigated how PWVI perceive accessibility on RTO websites. Also, Singh & Sibi (2021) examine the accessibility and readability of OTAs' websites in India. From the marketing perspective, Kaur & Nitasha Sharma (2015) describe how the Indian Tourism Development Corporation (ITDC) and other state tourism corporations were using traditional marketing approaches.

In terms of webometric applications, a study focused on webometric analysis of medical tourism websites and their

prospects in Kerala (Thanuskodi & Naseehath, 2016). There are numerous studies on other subjects of tourism-related websites, such as webometric analysis to assess institutional networks, and to analyze the level of homogeneity among the CIHMs websites in India (Leeladharan & Shekhar, 2019), followed by another study investigating and exploring the websites of 18 selected Indian Tourism websites (Muniyasamy *et al.*, 2023). Another study on webometric mapping of tourism websites in 36 states and Union Territories (UTs) in India highlights the global Search Engine Optimization (SEO) ranking, along with various scores and their popularity rankings (Arindam, Pal, & Kar, 2018).

Finally, there are region and state-wise studies that comparatively evaluate tourism websites of the five Indian states using Search Engine Optimization (SEO) (Vyas, 2019); followed by the tourism websites for the seven north-eastern states of India (Patil, 2011). Another study, focusing on the Northeastern states, examined the most preferred domain extension used and evaluated websites based on key parameters, including information availability, functionality, and ease of use (Pulamte & Ramasamy, 2024). Similarly, Chavali and Sahu (2008) studied a comparative analysis of tourism websites in South India; and Das, *et al.*, (2024) studied web accessibility of open science portals of India.

Significance and scope of the study

In response to the growing number of digital footprints and the need to improve both efficiency and evaluation, numerous studies have been conducted worldwide on tourism websites, focusing on content information, user perspectives, interactive features, responsiveness, and other aspects. There are studies on webometrics of tourism websites in India, but they are primarily focused on regional and state-specific tourism websites, such as those in the North-eastern states and South Indian states, or on state-specific studies, like those of Kerala and Maharashtra. Since there hasn't been any prior research covering all state tourism websites, the purpose of this article is to analyze and evaluate all the government tourism websites in the 28 Indian states through various webometrics indicators like URL analysis, domain authority, page authority, web impact factor, Google page rank, social media presence, etc. Based on the results, the authors provide implications of the study and recommendations to enhance user interaction, credibility, and inclusivity across all platforms.

Objectives of the study

To perform a thorough webometric analysis of the state tourism websites of India.

To use webometric metrics to assess these websites' impact, visibility, and web presence.

To assess the social media presence and offer actionable insights for improving the state tourist website's social media presence and reach.

METHODOLOGY

Selection of tools

Several tools were established to study the webometric analysis of the selected websites. Firstly, an appropriate search engine is required in order to collect the data needed for the current study. With advanced search tools that count the links on websites, the search engine coverage should be extensive, i.e., having a greater number of hyperlinks. One of the search engines that meets the aforementioned requirements is Google (Khan & Mondal, 2025); (R. Chakravarty & Wasan, 2015). Therefore, for the present study, we used the Google search engine (version 142.0.80) for webometric data collection. The search query format "site: sitename" is employed to specifically target and retrieve information from each website, such as <https://www.uptourism.gov.in/>. The website link analyzer tool, available at <https://smallseotools.com>, is used to collect information on domain and page authority, as well as Google PageRank, for ranking each website under study.

The Screaming Frog Version 21.4 tool was used to collect information on internal links and external links, to calculate the web impact factor. Each tourism website was evaluated individually, and all metrics were recorded manually during the same period to minimize any temporal bias. These tools are chosen to provide a comprehensive assessment of the digital presence, visibility, and impact of the selected websites. Despite thorough efforts, the study has certain limitations, such as the exclusion of eight UTs because the majority of them lacked valid website information. The period during which the data was collected was from April 1, 2025, to April 10, 2025. This detailed procedure allows replicability and methodological transparency for future webometric research.

Following data collection, the webometric indicators for each state tourism website are determined through a methodical analysis process that utilizes statistical analysis techniques, including descriptive statistics and content analysis, to identify patterns, trends, and relationships among the webometric indicators. To enhance the analytical depth and novelty, the study conducts a correlation analysis using Microsoft Excel to examine the relationship among key webometric indicators, namely domain authority, page authority, and simple web impact factor. It will enable the identification of interdependence among these metrics. The analysis will provide empirical evidence on whether higher authority and link credibility contribute to greater web visibility and engagement. The above-mentioned metrics are discussed in detail in the following sections.

URL analysis

To conduct the study, the list of all the tourism websites and their URLs was retrieved from the official website of the Ministry of Tourism, Government of India (<https://tourism.gov.in/related-links/state-tourism-links>). The authors selected the

tourism websites of all twenty-eight states for the study. A few websites required corrections to fit within the scope of the study, including those for Assam, Bihar, Chhattisgarh, Nagaland, Tamil Nadu, and West Bengal. Table 1 presents all twenty-eight state tourism websites, along with their URLs, which indicate their online presence.

Domain Authority (DA) and Page Authority (PA)

DA is a domain or subdomain metric. It indicates the quality of any website. It has a range of 1 to 100. A higher rank is indicated by a higher value. On the other hand, PA is a single page's rating on search engine result pages (Dhar & Gayan, 2022). Hence, both Domain Authority (DA) and Page Authority (PA) are quality scores. While domain authority is a quality score out of 100 that gauges the predictive ranking of entire domains or subdomains, page authority predicts how well a specific page will rank on search engines. A high page authority score suggests that the page has the potential to rank well in search engine results. The ideal application of domain authority is as a comparative metric, such as comparing a website's DA score to that of its immediate competitors (Maharaj *et al.*, 2021). DA is high for websites with high-quality external links. DA is used by webmasters to compare their own websites alongside rival websites. The Page Authority (PA) measures the ranking strength of a single page within a domain. A higher PA means better ranking potential (Yadav *et al.*, 2024).

Simple Web Impact Factor (SWIF)

It was developed by Peter Ingwersen. The Web Impact Factor (WIF) is a metric that measures a website's influence based on the quantity of connections it receives. According to (Noruzi, 2006) WIF is directly correlated with the website's perceived reputation. Internal Web Impact Factor (IWIF), External Web Impact Factor (EWIF), and Simple Web Impact Factor (SWIF) form the foundation of WIF. The ratio of total links to total pages on a website is called the SWIF ratio. On the other hand, the total number of links consists of both external and internal links. Here, the Google search box was used to enter the command "site:" followed by the URL of the library association's website in order to determine the number of web pages, for example, "site: <https://www.uptourism.gov.in/>" (Dhar & Gayan, 2022).

Google PageRank

Google PageRank lists the ranks of websites based on Google searches, which is considered the most widely used browser and search engine worldwide (Evans, 2007). It ranges from 1 to 10, indicating that a website with many hyperlinks pointing to it would have a high page rank, as the algorithms use these hyperlinks as a vote for the popularity of that specific website (Thiruppathi & Durai Muthumani, 2024; Evans, 2007). Larry Page and Sergey Brin, the co-founders of the multinational American technology company Google (1998), have created Google PageRank metrics.

The Google page rank patent was first granted in 1998, but Google has not renewed it since it expired in 2018 (Suman & Patel, 2023). Thus, there are several websites that provide Google PageRank using the algorithm employed by Google to calculate the page rank of websites on Google search result pages. Here, the Google page-rank checker (<https://smallseotools.com/google-pagerank-checker/>) is used to calculate the PageRank of state tourism websites in India. While these proxies are widely used in contemporary webometric research, they may not fully replicate Google's proprietary algorithm. Therefore, results related to PageRank should be interpreted as indicative rather than absolute, reflecting relative website authority rather than exact ranking positions.

