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Webometric Analysis of Maritime Training Institutes Affiliated to Indian Maritime University (IMU) in India

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ABSTRACT

Purpose: *The study aimed to assess the online visibility of Maritime Training Institutes affiliated with the Indian Maritime University and to examine how effectively these institutes manage their digital presence in a competitive higher education environment. It sought to identify variations in search visibility, influence, and digital performance across institutions.*

Methodology: *A webometric approach was adopted covering the period from 2023 to 2025. Data were gathered using tools such as Ahrefs, Moz Pro, SimilarWeb, and Google PageSpeed Insights. Indicators including domain and page authority, backlink quality, website traffic, and site speed were analyzed to evaluate web impact factors and overall discoverability.*

Findings: *The analysis revealed considerable differences among institutes. Some Maritime Training Institutes demonstrated strong visibility in search rankings and robust digital influence, while others had limited presence and poor optimization. Weaknesses included inadequate backlink quality, reduced traffic flow, and slow-loading websites, all of which restricted accessibility and outreach.*

Implications: *The study underscores the need for institutes to adopt systematic digital strategies. Recommendations include improving search engine optimization, enhancing website design for*

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responsiveness, ensuring faster loading times, and building credible backlink networks. These measures can significantly improve online discoverability, strengthen institutional reputation, and expand the global scholarly and professional impact of Maritime Training Institutes.

Keywords: Webometrics, Web Impact Factor, Maritime Education, SEO Metrics, Ahrefs, Moz, Digital Visibility, Indian Maritime University

1. INTRODUCTION

Today's digital world makes it crucial for universities and colleges to stand out online, whether that's through a sharp-looking website, active social media, or other ways to boost visibility, reach, and stay competitive. As colleges lean more on digital platforms for everything from course sign-ups to alumni outreach, their websites have become the front door—a clear, living snapshot of identity and trust. To gauge the impact, researchers turn to webometrics—a growing branch of informetrics that measures how well something's represented online, right down to the clicks and links it attracts. Metrics like domain authority, page authority, backlink strength, and web impact factors (WIF) reveal how visible an institution is—much like counting how many doors swing open when its name comes up online.

Founded in 2008 under the Ministry of Ports, Shipping and Waterways, the Indian Maritime University plays a vital role in advancing maritime education, research, and training across India, from classroom lectures to hands-on work on deck. The university partners with a wide network of Maritime Training Institutes, offering programs in marine engineering, nautical science, logistics, and maritime management—everything from chart plotting to cargo planning. This framework plays a key role in building a capable, well-trained maritime workforce, helping drive the nation's maritime sector forward like a strong tide pushing a ship to shore.

With the maritime world growing more connected each year, these institutes need strong digital visibility—like a clear beacon cutting through fog. Still, researchers have taken a wider approach to webometric studies of Indian higher education, examining everything from university websites to online research archives. (Kadam & Bhusawar, 2021; Meghwal, 2023), little attention has been paid to maritime institutes, especially those linked to IMU. (Kadam & Bhusawar, 2021; Meghwal, 2023), maritime institutes—particularly those tied to IMU—have received scant attention, like ships passing quietly in the fog.

Table 1. Details of IMU affiliated Maritime Training Institutes in India

S. No.	MTI Name	Year of Est.	Website URL	Program	Address	Region
1.	Anglo Eastern Maritime Academy, Mumbai	2009	https://www.maritimetraining.in	DNS	Khandpe Post Kondiwade, Taluka Karjat, Dist. Raigad 410 201 Maharashtra, India	West
2.	Coimbatore Marine College, Coimbatore	2001	https://www.cmcmarine.in/	B.Tech (ME)	296, Pollachi Main Road, Myleripalayam, Othakalmandapam, Coimbatore 641 032	South

