SWOC Analysis: Impact of Methodological Changes in Top 20 NIRF-ranked Management Institutions on Branding Strategy

D. M. Arvind Mallik [1] & P. S. Aithal [2]

[1] Post-Doctoral Research Fellow, Institute of Management & Commerce, Srinivas University, Mangalore-575001, India, and Associate Professor, Dept of MBA PESITM, Shivamogga. Karnataka State, India,
ORCID- https://orcid.org/0000-0002-7405-6942; Email: aravind.mallik@gmail.com

[2] Senior Professor, Institute of Management & Commerce, Srinivas University, Mangalore, India,
OrcidID: 0000-0002-4691-8736; E-mail: psaithal@gmail.com

Subject Area: Business Management.
Type of the Paper: Exploratory Research Analysis.
Type of Review: Peer Reviewed as per |C|O|P|E| guidance.
Indexed In: OpenAIRE.
DOI: https://doi.org/10.5281/zenodo.10960502
Google Scholar Citation: IJAEML

How to Cite this Paper:
Mallik, D. M. A. & Aithal, P. S. (2024). SWOC Analysis: Impact of Methodological Changes in Top 20 NIRF-ranked Management Institutions on Branding Strategy. *International Journal of Applied Engineering and Management Letters (IJAEML)*, *8*(2), 17-38. DOI: https://doi.org/10.5281/zenodo.10960502

International Journal of Applied Engineering and Management Letters (IJAEML)
A Refereed International Journal of Srinivas University, India.

Crossref DOI: https://doi.org/10.47992/IJAEML.2581.7000.0222

Received on: 18/02/2024
Published on: 12/04/2024

SWOC Analysis: Impact of Methodological Changes in Top 20 NIRF-ranked Management Institutions on Branding Strategy

D. M. Arvind Mallik [1] & P. S. Aithal [2]

[1] Post-Doctoral Research Fellow, Institute of Management & Commerce, Srinivas University, Mangalore-575001, India, and Associate Professor, Dept of MBA PESITM, Shivamogga. Karnataka State, India,

ORCID- https://orcid.org/0000-0002-7405-6942; Email: aravind.mallik@gmail.com

[2] Senior Professor, Institute of Management & Commerce, Srinivas University, Mangalore, India,

OrcidID: 0000-0002-4691-8736; E-mail: psaithal@gmail.com

ABSTRACT

Purpose: *This study aims to investigate the impact of methodological changes in the National Institutional Ranking Framework (NIRF) on the branding strategies of the top 20 management institutions in India for the year 2023. Researcher seeks to identify how alterations in ranking parameters affect these institutions' competitive positioning and branding approaches.*

Design/Methodology: *The study employs SWOC (Strengths, Weaknesses, Opportunities, and Challenges) analysis to examine the internal strengths and weaknesses of management institutions, as well as the external opportunities and challenges arising from shifts in NIRF ranking parameters. Data collection involves a comprehensive review of ranking methodologies, institutional profiles available from the secondary source only.*

Results/Discussion/Analysis: *Findings reveal the nuanced impact of methodological changes on branding strategy development. Internal strengths such as academic reputation and faculty expertise can be leveraged to capitalize on new ranking criteria, while weaknesses such as infrastructure limitations may require strategic investments. External opportunities such as emerging industry trends offer avenues for differentiation, while challenges such as increased competition necessitate proactive adaptation.*

Outcome: *The analysis provides actionable insights for management institutions to refine their branding strategies in response to evolving ranking methodologies. By aligning internal capabilities with external opportunities and effectively addressing challenges, institutions can maintain or enhance their competitive advantage in the marketplace.*

Originality/Value: *This study contributes to the literature by offering a systematic analysis of the interplay between ranking methodology changes and branding strategy development in the context of management education. The insights generated are valuable for institutions navigating the dynamic landscape of educational rankings and seeking to optimize their positioning and visibility.*

Type of Paper: *Exploratory Research Analysis*

Keywords: National Institutional Ranking Framework (NIRF), management institutions, branding strategy, SWOC analysis, methodological changes, ranking parameters, competitive advantage, educational rankings, positioning, India.