Languages

India is home to a diverse array of cultural, religious, and linguistic groups, each speaking a distinct language. India is a multilingual country as a result. There are over 1500 languages in the nation, including dialects, and twenty-two of these are scheduled languages that the Indian constitution has authorized for use as official languages (Suman & Patel, 2023). Visitors to the state tourism websites may come from both domestic and international locations. For the benefit of users worldwide, these websites must offer multilingual content to increase visibility and attract more inbound links. Websites should provide English web pages, as the English language is the most widely used language by all major national and international societies worldwide (Aminpour *et al.*, 2009; Mirica & Toma, 2018).

Social media presence

Social media is quickly emerging as a potent tool for Destination Marketing Organizations (DMOs) to draw tourists and a crucial way for stakeholders like travel agencies to gain clients, thanks to its benefits of low cost, high penetration, and high influence (Liu *et al.*, 2024). Social media helps businesses establish connections with their target audiences. In the current Information and Communication Technology (ICT) era, social networking

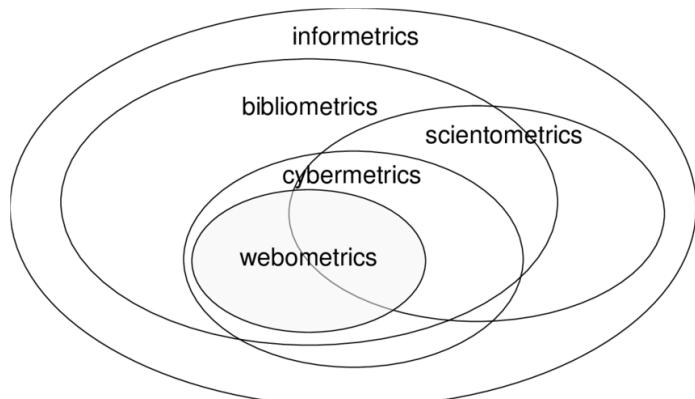


Figure 1: Relationships between the LIS fields of info-/biblio-/sciento-/cyber-/webo-/metrics. Source: (Björneborn & Ingwersen, 2004).

Table 1: Official state tourism website URL links.

State	MOT link	Correct Link
Andhra Pradesh	https://tourism.ap.gov.in/	
Arunachal Pradesh	http://www.arunachaltourism.com/#0	
Assam	https://tourism.assam.gov.in/	https://assamtourism.gov.in/
Bihar	http://www.bihartourism.gov.in	https://tourism.bihar.gov.in/
Chhattisgarh	http://chhattisgarhtourism.cg.gov.in	https://tourism.cgstate.gov.in/
Goa	https://goa-tourism.com/	
Gujarat	https://www.gujarattourism.com/	
Haryana	http://haryanatourism.gov.in/	
Himachal Pradesh	https://himachaltourism.gov.in/	
Jharkhand	https://tourism.jharkhand.gov.in/	
Karnataka	https://www.karnatakaturism.org/	
Kerala	http://www.keralatourism.org	
Madhya Pradesh	http://www.mptourism.com	
Maharashtra	http://www.maharashtraturism.gov.in/	
Manipur	http://www.manipurtourism.gov.in/	
Meghalaya	https://www.meghalayaturism.in/	
Mizoram	https://tourism.mizoram.gov.in	
Nagaland	http://tourismnagaland.com/	https://tourism.nagaland.gov.in/
Odisha	http://www.odishatourism.gov.in	https://odishatourism.gov.in/content/tourism/en.html
Punjab	https://punjabtourism.punjab.gov.in/	
Rajasthan	http://www.tourism.rajasthan.gov.in/	
Sikkim	http://www.sikkimtourism.gov.in/	
Tamil Nadu	https://www.tamilnadutourism.org	https://www.tamilnadutourism.tn.gov.in/
Telangana	https://www.telanganatourism.gov.in/	
Tripura	https://tripuratourism.gov.in	
Uttar Pradesh	https://www.uptourism.gov.in	
Uttarakhand	https://uttarakhandtourism.gov.in/	
West Bengal	https://www.wbtourismgov.in/	https://www.wbtourism.gov.in/

Source: <https://tourism.gov.in/related-links/state-tourism-links>.

sites such as Facebook, Instagram, YouTube, and Twitter have become essential tools for communication. (Mirica & Toma, 2018) asserts that web presence is a crucial factor in increasing internationalization. Social media is used by governments, organizations, universities, and other entities to swiftly and globally contact their audiences without regard to regional boundaries (Suman & Patel, 2023; Oka & Subadra, 2024). Due to the high usage of Facebook, YouTube, Twitter, Instagram, Pinterest, and LinkedIn, the study manually examines the social media presence of the chosen state tourism websites on these platforms.

RESULTS AND FINDINGS

URL analysis

Uniform Resource Locator (URL) is a string of characters that comprises a reference to a resource. URLs are made up of file names, directories, domain names, and the transfer protocol. A domain name is the unique name of a website. It is an easy-to-remember address used to access websites on the World Wide Web (WWW). In the Domain Name System (DNS), a Top-Level Domain (TLD) is the last part that comes immediately after the dot in any URL. For example, in the domain names tourism.com, tourism.org, here the .com and .org are the TLDs (Suman & Patel, 2023). TLDs are divided into two parts, i.e., generic TLDs (gTLDs) and country-code TLDs (ccTLDs). Generic top-level

domains (gTLDs) are the most popular ones. Prior to 2010, there were only seven generic top-level domains (gTLDs), including .com, .gov, .edu, .net, .org, .int, and .mil. However, there are now more than 100 gTLDs available. ccTLDs are used to represent a country. For example, .in for India, .uk for the United Kingdom, and so on. Few websites are using both .com and .org gTLDs. Here, the domain name has been taken into consideration while examining the URLs of the state tourism websites, as shown in Table 2.

The percentage analysis reveals that the twenty-eight state tourism websites used four different domain names, with the most common being .gov.in, which is used by twenty-one websites (75%), followed by .com, which is used by four (14.29%), followed by .org, which is used by two (7.14%), and lastly, .in, which is used by only one (3.57%), state tourism website. This phenomenon accounts for 75% of the state tourism websites using government-authorized portals and affiliations, highlighting India's service and national representation. And since all the state tourism websites represent India, twenty-one of them use the gTLDs and ccTLDs, i.e., .gov.in, while only Meghalaya uses .in alone without any gTLD.

Domain Authority (DA) and Page Authority (PA)

The strategic importance of preserving strong web platforms in these states is reflected in the DA and PA scores. Figure 2 illustrates the comparative analysis of DA and PA scores across all state tourism websites. It reflects Rajasthan has the highest Domain Authority (DA of 68), highlighting its greater prominence and legitimacy. Kerala, with a DA of 62, ranks second, followed by Andhra Pradesh comes in third with a DA of 60. In the PA

rankings, Kerala leads the pack with a PA of 59, demonstrating a well-optimized and significant online presence. With a PA of 57, Rajasthan comes in second, and Gujarat comes in third with a PA of 54. High DA and PA rankings for states like Kerala and Rajasthan indicate a thorough strategy for their online presence and digital credibility.

As DA assesses the strength of entire domains or websites, PA gauges the ranking power of a single website page, but the same algorithm or process is used to calculate both metrics. The ranking of state tourism websites, based on their Domain Authority (DA) and Page Authority (PA) scores. Compared to others, states like Bihar, Goa, and Madhya Pradesh reveals a moderate online presence. While the DA and PA of states like Manipur and Tripura indicate a need for improvement in digital presence. States with similar DA and PA rankings suggest that states might have adopted similar strategies to enhance their digital footprints. Hence, the states' differences in digital presence highlight areas in need of focus to promote and increase online visibility. Overall, the DA and PA scores reveal a clear disparity in digital visibility among states, indicating that while some states follow robust SEO and branding strategies, others require significant improvement to enhance their online competitiveness.