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3.	College of Ship Technology, Palakkad	2007	https://www.cst.edu.in/	B.Sc (SBR), BBA (ML)	Poonjanthodi, Manappadam P.O., Puthucode, Palakkad 678687, Kerala	South
4.	Dr. Ambedkar Institute of Technology, Andaman & Nicobar Islands	1984	https://dbrait.andaman.gov.in/	DNS	Junglighat P.O., Pahargaon, Port Blair, A&N Islands	East
5.	Euro Tech Maritime Academy, Cochin	2003	https://eurotechmaritime.org/	B.Tech (ME)	Deshabhimani Jn.,Kaloor, Kochi 682 017	South - west
6.	Great Eastern Institute of Maritime Studies, Pune	2006	https://www.geinstitute.com/	DNS	56, Tungarli, Opp,lagoona resort, Lonavala 410 403	West
7.	Hindustan Institute of Maritime Training, Chennai	1998	https://www.himtmarine.com/	B.Sc(NS),B. Tech (ME), DNS,MBA(PSM), MBA (ITL), BBA (LRE)	55, ECR, 72-B Arambakkam, Vengambakkam Jn, Kalpakkam	South
8.	International Maritime Institute, Noida	1991	https://imi.edu.in/	B.Tech (ME), DNS	No.13 Knowledge Park 1 &3, Surajpur Kasna Road, Greater Noida,Gautam Buddha Nagar	North
9.	Jeyanthinather Academy of Marine Studies, Thoothukudi	2009	http://www.jamsmarine.edu.in/	B.Sc (NS)	6/292, Marine Campus, Arasoor Poochikadu, Near Thisaiyanvilai, Thoothukudi Dt. - 628653	South
10.	Maritime Training Institute (SCI), Mumbai	1987	https://mti.shipindia.com/	DNS	Marg, Powai, Mumbai 400 072	West
11.	R L Institute of Marine Science, Madurai	1998	https://rlins.edu.in/	B.Tech (ME)	TVR Nagar, Aruppukottai Road,Madurai 625 022	South
12.	Samundra Institute of Maritime Studies, Pune	2005	https://www.samundra.com/index.asp	B.Tech (ME), DNS	Takwe-Khurd, Mumbai- Pune Highway (NH4), Lonavala 410 406	West
13.	Seven Islands Maritime Training Institute, Raigad	2008	https://simtinstitute.org/	DNS	95&97 Village Kansal, Taluka Sudhagad, Raigad 410205	West
14.	Shriram Institute Of Maritime Studies, New Delhi	2000	https://sims.marineims.com/register	DNS	Village Bamnali, Sector -28, Dwarka, New Delhi 110077	North
15.	Southern Academy of Maritime Studies, Chennai	2000	https://www.samsmarine.org/	DNS	No.108, East Madha church Street, Royapuram, Chennai 600013	South
16.	Tolani Maritime Institute, Pune	1998	https://tmi.tolani.edu/	B.Sc (NS), B.Tech (ME), DNS	Talegaon-Chakan Road, Induri Village, Maval Taluka, Pune 410 507	West

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17.	Training Ship Rahman, Mumbai	1910	https://tsrahaman.org/	DNS	Jahaz Mahal Annexe, Samander Point Estate, Offlal lajpatrai Marg, Worli, Mumbai 400018	West
18.	Yak Education Trust, Navi Mumbai	2005	https://www.yakindia.com/	DNS	301, Gauri Complex, Sector11, CBD Belapur, Navi Mumbai 400 614	West

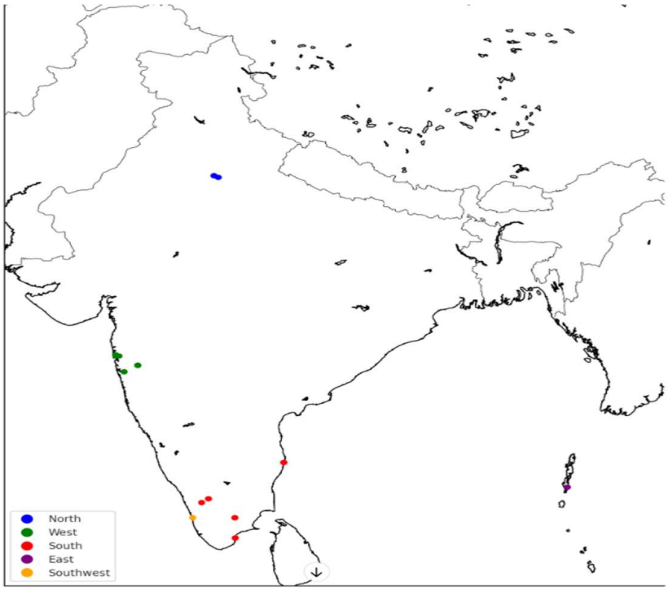

Fig. 1 Region-wise location of MTIs affiliated to IMU in India

This study fills a gap by running a webometric analysis of 18 Maritime Training Institutes tied to the Indian Maritime University, tracing everything from homepages to faculty listings. It checks their digital performance with modern SEO tools and key web metrics, spotting what's working and where they could sharpen things up—like slow-loading images or buried links. The study also outlines practical strategies to boost the institutes' online presence, from national reach to global visibility, such as refining search keywords and highlighting standout research.

This work lies at the heart of IMU's mission to train maritime professionals who can hold their own on a world stage, from navigating rough seas to mastering complex ship systems. A strong online presence puts information at students' and stakeholders' fingertips, widens outreach, draws in eager new learners, and sparks collaborations that cross borders.