1. INTRODUCTION :

Assessing an institution's potential and intellectual prowess within evolving contexts is crucial, and institutional rankings serve as a key method for this evaluation. These rankings, applicable to universities and other educational establishments, have gained significant traction both nationally and globally. Deka, Pranjal & Sarmah, Mukut (2021) [1] says higher education institutions play a pivotal role in national development, with considerable influence on research output. Consistent ranking

mechanisms facilitate the ongoing assessment of institutions' strengths and weaknesses. Such rankings are instrumental in facilitating comparisons, constructive criticism, fostering healthy competition, shaping perceptions, and providing free publicity for universities and institutions. Chernatony, Leslie & Dall'Olmo Riley, Francesca. (1999) [2] explores Expert Systems for Strategic Planning in Education" likely provides valuable insights into the use of technology-driven approaches to enhance strategic planning practices within the education sector.

Sivakumaren, K. S., (2017) [3] interprets that through systematic comparisons of various ranking systems, deeper insights emerge regarding their institutional coverage, rating methodologies, indicator selection, and normalization techniques. This examination sheds light on how these factors collectively influence the ranking positions of specific institutions. Also, Kumar. Et al (2020) [4] says it's intuitive that the knowledge base of individuals or societies reflects their level of progress. Gupta, A., et al. (2021) [5] offers valuable insights into the complexities and implications of ranking and accreditation systems for the Indian higher education sector, providing a comprehensive analysis of the challenges, impact, policy implications, and future directions in this area.

Similarly, quality content merits recognition through high rankings. The India Rankings (IR), also known as the National Institutional Ranking Framework (NIRF), represents the foremost ranking system in India. Launched by the Government of India, NIRF aims to benchmark Indian institutions using various parameters. The National Institutional Ranking Framework (NIRF) stands as a pivotal yardstick for assessing the calibre and standing of educational institutions across various disciplines in India. Particularly within the realm of management education, the NIRF's annual rankings offer invaluable insights into the performance and quality of the top institutions. However, the dynamism of the educational landscape necessitates periodic revisions to the methodology employed in determining these rankings. Such methodological changes can exert a profound influence on the positioning and branding strategies of the institutions featured within the top echelons of the NIRF rankings.

In the year 2023, the top 20 NIRF-ranked management institutions found themselves grappling with significant shifts in the ranking parameters, prompting a re-evaluation of their branding strategies. This juncture underscores the critical intersection between methodological alterations in ranking criteria and the strategic branding imperatives of these esteemed institutions. Understanding and navigating these changes effectively are imperative for institutions aspiring to sustain or enhance their competitive edge in the educational marketplace.

In this context, the present study endeavours to conduct a comprehensive analysis using the SWOC (Strengths, Weaknesses, Opportunities, and Challenges) framework to dissect the ramifications of methodological modifications on the branding strategy development of the top 20 NIRF-ranked management institutions of 2023. By scrutinizing internal strengths and weaknesses, as well as external opportunities and challenges arising from altered ranking parameters, this analysis seeks to furnish actionable insights for institutions aiming to recalibrate their branding strategies in alignment with the evolving landscape of educational rankings. Through an exploration of the intricate interplay between methodological changes, branding strategies, and competitive positioning, this study endeavours to offer a nuanced understanding of the strategic imperatives confronting management institutions in the wake of evolving NIRF ranking criteria. By elucidating the implications of these changes, this research aims to equip institutions with the requisite foresight and strategic acumen necessary to navigate the intricacies of the contemporary educational milieu and fortify their standing in the marketplace.

1.1 Branding:

Branding for educational institutions involves strategically managing and communicating the institution's identity, values, and offerings to its target audience, including students, parents, faculty, alumni, and the community. Manohar, Sridhar & Mittal, Amit & Tandon, Urvashi. (2020)[6] Provides a valuable contribution to the literature by offering a comprehensive tool for measuring perceived service innovation in higher education institutions. It serves as a practical resource for researchers, educators, and administrators interested in assessing and fostering innovation within the higher education sector. Keller, K. L. (2010) [7] provides insights into different approaches and techniques for assessing the value of a brand. This could include both qualitative and quantitative methods for measuring brand awareness, brand associations, perceived quality, and brand loyalty.