Table 2: Classification of the state tourism websites by the domain extension.

Domain	No. of websites	Percentage
.gov.in	21	75.00%
.com	4	14.29%
.in	1	3.57%
.org	2	7.14%
Total	28	100%

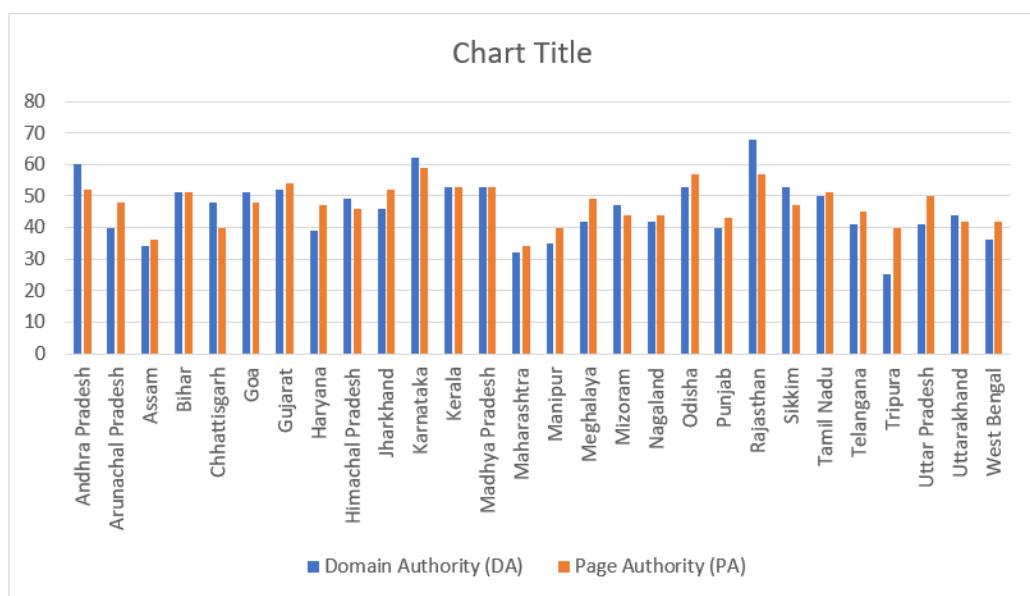


Figure 2: State tourism websites with DA and PA score. Source: Author's own.

Simple Web Impact Factor (SWIF)

SWIF data for the state tourism websites of India, highlighting the website's impact and visibility. SWIF is calculated by the ratio of Linked Web Pages (LWP), which includes Internal Links and External Links, to the total Number of Web Pages (NWP). It denotes the website's impact based on the proportion of linked pages. Table 3 presents the Simple Web Impact Factor (SWIF) data for India's state tourism websites, highlighting the impact and visibility of these websites. SWIF, calculated by the ratio of Linked web Pages (LWP) to total number of web pages (NWP), denotes the website's impact based on the proportion of linked pages.

States like Sikkim, Jharkhand, Manipur, Arunachal Pradesh, and Assam ranked high in the SWIF rankings due to a smaller NWP and a high link count. While Kerala and Rajasthan, despite having high DA and PA, have very low SWIF ranks, this suggests underutilization of hyperlinks. Whereas states like Telangana, Bihar, Gujarat, Goa, and Tamil Nadu exhibit balanced SWIF ranks, indicating moderate optimization with room for improvement through more effective interlinking strategies. Simultaneously, Madhya Pradesh, with over 18 million NWP, has the lowest SWIF rank, highlighting limited interlinks and inefficient web structure. Hence, SWIF values provide a valuable digital representation of the internal and external links on websites.

Correlation Analysis

To enhance the analytical rigor of the study, a correlation analysis was conducted to examine the relationship among key webometric indicators, as shown in Table 4. First, the correlation analysis between DA and PA scores was conducted, which reveals a strong positive correlation coefficient ($r = 0.81$), indicating a close relationship between the two variables. This analysis suggests that state tourism websites with well-established domain reputation also maintain consistent SEO across their internal pages. The alignment between DA and PA reflects effective optimization strategies and a high-quality structure, as observed in high-performing states like Kerala, Rajasthan, and Punjab. On

the other hand, states with weak DA and PA, such as Manipur and Tripura, may require improved linkage and keyword optimization to strengthen the internal authority signal.

Further, the authors investigated the correlation between DA and SWIF, which was calculated, and it shows a weak and negative correlation ($r = -0.15$), suggesting that SWIF does not consistently contribute to the overall authority of state tourism websites. The findings suggest that the mere quantity of links is insufficient for improving domain credibility. The states with high DA, such as Kerala and Rajasthan, appear to prioritize link quality and relevance over volume. Conversely, states with low DA, such as Sikkim and Manipur, display inflated SWIF scores likely due to excessive or no contextual backlinks, which may not enhance authority from an SEO perspective. Similarly, the correlation between PA and SWIF was calculated, which also shows a negative and weak correlation ($r = -0.185$). This suggests that increased backlinks do not consistently improve individual page authority, possibly due to the presence of low-quality or low-quality inbound links. Hence, the correlation results confirm that DA and PA are closely aligned, while SWIF behaves independently, indicating that the website structure and link quality alone cannot predict digital autonomy.

Google page rank

The vast number of websites being indexed by search engines, coupled with growing competition for the top search results, necessitated the development of algorithms and programs by search engines to qualify search results and provide users with relevant content for their queries (Almadhoun & Malim, 2025). On the other hand, developers are vying for the highest rankings in Search Engine Result Pages (SERPs). These strategies comprise what is now known as "Search Engine Optimization" (SEO) (Ziakis *et al.*, 2019). As shown in Figure 3, Rajasthan and Tamil Nadu stand out with the highest Page Rank of 6. This suggests a robust online presence and the capacity of their websites to garner substantial attention from reliable sources. Furthermore, states such as Andhra Pradesh, Arunachal Pradesh, Goa,

Table 3: NWP- No. of web pages, IL-Internal Link, EL- External Link, TL-Total Link, SWIF- Simple Web Impact Factor.

State	NWP(A)	LWP(B)			SWIF(B/A)	Rank
		IL	EL	TL		
Andhra Pradesh	423	53	11	64	0.151300	22
Arunachal Pradesh	162	404	89	493	3.04320	4
Assam	191	397	100	497	2.602094	5
Bihar	878	450	50	500	0.569476	14
Chhattisgarh	154	36	8	44	0.285714	21
Goa	1530	447	49	496	0.324183	20
Gujarat	1330	467	31	498	0.374436	19
Haryana	572	455	33	488	0.853146	11
Himachal Pradesh	260	449	51	500	1.923076	6

State	NWP(A)	LWP(B)			SWIF(B/A)	Rank
		IL	EL	TL		
Jharkhand	81	435	61	496	6.123456	2
Karnataka	4310	494	6	500	0.116009	23
Kerala	67700	477	23	500	0.007385	25
Madhya Pradesh	18800000	437	58	495	0.000026	28
Maharashtra	513	445	53	498	0.970760	10
Manipur	115	438	61	499	4.339130	3
Meghalaya	790	466	30	496	0.627848	13
Mizoram	416	433	67	500	1.201923	8
Nagaland	1010	335	44	379	0.375247	18
Odisha	634	442	58	500	0.788643	12
Punjab	50300	413	84	497	0.009880	24
Rajasthan	3410000	466	33	499	0.000146	27
Sikkim	8	474	25	499	62.375	1
Tamil Nadu	1240	456	22	478	0.385483	17
Telangana	940	427	57	484	0.514893	16
Tripura	488	438	62	500	1.02459	9
Uttar Pradesh	287	472	28	500	1.742160	7
Uttarakhand	1060	50	22	72	0.006792	26
West Bengal	920	463	27	490	0.532608	15

Table 4: Correlation Matrix.