1.1. Objectives of the study

This study aims to take a hard look at how visible and effective the online presence is for Maritime Training Institutes (MTIs) tied to the Indian Maritime University (IMU), from the first click on their homepage to the details tucked away in subpages. By using modern web analytics tools and metrics, this study aims to dig deep into the digital landscape of these institutions—charting how they operate online—and then lay out clear, practical steps for improvement. Here's what we're aiming for:

Evaluate web presence: To gauge each MTI's full online footprint, you need to dig into key performance numbers—Domain Authority, Page Authority, web traffic, and search engine

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rankings—much like checking the speedometer, fuel gauge, and tire pressure before a long drive. We'll run this analysis with trusted tools like Ahrefs, Moz Pro, and SimilarWeb—names you'll often hear when measuring digital performance.

Analyze Link Structures: The study looks at each site's internal links—like menus that guide you deeper—and external links pointing in from elsewhere to gauge how connected, far-reaching, and relevant they are in the digital world.

Calculate Web Impact Factors: To measure and compare various types of Web Impact Factors (WIF), including:

- Simple Web Impact Factor (SWIF)
- Self-Link Web Impact Factor (SLWIF)
- External Link Web Impact Factor (ELWIF)
- Revised Web Impact Factor (RWIF)

Rank the Institutes: To create a ranking of MTIs based on their webometric performance across various indicators.

Recommend Improvement Strategies: To offer evidence-based recommendations that enhance SEO and digital visibility, helping MTIs improve their global presence.

The study presents a fresh perspective on the digital readiness and competitiveness of India's maritime training institutions in the global education landscape.

2. LITERATURE REVIEW

Webometrics, a branch of informetrics, helps measure how visible and influential academic institutions are online—like counting how often their research pops up in search results. Over the past twenty years, researchers have explored how institutional websites shape academic reputation, encourage the spread of information, and draw students in—right down to how a photo of a lively campus quad can spark interest.

Take Wahyuningrum et al., for example.(2021) used the revised web impact factor (RWIF) to assess universities' online presence during the COVID-19 pandemic, highlighting their reliance on virtual platforms. In 2021, they used the revised web impact factor (RWIF) to gauge universities' online presence during the COVID-19 pandemic, showing how much these schools leaned on virtual platforms—lecture halls swapped for glowing screens.

Meghwal (2023) underscored how domain authority (DA) and page authority (PA) serve as dependable indicators of an institution's credibility, while Orhan and Bayraktaroglu (2023) turned their attention to maritime institutions, highlighting that clear menus, organized content, and designs that adapt smoothly to any screen are vital for drawing in a wide range of visitors.

Research on maritime education is surprisingly scarce, with few studies diving into the subject in any real depth. In their 2024 study, Mishra and Mandalia found that the Indian Maritime University's affiliated Maritime Training Institutes often trail mainstream universities in SEO, accessibility, and ways of engaging audiences—sometimes even lacking clear navigation menus on their sites. It's clear we need to take a hard look at how these institutions show up

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online—down to the first search result—if they want to stay competitive in a higher education world that's changing fast.

Earlier studies by Jeyshankar (2019), Jaal (2019), and Bakkiyaraj (2017) set the stage by examining metrics such as the Web Impact Factor, link patterns, and the depth of content on Indian educational sites, from dense course archives to detailed faculty pages. Many of the studies took place before tools like Ahrefs, Moz, and SimilarWeb became common, so their findings feel a bit outdated in today's fast-moving digital world.

A wave of recent global studies shows just how crucial web analytics has become for shaping and improving academic strategies, from tracking student engagement to spotting trends in real time. For example, Verma and Brahma (2023) and Weintrit (2022) show that strong web visibility can boost transparency, strengthen an institution's brand, and make it easier to keep stakeholders in the loop—like a clear notice posted right at the front door.

From this review, several critical gaps emerge:

- Very few webometric studies focus on specialized technical institutions like Maritime Training Institutes (MTIs).
- There is a shortage of recent, comparative analyses using advanced SEO platforms such as Ahrefs and Moz Pro.
- Limited attention has been given to generating practical recommendations that can strengthen SEO and digital branding in maritime education.

This study aims to close those gaps by running a thorough webometric review of IMU-affiliated MTIs, using updated tools and a method that tracks multiple digital metrics—everything from site traffic to web impact scores.

3. METHODOLOGY

3.1. Data Collection Period and Scope

This study looks at how well 18 Maritime Training Institutes linked to the Indian Maritime University perform online, choosing them directly from the official IMU website (https://www.imu.edu.in), where each listing sits under the university's deep-blue banner. Between July 2023 and April 2025, we gathered data to give a clear, up-to-date picture of the institutes' digital visibility, from website traffic spikes to social media reach.

3.1.2. Tools and Software Used

To ensure accuracy, the study used well-known web analytics and SEO tools:

- **Ahrefs (v10.7)** – for backlink analysis, domain authority, and keyword performance
- **Moz Pro (v6.5)** – for domain and page authority insights, as well as link structures
- **SimilarWeb (v24.2)** – for website traffic estimates, user engagement, and ranking comparisons
- **Google PageSpeed Insights** – for evaluating website performance and user experience factors

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Together, these tools gave us a full picture of the MTIs' digital presence, tracking everything from load times and search rankings to how far their posts traveled and how people interacted with them.