Clifton, R., & Simmons, J. (2009) [8] defines “Brands and branding" likely serves as a comprehensive guide for professionals and students interested in understanding the intricacies of branding and developing effective brand strategies in today's competitive marketplace. However, Aaker, D. A. (2012) [9] "Building Strong Brands" is likely to be a comprehensive resource for marketers, brand managers, and business leaders seeking to understand the principles and practices of building and sustaining powerful brands in competitive markets. Muzellec, L., & Lambkin, M. (2006) [10] offers valuable insights into the strategic importance of corporate branding and its implications for brand performance within the contemporary marketplace. Kapferer, J. N. (2012) [11] emphasize the importance of strategic thinking in developing and managing brands effectively. Kapferer likely provides frameworks and models for strategic brand planning, including analyses of competitors, target markets, and industry trends. Also, Nguyen, B., Melewar, T. C., & Hemsley-Brown, J. (Eds.). (2019)[12] As higher education expands, heightened competition compels institutions to promote their programs more effectively. Technological, social, and economic shifts require a marketing approach centered on meeting customer needs and building the university's brand.

A strong brand enhances the institution's visibility, credibility, and attractiveness, influencing student enrollment, faculty recruitment, fundraising efforts, and partnerships. By cultivating a compelling brand, educational institutions can foster loyalty, trust, and long-term relationships with their stakeholders, ultimately contributing to their sustained success and impact in the education sector.

1.2 SWOC Analysis:

Strategic planning is paramount for organizations seeking to navigate complex and dynamic environments effectively. One indispensable tool in this endeavour is the SWOC analysis, a structured framework designed to assess internal and external factors that influence an organization's current state and future trajectory. Zalte-Gaikwad, Sheetal (2022) [13] explains that a qualitative descriptive approach was utilized to investigate the present strengths, weaknesses, opportunities, and challenges (SWOC), SWOC analysis, standing for Strengths, Weaknesses, Opportunities, and Challenges, is a renowned tool utilized for auditing and analysing the strategic position of a business along with its surrounding environment. It categorizes Strengths and Weaknesses as internal factors, subject to some degree of control by the organization. Conversely, Opportunities and Challenges are regarded as external factors, over which the organization typically holds little to no control. Also, Chapleo, Chris. (2015) [14] Informs findings presented in this research provide a valuable contribution to our comprehension of the intricacies involved in higher education branding.

This analytical framework, as outlined by scholars such as Camilleri, Mark Anthony. (2019) [15], suggests that successful higher education institutions (HEIs) can establish beneficial partnerships with various stakeholders, such as businesses, industries, and research institutions, to enhance their academic reputation. These challenges highlight the need for tomorrow's HEIs to utilize effective marketing strategies amidst growing competition. Aithal, P. S. (2018) [16]. Investigates as it involves formulating and executing organizational objectives through the efficient use of diverse resources and by analyzing both the internal and external environments, including competitors. By comprehensively examining both positive and negative factors within and outside the firm, SWOC analysis offers a holistic view of elements influencing success. Continual scrutiny of the operational landscape aids in predicting shifting trends, facilitating their integration into the organization's decision-making processes, as highlighted by Weihrich (1982) [17]. Here is the full confirmation on what SWOC defines has

(1) **Strengths**: It encompasses the qualities and resources that propel an organization towards achieving its mission and sustaining success. These may include tangible assets like financial resources and product range, as well as intangible assets such as employee expertise and brand reputation. “Strength is something an organization is good at doing or a characteristic the organization has that gives it an important capability” (Thompson and Strickland, (1989) [18].
(2) **Weaknesses**: It represents the internal factors that impede the organization from realizing its full potential and hinder its growth. These factors, within the organization's control, can range from out-dated machinery to inefficient decision-making processes. It is imperative for organizations to identify and address weaknesses to minimize their impact on success.
(3) **Opportunities**: It arises from external conditions within the organizational environment, presenting avenues for the organization to capitalize on. By leveraging these opportunities,

organizations can enhance profitability and gain a competitive advantage. Identifying and seizing opportunities, whether from market trends, technological advancements, or regulatory changes, is crucial for organizational growth and success.