Relationship	Correlation(r)	Strength	Direction	Interpretation
DA-PA	0.809	Strong	Positive	States with higher Domain Authority also show higher Page Authority, strong alignment between domain credibility and internal page optimization.
DA-SWIF	-0.153	Weak	Negative	High backlink counts (SWIF) do not necessarily contribute to higher domain authority quality of backlinks likely matters more than quantity.
PA-SWIF	-0.185	Weak	Negative	Increased backlinks do not consistently improve individual page authority, possibly due to low-quality or irrelevant inbound links.

Gujarat, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Punjab, and Uttarakhand maintain a neutral page rank of 5, indicating a strong digital presence; however, their websites achieve moderate visibility and influence. States like Assam, Chandigarh, Haryana, Mizoram, Sikkim, Telangana, Tripura, Uttar Pradesh, and West Bengal all have a Page Rank of 4. While these states demonstrate a decent level of online authority, they have opportunities to enhance their digital presence through improved content strategies, effective link-building efforts, and optimized techniques.

Factors that impact a website's ranking, with the majority of references citing backlink quality and quantity, social media support, title tag keywords, website structure, loading speed,

domain age, and keyword density (Ziakas *et al.*, 2019). Hence, the state tourism website, with a page rank of 4 or below, suggests that its visibility might be lower due to fewer high-quality backlinks, outdated content, or a limited digital presence. These states may need significant improvements in their websites, SEO strategies, and link-building efforts. By focusing on improving backlinks, enhancing website content, and optimizing for search engines, the lower-ranked states can improve their digital presence and authority.

Language

Various significant insights into the linguistic diversity of official state tourist websites can be gained from analyzing language

preferences across different states, as illustrated in Figure 3. According to the study, English is the most widely used language in the majority of states, indicating its status as a commonly utilized communication medium for public access to information and government. This is consistent with the broader national trend of using English as a bridge language for various linguistic groups (Mishra, 2024). Nonetheless, a bilingual approach to digital communication is demonstrated by certain states. To ensure accessibility to a wider audience, especially native Hindi speakers, Bihar, Chandigarh, and Uttar Pradesh, for example, have adopted both Hindi and English.

In a similar vein, Rajasthan uses both Hindi and English, which can be attributed to its efforts to cater to both national and international stakeholders. A notable exception is Kerala, which emphasizes linguistic diversity, with its website supporting ten Indian and twelve international languages. Similarly, Punjab is the most linguistically diverse state, with a tourism website that supports 230 languages. These results underscore the need for a more inclusive digital communication approach tailored to audiences in both local and international markets. In addition to English, some states exhibit a regional language focus. To maintain native speakers' access to digital content, Karnataka incorporates the Kannada language, while Tamil Nadu incorporates the Tamil language. This demonstrates a dedication to regional language representation. The findings underscore the importance of language inclusion in digital governance. Particularly in areas with significant linguistic diversity, states that allow many languages are better positioned to improve public accessibility, boost user engagement, and promote inclusivity. While the integration of regional languages demonstrates a commitment to cultural and linguistic preservation, the preference for English as the primary language suggests an effort to conform to global communication standards.

Social Media Presence of State Tourism Websites

As information technology has advanced, social media has taken center stage in helping travelers connect with travel destinations and obtain information about them (Liu *et al.*, 2024). As shown in Figure 4, the heatmap analysis and visualization. Social media, as a tool for promoting tourism, offers states and destinations an opportunity to showcase their cultural, natural, and historical assets to a global audience. This study highlights the disparities in adoption and effectiveness among states. Since Facebook, YouTube, Twitter, Instagram, LinkedIn, Pinterest, WhatsApp, and other social media platforms are widely used. The study considers the social media presence of these platforms on the state tourism websites.

Figure 4 displays the heat map of the social media presence on Indian state tourism websites across major digital platforms. A heat map is a graphical representation of data that simultaneously reveals the hierarchical cluster structure of both rows and columns in a data matrix (Guo *et al.*, 2020; Oike *et al.*, 2019). Different colors are used to represent the magnitude of specific monitoring values. Dark or saturated colors reflect a strong presence, while light or pale shades indicate limited or absent usage. The visual differences help reveal cross-state patterns, such as which social media platforms are widely adopted and where a significant digital gap exists. The state tourism websites reveal significant variations in platform engagement and strategic utilization.

With a presence on twenty-seven state tourism websites, Twitter remains the most popular medium. Leading states on Twitter, which are mostly used for institutional communication and real-time updates, are Gujarat (1.7 million), Telangana (1.1 million), Kerala (1.9 million), and Odisha (1.2 million). These figures indicate that Twitter has been successfully positioned as a reliable source for updates, travel-related initiatives, and

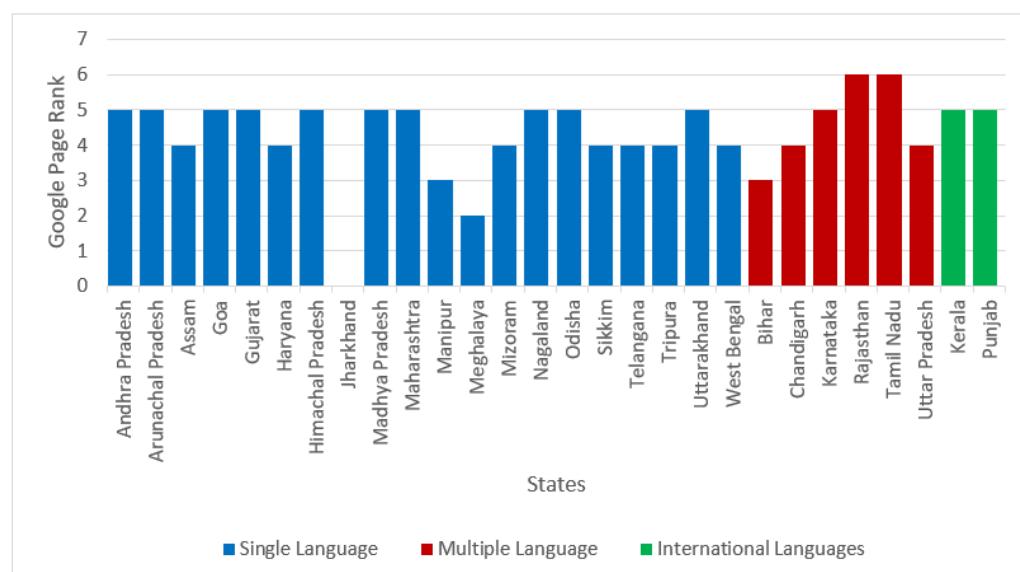


Figure 3: Language and Google page rank. Source: Author's own.

stakeholder interaction. The relatively few followers in states like Manipur and Mizoram may indicate underutilization of the platform or a lower level of Twitter penetration among its target consumers. This is closely followed by Facebook and Instagram, with the presence of each on twenty-six state tourism websites.