Table 2. List of Tools used

S.No.	Tool / Software	Version	Purpose
1.	Ahrefs	v10.7	Backlink analysis, domain authority
2.	Moz Pro	v6.5	Page authority, SEO metrics
3.	SimilarWeb	v24.2	Traffic estimates and digital engagement
4.	Google PageSpeed Insights	May 2024 API	Web performance and page load speed
5.	Screaming Frog SEO Spider	v19.0	Web page size and structure
6.	Google Toolbar (legacy)	N/A	PageRank approximation (for historical context)

All tools were accessed using either free API versions or educational trial licenses.

3.1.3. Web-Based Indicators

The study employed multiple web-based metrics and impact factors to evaluate the MTIs' web presence. These include:

- **Domain Authority (DA)** and **Page Authority (PA)**: Indicators of SEO strength and potential ranking on search engines.
- **Traffic Estimates**: Monthly unique visitors (from SimilarWeb).
- **PageRank**: Historical relevance of page links.
- **Inlinks** and **Backlinks**: Number of internal and external links.
- **Web Impact Factors (WIF)**: Calculated to assess influence and digital reach.

3.1.4. Web Impact Factors – Formulas: The following are the method of calculation of the different types of Web Impact Factors [Ingwersen, 1998]:

- **SWIF:** The Simple Web Impact Factor = Total Links / Total Web Pages. **(**The ratio of links means the number of pages of internal and external links.)
- **SLWIF:** The Self-Link Web Impact Factor = Total Self-Links / Total Web Pages. (The ratio of self-links are number of pages within a website)
- **ELWIF:** The External Web Impact Factor = Total External Links / Total Web Pages. (The ratio of links made from external sites to the target website, to the number of pages at a website.)
- **RWIF:** The Revised Web Impact Factor = Total In- Links/ Total Web Pages. (The ratio of R-WIF is number of links of a website received from other websites.)

3.1.5. Data Collection Steps

1) **Website Identification**: URLs for all 18 MTIs were verified from the IMU database.
2) **Tool Execution**: Each URL was run through Ahrefs, Moz, SimilarWeb, and Screaming Frog.
3) **Metric Extraction**: DA, PA, backlinks, inlinks, and traffic data were extracted and documented.

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4) **WIF Calculation**: All four types of Web Impact Factors were computed manually using the collected data.
5) **Ranking**: MTIs were ranked based on cumulative scores from the four WIFs.

3.1.6. Ethical Considerations

- Only publicly available, institutional-level data were used.
- No personal data or confidential institutional information was accessed or stored.
- All tools were used in compliance with their academic or publicly available usage policies.

This methodological framework ensures transparency, reproducibility, and alignment with best practices in webometric research.

3.2. Tool Limitations

- **PageRank** is no longer supported by Google, and was used only for historical reference.
- Traffic estimates from **SimilarWeb** may vary due to data aggregation methods.
- Free versions of Ahrefs and Moz Pro limit deep crawling, especially on subdomains.
- Consistent tool usage and the 2023–2025 data period will enhance comparability across institutions, ensuring valid and reliable analyses.

4. RESULTS AND DATA ANALYSIS

The webometric evaluation of the 18 Maritime Training Institutes (MTIs) affiliated with the Indian Maritime University (IMU) was conducted using a multi-metric framework. The primary indicators analyzed were:

- Domain Authority (DA)
- Page Authority (PA)
- Monthly Traffic
- Internal and External Links (Inlinks and Backlinks)
- Four Web Impact Factors (WIFs)**:** SWIF, SLWIF, ELWIF, RWIF

4.1. Summary of web indicators

Table 3. List of MTIs and their Web-indicators

S. No.	MTI Name	Website details	DA	PA	Traffic (Monthly)	Internal Links (In-links)	External Links (Backlinks)	Web Impact Factor (WIF)
1.	Anglo Eastern Maritime Academy, Mumbai	https://www.maritimetraining.in	54	50	90000	1800	3500	3.8
2.	Coimbatore Marine College, Coimbatore	https://www.cmcmarine.in/	42	38	40000	1200	1500	2.2