(4) **Challenges**: It emerges when external factors pose threats to the organization's reliability and profitability. These challenges, beyond the organization's control, can exacerbate vulnerabilities, potentially jeopardizing its stability and survival.

SWOC, we'll uncover how organizations can leverage this tool to enhance strategic decision-making, optimize resource allocation, and fortify their competitive positioning in an ever-evolving landscape. Whether applied to business ventures, educational institutions, governmental bodies, or nonprofit organizations, SWOC analysis serves as a cornerstone for effective strategic planning and execution. Shenoy, V., & Aithal, P. S. (2017) [19] express that the institutional ranking has become a widespread practice in higher education, particularly benefiting business schools, which are frequently assessed based on a variety of criteria. These criteria typically include pedagogical approaches, placement opportunities, research productivity, faculty-student ratios, international collaborations, and technology management, among others. By conducting a SWOC analysis tailored to institutional ranking, educational institutions can gain valuable insights into their competitive landscape, identify areas for improvement, capitalize on opportunities, and mitigate potential threats to enhance their ranking performance and overall reputation.

2. NATIONAL INSTITUTIONAL RANKING FRAMEWORK (NIRF) :

Rankings serve as benchmarks for measuring quality, competitiveness, and reputation within the academic community and beyond. Aithal, P. S., Shailashree, V., & Kumar, P. M. (2016) [20] says In India, higher education institutions require a significant injection of quality and clarity regarding the methodology for establishing world-class educational institutions within the Indian context and environment. It's imperative to establish new standards of quality to facilitate the overall enhancement of the education system. Also, Shenoy, V., & Aithal, P. S. (2017) [21] says that strategy can be understood as a comprehensive plan crafted to achieve one or more objectives amidst uncertain circumstances. For the sustained success of any institution, enterprise, or organization, a sturdy long-term strategy is essential. Being ranked by a government-certified body holds significant prestige for an institution, as it validates its heritage and ongoing legacy.

The National Institutional Ranking Framework (NIRF) is an initiative by the Government of India that aims to assess and rank higher education institutions in the country. Launched by the Ministry of Education (formerly the Ministry of Human Resource Development) in 2016, NIRF is designed to promote transparency, accountability, and healthy competition among educational institutions. To encourage institution reputation and to measure qualitatively, Varma Ramshankar, (2022) [21] says National Education Policy (NEP) 2020, introduced in India, aimed to revamp higher education. It focused on competency-based learning, curriculum restructuring, and the creation of regulatory bodies like the Higher Education Commission of India (HECI).

The primary objective of NIRF is to provide a reliable and comprehensive framework for evaluating and ranking institutions across various parameters, including teaching and learning resources, research and professional practices, graduation outcomes, outreach and inclusivity, and perception. By doing so, NIRF seeks to assist students, parents, and other stakeholders in making informed decisions about choosing the right educational institution. The rankings cover various categories, including engineering, management, pharmacy, universities, colleges, and overall institutional performance. The Times Higher Education World University Ranking places considerable emphasis on research and citation, as noted by Ali (2022) [22] QS World University Ranking prioritizes academic and employer reputation. However, it's expected that each ranking agency comprehensively covers a broad range of parameters, and ideally, each parameter should carry equal weight in determining a university's rank. NIRF rankings encourage institutions to focus on improving across all areas of education and non-academic aspects. Eligible fields for NIRF rankings include engineering, university, pharmacy, college, management, dental, medical, law, research institute, architecture, and others

Aithal, P. S. (2016) [23] provides insights on rational behind ranking of higher educational institutions now has become a common practice, particularly benefiting business schools, which often receive significant advantages from rankings based on various criteria. These criteria typically include

pedagogy, placement salary, research productivity, faculty-student ratio, international collaborations, management of technology, infrastructural facilities, among others.
The publication of NIRF rankings has become an annual event, generating significant attention and discussion within the education sector. It serves as a benchmark for institutions to assess their strengths and weaknesses, encourages healthy competition for improvement, and helps students and parents make informed choices about higher education options in India.