Facebook's significant reach is evident in states like Kerala (5.1 million), Gujarat (2.4 million), Madhya Pradesh (2.3 million), Karnataka (2.2 million), and Maharashtra (1 million), which demonstrate persistent audience engagement and purposeful investment in content marketing. These numbers reflect existing brand equity, which is frequently enhanced by regular posting and gripping visual storytelling. Whereas, on Instagram, Karnataka seems to have the largest number of followers (4.2M), followed by Kerala (777k) and Maharashtra (830k). This implies that to appeal to younger audiences, these states have effectively adopted influencer partnerships, visual storytelling, and short-form video content.

In terms of long-form content and virtual travel, YouTube, with the presence on 25 state tourism websites, is widely used by Madhya Pradesh (104k), Maharashtra (160k), and Kerala (417k). These states appear to be utilizing immersive video storytelling to showcase their festivals, culture, and the beauty of the natural world. States that have a diverse presence across major social media

platforms, such as Kerala, Madhya Pradesh, and Maharashtra, demonstrate a thorough understanding of multi-channel tourist marketing by striking a balance between consumer-centric content and institutional voice. But northeastern states, such as Mizoram, Nagaland, Manipur, and Sikkim, on the other hand, typically exhibit lower levels of involvement. This could be due to a lack of strategic prioritization, systemic infrastructure limitations, or inadequate digital literacy. In addition to these major social media platforms, several state tourism websites also integrate less widely used platforms.

Social media platforms such as LinkedIn are available in only four states: Kerala, Madhya Pradesh, Rajasthan, Tamil Nadu, and Uttarakhand. Additionally, Pinterest, which is only available in states such as Bihar, Goa, Kerala, Rajasthan, Odisha, and Uttarakhand, states that these states utilize alternative media tools to expand its reach. States such as Rajasthan incorporate Telegram and Vimeo, whereas Uttar Pradesh and Uttarakhand also utilize the nation's own microblogging platform, Koo, which reflects their efforts to diversify their digital communication strategies beyond mainstream social media. The perception of the destination is being somewhat reshaped by the increasing number of tourists using social media to share their experiences, leave comments, and express their opinions (Molinillo *et al.*, 2018).

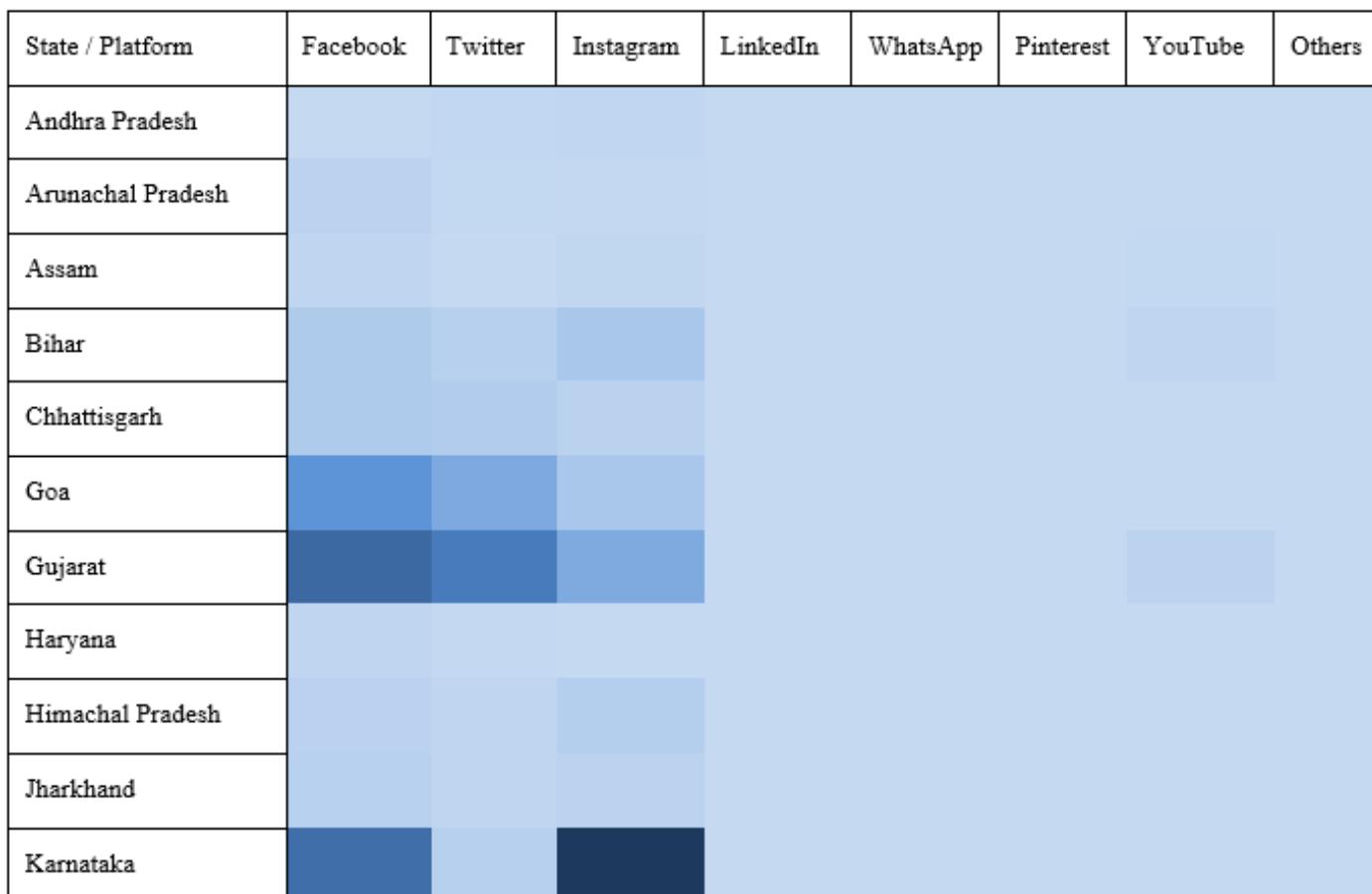




Figure 4: Heat Map of Social Media Presence of state tourism websites. Source: Author's own.

Enabling a comparison across eight social media platforms on twenty-eight states' tourism websites, the heatmap provides a nuanced understanding of digital engagement and highlights digital gaps in state tourism website communication. It reveals a fragmented digital environment, with some top states exhibiting comprehensive approaches, while others are underrepresented

on social media platforms. The heat map visualization and findings support the argument by (Mirica & Toma, 2018), who emphasized that in the digital age, integrating audience-specific content design, data-driven social media management, and cross-platform communication will be essential for inclusive and long-term tourism growth.

DISCUSSION

In the evolving landscape of digitalization in governance and tourism, the state tourism websites play a crucial role in shaping public perceptions and preferences. The webometric analysis of Indian state tourist websites demonstrates the effectiveness of Search Engine Optimization (SEO) as well as their digital/web presence and reach. It represents a crucial dimension of efforts for promoting digital tourism. The majority of these websites function under the `gov.in` domain, indicating government legitimacy, according to domain analysis results. Domains like `.org` and `.com` are utilized by states such as Goa, Kerala, and Karnataka, indicating varying degrees of integration with the government's digital infrastructure.

To further highlight the glaring differences in digital efficacy, the study incorporated various other metrics, such as Domain Authority (DA) and Page Authority (PA), as well as Simple Web Impact Factor (SWIF) analysis, to evaluate website impact and visibility. States like Rajasthan and Kerala have high rankings in terms of DA and PA, which is indicative of both high-quality internal and external backlinks, as well as search engine exposure. However, states with low DA and PA, such as Manipur and Tripura, indicated a lackluster online presence and show a need for optimization efforts. The SWIF rank highlights disparities by calculating the ratio of Linked Web Pages (LWP) to the total Number of Web Pages (NWP). For example, the SWIF ranks of Andhra Pradesh, Jharkhand, and Uttarakhand are low compared to other states, despite having high LWP.