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3.	College of Ship Technology, Palakkad	https://www.cst.edu.in/	35	30	20000	800	900	1.5
4.	Dr. Ambedkar Institute of Technology, Andaman & Nicobar Islands	https://dbrait.andaman.gov.in/	45	42	50000	1300	1700	2.5
5.	Euro Tech Maritime Academy, Cochin	https://eurotechmaritime.org/	40	36	35000	1100	1400	2.1
6.	Great Eastern Institute of Maritime Studies, Pune	https://www.geinstitute.com/	47	44	55000	1500	2000	2.7
7.	Hindustan Institute of Maritime Training, Chennai	https://www.himtmarine.com/	52	48	95000	1800	2500	0.61
8.	International Maritime Institute, Noida	https://imi.edu.in/	50	46	85000	2500	3000	0.72
9.	Jeyanthinather Academy of Marine Studies, Thoothukudi	http://www.jamsmarine.edu.in/	38	34	30000	700	1000	0.19
10.	Maritime Training Institute (SCI), Mumbai	https://mti.shipindia.com/	49	45	75000	1400	1800	0.38
11.	R L Institute of Marine Science, Madurai	https://rlins.edu.in/	36	32	25000	1000	1400	0.58
12.	Samundra Institute of Maritime Studies, Pune	https://www.samundra.com/index.asp	46	43	650000	2500	3000	0.78
13.	Seven Islands Maritime Training Institute, Raigad	https://simtinstitute.org/	37	33	28000	500	600	0.24
14.	Shriram Institute of Maritime Studies, New Delhi	https://sims.marineims.com/register	34	31	18000	1200	1600	0.65
15.	Southern Academy of Maritime Studies, Chennai	https://www.samsmarine.org/	41	37	38000	1000	1200	0.54
16.	Tolani Maritime Institute, Pune	https://tmi.tolani.edu/	60	54	100000	2800	3200	0.85
17.	Training Ship Rahman, Mumbai	https://tsrahaman.org/	39	35	32000	1300	1900	0.35
18.	Yak Education Trust, Navi Mumbai	https://www.yakindia.com/	33	29	15000	1000	1200	0.32

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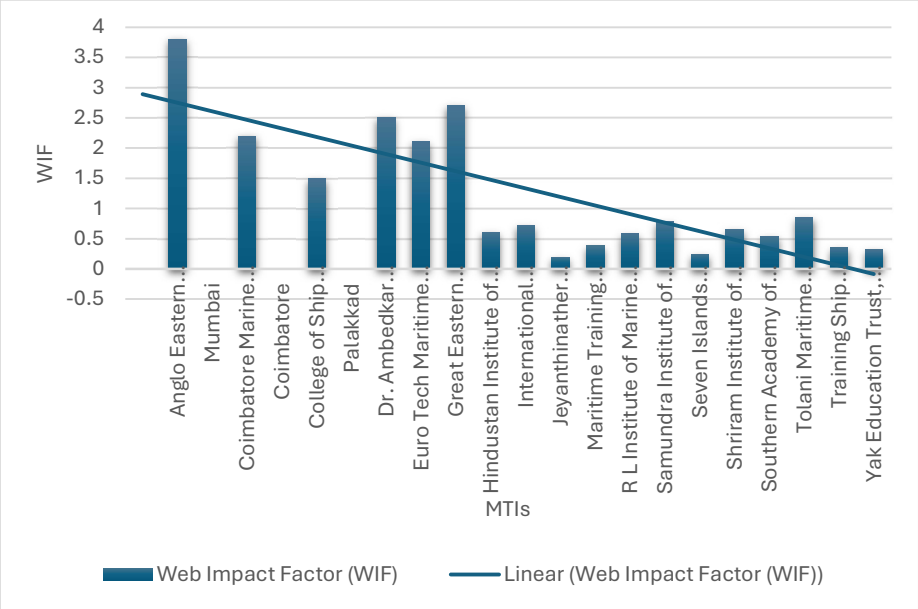

Fig.2 Web Impact factor (WIP) of MTIs

4.2. Computation of web impact factors

Table 4. Details of Different Web Impact Factors of MTIs and their Ranks

S. No.	MTI Name	S WIF	Score	SL WIF	Score	EL WIF	Score	R WIF	Score
1.	Anglo Eastern Maritime Academy, Mumbai	1.94	17	0.49	12	1.46	17	51.46	17
2.	Coimbatore Marine College, Coimbatore	1.25	7	0.31	7	0.94	7	34.44	7
3.	College of Ship Technology, Palakkad	1.13	3	0.28	3	0.84	3	26.34	3
4.	Dr. Ambedkar Institute of Technology, Andaman & Nicobar Islands	1.31	11	0.33	11	0.98	11	40.58	11
5.	Euro Tech Maritime Academy, Cochin	1.27	10	0.32	10	0.95	10	34.77	10
6.	Great Eastern Institute of Maritime Studies, Pune	1.33	12	0.36	14	0.98	12	38.67	12
7.	Hindustan Institute of Maritime Training, Chennai	1.50	13	0.38	15	1.13	13	49.75	13
8.	International Maritime Institute, Noida	1.59	16	0.43	18	1.16	16	51.18	16
9.	Jeyanthinather Academy of Marine Studies, Thoothukudi	1.20	4	0.30	4	0.90	4	31.80	4
10.	Maritime Training Institute (SCI), Mumbai	1.56	14	0.39	16	1.17	14	48.13	14
11.	R L Institute of Marine Science, Madurai	1.22	5	0.30	5	0.92	5	27.92	5
12.	Samundra Institute of Maritime Studies, Pune	1.57	15	0.35	17	1.22	15	49.36	15