The empirical correlation results confirm that domain and page authority coherence have a significant influence on website visibility. The correlation matrix between DA, PA, and SWIF reveals a degree of association. A strong positive correlation between DA and PA indicates that the state tourism websites with higher domain credibility also maintain high page optimization and consistent SEO strategies. This aligns with Noruzi's (2006) argument that reputation is more influenced by the quality of links than by the quantity of links. In contrast, the correlation between DA, PA, and SWIF reflect a weak and negative correlation. It suggests that the increased number of backlinks does not necessarily enhance website authority. This implies that the quality and contextual relevance of inbound links may be more influential than their quantity.

States such as Kerala, Rajasthan, and Punjab exhibit high DA and PA scores, indicating that they prioritize link quality and optimized internal structure. Kerala's 'Human by Nature' and Rajasthan's 'Padharo Mhare Desh' campaign have integrated SEO to enhance destination visibility. Additionally, both states have invested significantly in digital infrastructure and policy support through dedicated e-governance departments and public-private partnerships. Kerala ranks among the highest in India's digital literacy index, while Rajasthan's tourism

policy (2020–2025) emphasizes online branding and visitor data analytics. These socio-technical initiatives collectively explain their superior web authority metrics. In contrast, states like Manipur, Tripura, and Sikkim show irregular SWIF patterns, possibly due to a combination of infra and governance limitations. The low-performing states also have geographical limitations and weaker broadband connectivity, which constrain their development and maintenance of their digital presence. Hence, a strategic digital governance and well-thought-out socio-economic development plan is required to improve their website metrics and promote tourism.

A conceptual tool for assessing a website's importance based on user involvement and hyperlink structure is Google PageRank. Among the 28 states under study, Rajasthan and Tamil Nadu emerged as the states with the highest page rank of 6 out of 10, which reflects their consistent content updates, extensive backlinks, and strong SEO. Many states, such as Andhra, Gujarat, Kerala, Maharashtra, and Karnataka, maintain a PageRank of 5, indicating that their SEO tactics and user engagement are balanced yet continue to grow. In addition to visibility and web presence, the study examined language variety as a key determinant of digital inclusion (Vasylieva *et al.*, 2021). English remains the predominant language used by nearly all states, reflecting its functional role as a lingua franca in governance and digital communication (O'Regan, 2014; Hult, 2017; Salomone, 2022). Notably, states like Punjab are pioneering a multilingual approach, with a staggering 230 languages represented on their websites, indicating a strategic commitment to accessibility across diverse linguistic groups. States like Tamil Nadu, Karnataka, Bihar, Rajasthan, Uttar Pradesh, and others, following a bilingual approach, can incorporate this multilingual approach for better digital inclusion.

Social media has developed into a digital platform for promoting and presenting travel experiences. This study examines the presence of 28 state tourism websites on popular social media platforms, including Instagram, YouTube, LinkedIn, Pinterest, WhatsApp, Facebook (Meta), Twitter (X), and others. With over 3.7 billion users as of 2023, Facebook is the most popular platform in the world (Gonzalez *et al.*, 2017). However, when it comes to organizational presence, Twitter is the most often used medium, closely followed by Facebook and Instagram, while other platforms are still underutilized. The heat map shows, states like Kerala, Gujarat, Rajasthan, and Karnataka lead the way in cross-platform engagement, boasting high follower counts and viewership. However, emerging domestic tourism destinations such as those in the Northeastern states demonstrate poor engagement, suggesting the need for a more robust digital infrastructure. The argument is supported by Biswas & Rai (2024), who also assert the need for digital inclusive infrastructure, especially in northeastern states, to effectively address the digital gap.

Overall, the findings indicate that integrating multilingual content, continually optimizing search engines, operations, and maintaining cross-platform digital engagement are in a better state in terms of attracting and informing viewers. To improve their online visibility, states that are lower in the rankings and metrics should leverage their multilingual qualities, engage in proactive SEO, and expand their social media presence across multiple channels (Biswas & Rai, 2024). A key component of improving consumer satisfaction may be the use of chatbots in service experiences by travel agencies and Destination Management Organizations (DMOs). Xanthakis *et al.*, (2024), also asserts that integrating chatbots into existing digital marketing tools, such as websites, represents a promising avenue for business growth.

IMPLICATIONS

Theoretical

This study resides at the intersection of informetrics and e-tourism governance, as it integrates webometric indicators with frameworks of destination competitiveness, digital inclusion, and public value. The accessibility and visibility of government tourist websites are vital in determining the perception of a location in the current era of digital transformation. The study supports the idea that a well-maintained website enhances engagement, legitimacy, and trust by demonstrating that web-based indicators, such as SWIF, DA, and PA, are reliable tools for evaluating a state's digital performance and presence. The study also supports the website's accessibility, content structure, and language inclusion, aligning with the public value theory, which offers innovative ways to plan, design, and implement digital government initiatives for digital governance (Twizeyimana & Andersson, 2019; Panagiotopoulos *et al.*, 2019). Additionally, the findings regarding the limited use of regional language support the digital inclusion theory, demonstrating that bilingual or regional language strategies can create accessibility barriers (Sharp, 2022). According to the study, SEO can play a crucial role in ensuring reliability and user engagement on digital platforms, as well as influencing public information-seeking behavior. Additionally, the study aligns with UNESCO's digital inclusion goals to promote access to reliable information, enabling citizens to make informed decisions and hold their governments accountable (UNESCO, 2025). Higher levels of digital inclusion are reflected in states like Kerala, Rajasthan, and Gujarat, which offer content in multiple languages and maintain active social media channels. These states also have greater webometric indicators.

Practical

The study emphasizes the importance of establishing centralized guidelines for state tourism departments to standardize website development and SEO practices, thereby improving accessibility, visibility, and engagement across state tourism websites. The disparity in social media presence across states suggests the necessity for a strategic framework that utilizes platform-specific

content to reach diverse demographics. Additionally, the study recommends incorporating multilingual applications into website portals, as seen in a few states, such as Punjab and Kerala, which will enhance user accessibility and inclusion for both domestic and global audiences (Lonardi, 2022; Hazaee *et al.*, 2024).

According to the study, digital visibility is consistently higher in states with higher DA and PA, and a huge social media reach. By collaborating with travel bloggers and influencers to create targeted content and improve search engine optimization, states with lower rankings and scores can enhance their online presence. Tracking digital performance and updating web content can be facilitated by monitoring and assessing state tourism websites. The study's application aligns with the objectives of the National Digital Travel Mission (NDTM), which aims to leverage the digital ecosystem of the tourism sector.

CONCLUSION AND FUTURE RESEARCH

The study's conclusions are consistent with broader theoretical perspectives that link digital performance to destination competitiveness. States with high DA, PA, and social media engagement scores, including Kerala, Rajasthan, and Gujarat, also exhibit traits linked to greater digital inclusion and destination competitiveness. The principles of eWOM theory and Digital Inclusion Theory are reinforced by their strong hyperlink structures, multilingual accessibility, and active social media channels, which suggest that higher webometric scores lead to increased online visibility, stronger destination image formation, and improved public value delivery.

The study presents a comprehensive webometric analysis of state tourism websites, revealing notable disparities in digital infrastructure, visibility as measured by several metrics, and social media platform engagement. A few states, including Manipur, Tripura, and Mizoram, have low digital footprints, indicating the need for significant improvements in their state tourism digital infrastructure. On the other hand, many states, including Rajasthan, Kerala, Madhya Pradesh, and Punjab, demonstrate their digital strength across various metrics. The vast digital infrastructure, improved access to ICTs, and citizens' enhanced digital skills are the primary reasons why digital inclusion in industrialized nations is more advanced than in developing ones (Alhassan & Adam, 2021).