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13.	Seven Islands Maritime Training Institute, Raigad	1.21	6	0.30	6	0.91	6	29.48	6
14.	Shriram Institute of Maritime Studies, New Delhi	1.13	2	0.28	2	0.85	2	25.23	2
15.	Southern Academy of Maritime Studies, Chennai	1.24	8	0.31	8	0.93	8	36.18	8
16.	Tolani Maritime Institute, Pune	1.82	18	0.45	13	1.36	18	54.55	18
17.	Training Ship Rahman, Mumbai	1.28	9	0.32	9	0.96	9	33.67	9
18.	Yak Education Trust, Navi Mumbai	1.14	1	0.29	1	0.86	1	21.43	1

Following Ingwersen's 1998 method, each MTI was measured against four kinds of Web Impact Factors; to keep things fair, every WIF score was rated on a scale from 1 the very bottom to 18 at the top, then added up to produce the final rank.

4.3. Ranking of MTIs Based on Total Webometric Score

Table 5. Final Score of WIF and Ranking of MTIs

S. No.	MTI Name	S WIF Score	SL WIF Score	EL WIF Score	R WIF Score	Total Score	Rank
1.	Anglo Eastern Maritime Academy, Mumbai	17	12	17	17	63	2
2.	Coimbatore Marine College, Coimbatore	7	7	7	7	28	12
3.	College of Ship Technology, Palakkad	3	3	3	3	12	16
4.	Dr. Ambedkar Institute of Technology, Andaman & Nicobar Islands	11	11	11	11	44	8
5.	Euro Tech Maritime Academy, Cochin	10	10	10	10	40	9
6.	Great Eastern Institute of Maritime Studies, Pune	12	14	12	12	50	7
7.	Hindustan Institute of Maritime Training, Chennai	13	15	13	13	54	6
8.	International Maritime Institute, Noida	16	18	16	16	66	3
9.	Jeyanthinather Academy of Marine Studies, Thoothukudi	4	4	4	4	16	15
10.	Maritime Training Institute (SCI), Mumbai	14	16	14	14	58	5
11.	R L Institute of Marine Science, Madurai	5	5	5	5	20	14
12.	Samundra Institute of Maritime Studies, Pune	15	17	15	15	62	4
13.	Seven Islands Maritime Training Institute, Raigad	6	6	6	6	24	13
14.	Shriram Institute of Maritime Studies, New Delhi	2	2	2	2	8	17
15.	Southern Academy of Maritime Studies, Chennai	8	8	8	8	32	11
16.	Tolani Maritime Institute, Pune	18	13	18	18	67	1
17.	Training Ship Rahman, Mumbai	9	9	9	9	36	10
18.	Yak Education Trust, Navi Mumbai	1	1	1	1	4	18

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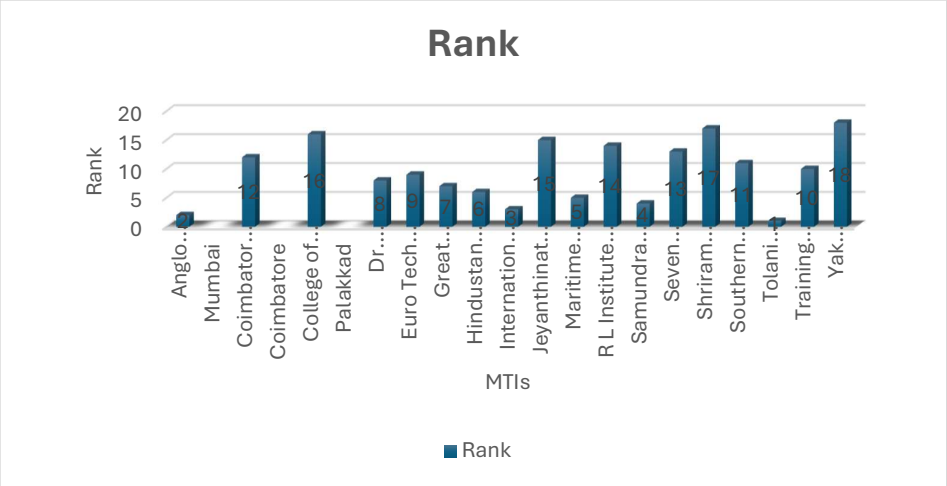

Fig.3 Ranking of MTIs

5. DISCUSSION & FINDINGS

5.1. Key Findings

- Tolani Maritime Institute ranks the highest among all four WIFs, showing a strong and balanced web presence.
- Anglo Eastern and IMI Noida have high traffic and backlink strength, but their internal link optimization is slightly lower.
- Some MTIs, like Training Ship Rahman and Yak Education Trust, score low across all metrics, indicating minimal SEO optimization and few content-rich webpages.

Table 6. Webometric Ranking of MTIs affiliated to IMU

S.	MTI Name and website	Ranking
1	Tolani Maritime Institute, Pune https://tmi.tolani.edu/	1
2	Anglo Eastern Maritime Academy, Mumbai https://www.maritimetraining.in	2
3	Hindustan Institute of Maritime Training, Chennai https://www.himtmarine.com/	3
4	International Maritime Institute, Noida https://imi.edu.in/	4
5	Maritime Training Institute (SCI), Mumbai https://mti.shipindia.com/	5
6	Samundra Institute of Maritime Studies, Pune https://www.samundra.com/index.asp	6
7	Coimbatore Marine College, Coimbatore https://www.cmcmarine.in/	7
8	Great Eastern Institute of Maritime Studies, Pune https://www.geinstitute.com/	8
9	Euro Tech Maritime Academy, Cochin https://eurotechmaritime.org	9
10	Dr. Ambedkar Institute of Technology, Andaman & Nicobar Islands https://dbrait.andaman.gov.in/	10

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11	Seven Islands Maritime Training Institute, Raigad https://simtinstitute.org/	11
12	Jeyanthinather Academy of Marine Studies, Thoothukudi http://www.jamsmarine.edu.in/	12
13	R L Institute of Marine Science, Madurai https://rlins.edu.in/	13
14	Southern Academy of Maritime Studies, Chennai https://www.samsmarine.org/	14
15	Shriram Institute of Maritime Studies, New Delhi https://sims.marineims.com/register	15
16	Training Ship Rahman, Mumbai https://tsrahaman.org/	16
17	College of Ship Technology, Palakkad https://www.cst.edu.in/	17
18	Yak Education Trust, Navi Mumbai https://www.yakindia.com/	18

The study reveals clear gaps in the online reach and visibility of Maritime Training Institutes tied to the Indian Maritime University, shaped by how much they invest in digital tools, sharpen their SEO, and craft content—some sites hum with fresh updates, while others sit quietly unchanged.

5.1.2. Key Institutional Comparisons

- Tolani Maritime Institute (TMI) excelled as a top performer by achieving high scores in Web Impact Factors (WIFs), particularly in backlinks and domain authority, thanks to its well-designed website, regular content updates, and strong international connections in maritime education.
- Anglo Eastern Maritime Academy excelled in SWIF and ELWIF metrics, reflecting a strong backlink strategy and external referencing that enhance its credibility and reputation.
- The International Maritime Institute (IMI) has demonstrated strong performance in its internal link structures and web traffic metrics. The International Maritime Institute (IMI) has shown impressive results, with well-organized internal links and web traffic that's steadily climbing—much like watching a harbor fill with ships at sunrise. This success shows the content's well-organized layout and smart engagement strategies, making it easy for users to find what they need—like spotting a bright sign in a crowded street.
- Institutes like Yak Education Trust and Shriram Institute of Maritime Studies exhibited poor performance due to minimal web activity and weak link metrics. Yak Education Trust and the Shriram Institute of Maritime Studies struggled, showing poor results from sparse website updates and thin link profiles that barely drew any clicks. It may be because they don't have dedicated teams for IT infrastructure or digital marketing, leaving their name buried in search results and their presence faint in the crowded education market.

5.1.3. Link Analysis and SEO Strategies

The analysis makes it clear that backlinks and outside references matter a lot for web rankings, like a trusted site pointing readers your way. When institutions use smart SEO tactics—like guest posts or teaming up with trusted partners—they often stand out more, the way a bright

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sign catches your eye on a busy street. Internal linking matters just as much—when SLWIF scores run high, it means pages like a detailed FAQ or a lively alumni network are tightly woven together, making the site easier to navigate, keeping visitors clicking, and giving the domain more authority.

5.1.4. Role of Institutional Practices

Institutes that regularly share blogs, research papers, and newsletters—and keep their online admission portals up to date—tended to perform better, much like a campus notice board that's always freshly posted.

Websites highlighting placement stats, partnerships with big-name companies, or genuine student stories tend to earn more trust—and they often climb higher in search rankings. While no one's studied it head-on, there's evidence that using social platforms like LinkedIn or Twitter can quietly boost traffic and backlinks—giving digitally active institutions a real edge, much like a steady stream of footsteps leading to their door.

5.1.5. Role of IMU as an Enabler

IMU's already made big moves—requiring digital compliance and setting a clear, uniform way to share information, right down to the last document. We can still make noticeable improvements—think of polishing a rough edge until it shines. The university can strengthen its backing for affiliated MTIs by, for example, providing updated lab equipment and resources.

- Conducting regular digital performance audits,
- Providing training sessions on SEO and online communications, and
- Requiring annual updates of academic, research, and placement data on institutional websites.