Therefore, to promote and enhance digital inclusion for tourism development, developing nations like India must focus on improving their digital infrastructure. Future research could investigate how multilingual digital accessibility impacts citizen satisfaction, participation, digital literacy, and the efficiency of information dissemination across different states. Also, future research could further deepen theoretical integration through structural modeling or visitor-behavior analysis to examine how webometric indicators directly influence tourist engagement and destination choice. To close the gap in digital accessibility

and visibility, future policy suggestions may also emphasize the establishment of unified standards and strategic frameworks for underrepresented regions. In conclusion, the study reaffirms that a state's capacity to market and promote tourism in the digital age is closely tied to its online presence and multilingual accessibility. Therefore, a unified strategy, combined with effective SEO tactics, will be beneficial in creating a competitive digital tourism ecosystem.

REFERENCES

Agrawal, G., Dumka, A., Singh, M., & Bijalwan, A. (2022). Assessing Usability and Accessibility of Indian Tourism Websites for the Visually Impaired. *Journal of Sensors*, 2022, 4433013. DOI: 10.1155/2022/4433013.

Ahassan, M. D., & Adam, I. O. (2021). The effects of digital inclusion and ICT access on the quality of life: A global perspective. *Technology in Society*, 64, 101511. DOI: 10.1016/J.TECHSOC.2020.101511.

Almadhoun, M. D., & Malim, N. H. A. H. (2025). Effects of using multi-category web pages on the rank estimation of the Google search engine results page. *Web Intelligence*, 23(1), 39–55. DOI: 10.3233/WEB-230239.

Aminpour, F., Kabiri, P., Otroj, Z., & Keshtkar, A. A. (2009). Webometric analysis of Iranian universities of medical sciences. *Scientometrics*, 80(1), 253–264. DOI: 10.1007/s11192-008-2059-y.

Anubhaw K. Suman, & Patel, M. (2023). Webometric Analysis of Websites of Central Universities of Eastern India: A Study. In *LIS Today* (Vol. 9, Issue 2). <https://moz.com/link-explorer>

Pal, A., & Kar, S. (2018). Webometric Mapping of Tourism Sites in India. <http://digitalcommons.unl.edu/libphilprach> DOI: 10.1957

Attallah, N. F. (2011). Evaluating Destination Tourism Websites with Application on Egypt. www.dratte.gr

Biswas, T., & Rai, A. (2024). Medical travel from north-east India: an assessment of domestic medical tourists' travels profile and experience. *Asian Geographer*, 41(1), 95–119. DOI: 10.1080/10225706.2022.2098506.

Björneborn, L., & Ingwersen, P. (2004). Toward a basic framework for webometrics. *Journal of the American Society for Information Science and Technology*, 55(14), 1216–1227. DOI: 10.1002/ASI.20077

Chakravarty, R., & Wasan, S. (2015). Webometric analysis of library websites of higher educational institutes (HEIs) of India: A study through google search engine. *DESIDOC Journal of Library and Information Technology*, 35(5), 325–329. DOI: 10.1042/djlit.35.5.8788.

Chakravarty, S. (2024). E-Tourism's Trends and Their Effects on Indian Tourism Industry. *Future Tourism Trends Volume 2*, 97–111. DOI: 10.1108/978-1-83753-970-3 20241006.

Choi, S., Lehto, X. Y., & Oleary, J. T. (2007). What does the consumer want from a DMO website? A study of US and Canadian tourists' perspectives. *International Journal of Tourism Research*, 9(2), 59–72. DOI: 10.1002/JTR.594.

Das, S., Das, A. K., Awasthi, S., & Tripathi, M. (2024). Comparison of Open Science Portals of India: Web Accessibility Study. *Collection and Curation*, 43(3), 94–102. DOI: 10.1108/CC-12-2023-0045.

De Rosa, A. S., Bocci, E., & Dryjanska, L. (2019). Social representations of the European capitals and destination e-branding via multi-channel web communication. *Journal of Destination Marketing & Management*, 11, 150–165. DOI: 10.1016/J.JDMM.2017.05.004.

Dhar, P., & Gayan, M. A. (2022). A Webometric Study of Selected International Library Association Websites: An Evaluative Study. *DESIDOC Journal of Library and Information Technology*, 42(3), 185–190. DOI: 10.14429/djlit42.3.17777.

Digiorgio, V. (2016). Impact of promotional tools on reservation channels management: a descriptive model of Italian accommodation facilities. *Information Technology and Tourism*, 16(4), 347–373. DOI: 10.1007/S40558-016-0069-9.

Evans, M. P. (2007). Analysing Google rankings through search engine optimization data. *Internet Research*, 17(1), 21–37. DOI: 10.1108/10662240710730470.

Gonzalez, R. S., Amer, S. M., Yahia, N. Ben, Costa, F. D. A., Noatay, M., Qiao, J. H., Rosado, F. G., Rosen, Y., Sedassari, B. T., Yantiss, R. K., & Gardner, J. M. (2017). Facebook Discussion Groups Provide a Robust Worldwide Platform for Free Pathology Education. *Archives of Pathology & Laboratory Medicine*, 141(5), 690–695. DOI: 10.5858/ARPA.2016-0369-OA.

Haneef, S. K. (2017). An exploratory study of the digital marketing trends in Dubai tourism industry. *Journal of Tourism Challenges and Trends*, 10(1), 25–44.

Hazzaea, A. N., Al-Sofi, B. B. M. A., & Alfaifi, A. (2024). Tourism representation and strategies on public signs: linguistic landscape of a Saudi southern tourist destination. *International Journal of Tourism Cities*, 10(1), 302–323. DOI: 10.1108/IJTC-07-2023-0130.

Iványi, T. (2021). Analysis of Sources for Information Gathering before Visiting a Festival in the Case of Generation Z. *Periodica Polytechnica Social and Management Sciences*, 29(2), 196–208. DOI: 10.3311/PPSO.15947.

Jiménez-Barreto, J., Rubio, N., Campo, S., & Molinillo, S. (2020). Linking the online destination brand experience and brand credibility with tourists' behavioral intentions toward a destination. *Tourism Management*, 79, 104101. DOI: 10.1016/J.TOURMAN.2020.104101.

Kaur, M., & Nitasha Sharma. (2015). State tourism websites in India. <https://www.researchgate.net/publication/275581749>

Khan, B., & Mondal, H. (2025). Library and Information Science Journals Enlisted in UGC-CARE: A Webometric Analysis. *DESIDOC Journal of Library and Information Technology*, 45(2), 150–156. DOI: 10.14429/djlit.2025.

Kim, S. E., Lee, K. Y., Shin, S. Il, & Yang, S. B. (2017). Effects of tourism information quality in social media on destination image formation: The case of Sina Weibo. *Information & Management*, 54(6), 687–702. DOI: 10.1016/J.IIM.2017.02.009.

Labanauskaitė, D., Fiore, M., & Stašys, R. (2020). Use of E-marketing tools as communication management in the tourism industry. *Tourism Management Perspectives*, 34, 100652. DOI: 10.1016/J.TMP.2020.100652.

Leeladharan, M., & Shekhar, P. (2019). Institutes of Hotel Management (IHMs) under Ministry of Tourism of India: A Webometric Analysis. <https://digitalcommons.unl.edu/libphilprac>

Li, X., & Wang, Y. (2010). Evaluating the effectiveness of destination marketing organisations' websites: evidence from China. *International Journal of Tourism Research*, 12(5), 536–549. DOI: 10.1002/JTR.772.