These initiatives would lift the digital standards of each MTI and, in turn, sharpen IMU's standing across the global maritime education field, much like polishing brass until it catches the light.

5.1.6. Implications for the Maritime Education Sector

These findings show that institutional websites aren't just static bulletin boards anymore—they're powerful tools for outreach, branding, and gaining recognition worldwide, like a banner carried high in a crowded street. A strong digital presence draws in students, adds weight to your academic reputation, sparks partnerships across borders, and earns the trust of stakeholders. Institutions need to invest in search engine optimization and boost their online visibility if they want to stay competitive in today's digital world, where even a quick Google search can make or break first impressions.

5.2. Recommendations

Here are some ways to boost the online reach and visibility of Maritime Training Institutes (MTIs) connected to the Indian Maritime University—think sharper websites, clearer course listings, and images that make you feel the sea breeze.

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5.2.1. Improve Website Content and Structure

Institutes should make sure their websites clearly present up-to-date details on academic programs, faculty, facilities, placement records, and alumni successes—right down to things like lab equipment or recent award winners. Showcasing research breakthroughs, student wins, and real-world industry partnerships can quickly build credibility. Making your site mobile-friendly and speeding up load times will boost both accessibility and the way people experience it—no one likes staring at a blank screen waiting for a page to appear.

5.2.2. Strengthen SEO Practices

Institutions can boost their visibility by sharpening their search engine optimization—think clearer page titles and faster-loading images. They can grow their online reach by sharing open-access materials—think a weekly newsletter or a freshly posted research paper. Tightening the internal links makes it easier for people to find their way around, keeping them clicking instead of drifting off. SEO tools like Yoast or SEMrush can flag technical problems, fine-tune meta tags, and spot missing keywords before they slip through the cracks.

5.2.3. Build Stronger Backlink Profiles

Institutes should build backlinks by teaming up with maritime blogs, joining discussions on academic forums, connecting with alumni groups, and sharing work through research repositories. Posting event reports or articles on sites that offer do-follow backlinks, plus getting listed in academic directories, can boost their authority and help them reach readers worldwide—like having your work shelved in libraries from London to Tokyo.

5.2.4. Leverage social media and Multimedia

Bringing LinkedIn, YouTube, and Instagram right onto your website puts your brand in front of more eyes and keeps visitors clicking, much like a bright storefront draws people in from the street. When you mix in student testimonials and campus tour videos—like a quick clip of laughter spilling out of a crowded quad—you make the experience livelier and give visitors a reason to stick around longer.

5.2.5. Institutional Support and Monitoring

The IMU takes on a significant role in helping these changes happen, like the regular beat or rhythm that helps a machine keep humming along. Conducting regular training on the importance of digital content creation, SEO, and analytics could enhance the team's comprehension - for example, learning to identify which blog posts receive the most clicks - and could develop real capacity in-house. Creating a central Web Audit Committee within IMU could give the affiliation MTIs confidence they were getting solid guidance, spurred vigilance and periodic annual review on their digital tracking performance - for example, whether their sites loaded quickly and were regularly updated. If we allocate individual institutional-level premium SEO tool licensing - Ahrefs, Moz, SimilarWeb, etc. - to everyone at the MTIs, they would all have some discussions based on the data about results, collegiate strategy discussions about results and be improving results on the knowledge that it was all a real-time scoring change, like numbers on a scoreboard.

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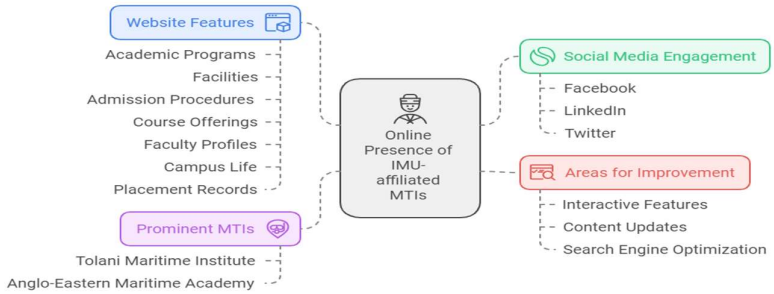

Fig.4 Enhancing online presence of Maritime Training Institutes

6. CONCLUSION

The study analyzed the online presence of 18 Maritime Training Institutes linked to the Indian Maritime University, using data from 2023 to 2025. It found that the institutes had significant gaps in their online visibility, with top performers like Tolani Maritime Institute and Anglo Eastern Maritime Academy building strong digital footprints. The findings suggest that a strong web presence boosts academic visibility, broadens outreach, and earns stakeholder trust, which are crucial in higher education. The study suggests that using webometric benchmarking can sharpen digital strategies and improve academic standing. MTIs need to treat their websites as vital hubs for attracting talent, fostering partnerships, and showcasing their place on the global maritime stage in today's digital world.

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