Liu, J., Wang, C., & Zhang, T. C. (2024). Exploring social media affordances in tourist destination image formation: A study on China's rural tourism destination. *Tourism Management*, 101, 104843. DOI: 10.1016/J.TOURMAN.2023.104843.

Lonardi, S. (2022). Minority languages and tourism: a literature review. *Journal of Heritage Tourism*, 17(3), 342–356. DOI: 10.1080/1743873X.2021.2012183.

Lončarić, D., Bašan, L., & Marković, M. G. (2013). Importance of DMO websites in tourist destination selection. In 23rd CROMAR Congress: Marketing in a dynamic Environment: Academic and practical insights (pp. 373–386). <https://researchgate.net/publication/262565804>.

Maharaj, N., Parmar, R., & Tandel, R. (2021). Webpage Analysis of Indian Institute of Management (IIM) and Indian Institute of Technology (IIT): A Webometric Study. *Library Philosophy and Practice*, 6219, 1–28.

Marine-Roig, E. (2022). Content Analysis of Online Travel Reviews. *Handbook of E-Tourism*, 557–582. DOI: 10.1007/978-3-030-48652-5_31.

Mirica, A., & Toma, I. E. (2018). Web visibility of Romanian universities: An analysis based on website analytics and social media data. In 4th International Conference on Higher Education Advances (HEAD'18) (pp. 571–578). Editorial Universitat Politècnica de València. DOI: 10.4995/head18.2018.8036.

Mishra, S. (2024). The convergence of policy, commerce, and identity in the linguistic landscape of an Indian city. *Journal of Multilingual and Multicultural Development*. DOI: 10.1080/01434632.2024.2345274.

Molinillo, S., Liébana-Cabanillas, F., Anaya-Sánchez, R., & Buhalis, D. (2018). DMO online platforms: Image and intention to visit. *Tourism Management*, 65, 116–130. DOI: 10.1016/J.TOURMAN.2017.09.021.

Muniyasamy, M., Nanthakumar, M., & Kumar, K. S. (2023). Indian Tourism Websites with Special Reference to the Selected States: A Webometrics. *Innovare Journal of Education*, 12–17. DOI: 10.22159/IJOE.2023V11I1.46639.

Nandi, S., Das, A. K., & Mandal, S. (2023). Web Presence of National Level Divyangjan Institutes of India: A Webometric Study. *Journal of Indian Library Association*, 59(2).

Noruzi, A. (2006). The Web Impact Factor: A Critical Review. *Electronic Library*, 24(4), 490–500. DOI: 10.1108/02640470610689188

O'Regan, J. P. (2014). English as a Lingua Franca: An Immanent Critique. *Applied Linguistics*, 35(5), 533–552. DOI: 10.1093/APPLIN/AMT045

Oka, I. M. D., & Subadra, I. N. (2024). Digital marketing for a sustainable tourism village in Bali: A mixed-methods study. *Journal of Infrastructure, Policy and Development*, 8(7). DOI: 10.24294/jipd.v8i7.3726

Panagiotopoulos, P., Klievink, B., & Cordella, A. (2019). Public value creation in digital government. *Government Information Quarterly*, 36(4), 101421. DOI: 10.1016/J.GIQ.2019.101421

Patil, V. (2011). Narrating political history about contested space. *Tourism Websites of India's Northeast. Annals of Tourism Research*, 38(3), 989–1008. DOI: 10.1016/j.a nnals.2011.01.018

Pulamte, J. L., & Ramasamy, R. (2024). A Comparative Study of State Tourism Websites with Special Reference to North Eastern States of India. *SSRN Electronic Journal*. DOI: 10.2139/SSRN.5012145

Ritchie, J. B., & Crouch, G. I. (2003). The Competitive Destination: A Sustainable Tourism Perspective. CABI. DOI: 10.1079/9780851996646.0000

Rizky, R. M., Kusdi, R., & Yusri, A. (2017). The impact of e-WOM on destination image, attitude toward destination, and travel intention. *Russian Journal of Agricultural and Socio-Economic Sciences*, 61(1), 94–104. DOI: 10.18551/RJOAS.2017-01.09

Salomone, R. C. (2022). The rise of English: global politics and the power of language. [471.https://books.google.com/books/about/The_Rise_of_English.html?id=_gNREAQAQBAJ](https://books.google.com/books/about/The_Rise_of_English.html?id=_gNREAQAQBAJ)

Şengel, Ü., & İşkin, M. (2024). Intellectual structure on artificial intelligence studies in tourism and hospitality: a bibliometric analysis. *Worldwide Hospitality and Tourism Themes*, 16(2), 202–215. DOI: 10.1108/WHATT-03-2024-0070/FULL/PDF

Sharp, M. (2022). Revisiting digital inclusion: A survey of theory, measurement and recent research. DOI: 10.35489/BSG-DP-WP_2022/04

Singh, R., & Sibi, P. S. (2021). Accessibility and readability of website: An analysis of Online Travel Aggregators (OTAs) of India. *E-Review of Tourism Research*, 18(5), 692–716.

Symes, A. (1999). Creating public value: Strategic management in government (Cambridge, MA: Harvard University Press) by Mark Moore. *International Public Management Journal*, 2(1), 158–167. DOI: 10.1016/S1096-7494(00)87438-3

Thanuskodi, S., & Naseehath, S. (2016). A webometric analysis of medical tourism websites in Kerala. *Library Philosophy and Practice*, 2016, 1–19.

Thiruppathi, K., & Durai Muthumani, G. (2024). Ranking of Open Education Resources Websites: A Webometric Analysis. www.oercommons.org

Twizeyimana, J. D., & Andersson, A. (2019). The public value of E-Government – A literature review. *Government Information Quarterly*, 36(2), 167–178. DOI: 10.1016/J.GIQ.2019.01.001

Universal access to information and digital inclusion | UNESCO. (n.d.). Retrieved May 24, 2025, from <https://www.unesco.org/en/access-information-digital-inclusion>

Vasylieva, T. A., Kryklii, O. A., & Petrushenko, Y. M. (2021). Digital Inclusion of Population: Economic, Social, Educational Determinants in the COVID-19 Era. <https://essuir.sumdu.edu.ua/handle/123456789/86161>

Vyas, C. (2019). Evaluating state tourism websites using Search Engine Optimization tools. *Tourism Management*, 73, 64–70. DOI: 10.1016/j.tourman.2019.01.019.

Warschauer, M. (2003). Technology and Social Inclusion. *Technology and Social Inclusion*. DOI: 10.7551/MITPRESS/6699.001.0001.

Xanthakis, M., Simatou, A., Antonopoulos, N., Kanavos, A., & Mylonas, N. (2024). Alternative Forms of Tourism: A Comparative Study of Website Effectiveness in Promoting UNESCO Global Geoparks and International Dark Sky Parks. *Sustainability* 2024, Vol. 16, Page 864, 16(2), 864. DOI: 10.3390/SU16020864.

Yadav, A., Singh, R., Yadav, B., & Srivastava, P. R. (2024). Webometric Study of National Institute of Technology (NIT) Websites in India. <https://www.researchgate.net/profile/Abhishek-Yadav-176/publication/378862929>

Ziakis, C., Vlachopoulou, M., Kyrokoudis, T., & Karagkiozidou, M. (2019). Important factors for improving Google search rank. *Future Internet*, 11(2), 32. DOI: 10.3390/FI11020032.

Cite this article: Singh E, Sibi PS. Webometric Analysis of Indian State Tourism Websites. *Journal of Data Science, Informetrics, and Citation Studies*. 2025;4(3):427-441.