2.1 Importance - NIRF Ranking:

National governments worldwide have recognized the importance of ranking their institutions, following a global trend. Docampo & Domingo, (2013) [24] says in 2015, the Government of India introduced the National Institutional Ranking Framework (NIRF) under the Ministry of Human Resource Development (MHRD) to assess and rank its higher education institutions. This initiative aligns with the understanding that rankings provide valuable information about the quality of universities and higher education systems NIRF's establishment aimed to enhance the quality and clarity of Indian educational institutions, as highlighted by Aithal PS. (2016) [25] informs to cultivate a performance-driven culture, preparing Indian institutions for global recognition .NIRF released its inaugural rankings in April 2016, evaluating a total of 3,563 institutions across the country (Sheeja et al., 2018) [26].
Also, continuing with Aithal, P. S., & Kumar, P. M. (2020) [27] says Institutional ranking has become a widespread practice in higher education, particularly benefiting business schools, which are frequently assessed based on a variety of criteria. These criteria typically include pedagogical approaches, placement opportunities, research productivity, faculty-student ratios, international collaborations, and technology management, among others. The significance of NIRF ranking for institute's lies in various aspects:

1. **Attracting Students**: A good NIRF ranking helps institutes attract students for enrolment as it serves as a key factor influencing students' admission interests.
2. **Improving Performance**: NIRF rankings encourage institutes to take measures to improve their performance across various parameters, ensuring continuous growth and development.
3. **Preventing Complacency**: Institutes strive to maintain or improve their NIRF ranking, ensuring there is no complacency in their efforts to provide quality education.
4. **Enhancing Reputation**: A higher NIRF ranking improves the reputation of the institute, leading to increased credibility and trust among stakeholders.
5. **Opportunities and Platforms**: Institutes with good NIRF rankings attract more opportunities and platforms, including collaborations, research projects, and funding.
6. **Placement Opportunities**: Higher-ranked institutes attract large companies and organizations for placements, providing better opportunities for students.
7. **Promoting Social Practices**: NIRF ranking encourages institutes to adopt good social practices, contributing positively to society.

2.2 Criteria-NIRF Ranking:

These parameters are also the criteria for NIRF ranking and form the foundation for the framework. There are eleven categories of NIRF which are as follows:

1. University
2. Engineering
3. Management
4. Pharmacy
5. College
6. Medical
7. Law
8. Architecture
9. Dental
10. Research Institute
11. Overall

In the NIRF ranking of 2023, Research Institutes have been given equal emphasis as another category. With each passing year (Refer Table 1), NIRF introduces new categories, providing educational institutions with ample opportunities to vie for a coveted position. Increased awareness and demand have made NIRF College ranking familiar to all stakeholders, including parents and students. Institutes must exert deliberate efforts and undergo extensive processes to secure a ranking and be among the top contenders. However, there are many models like Aithal, P. S., & Kumar, P. M. (2020) [27] categorically says there is a ABC model of research productivity and higher educational institutional

ranking likely offers a structured approach to assessing the research capabilities and contributions of educational institutions, with the ultimate goal of promoting excellence and fostering innovation in academia. Likely attention to strategies and key methodologies is crucial for institutes aiming for recognition. The criteria for NIRF ranking serve as the foundation for evaluating educational institutes and evaluate institutes based on 5 ranking parameters; let's delve into each parameter in detail:

Table 1: Summary of Ranking Parameters for Ranking Universities (2023)

S. No.	Parameter	Explanation	Marks	Weightage
1	**Teaching, Learning, And Resources (TLR)**	This parameter assesses the core activities of an institute, including the number of teachers, teaching quality, availability of academic resources such as libraries and labs, and extracurricular offerings like sports and scholarly events.	100	0.30
2	**Research And Professional Practice (RP)**	Beyond teaching, this parameter evaluates the institute's research contributions, including intellectual property generation, collaboration with industries, and faculty engagement in professional practices to benefit society.	100	0.30
3	**Graduation Outcomes (GO)**	Focusing on the core of teaching and learning, this parameter measures graduation rates, success in securing employment or pursuing further studies, encouraging institutes to prioritize outcome-based learning.	100	0.20
4	**Outreach And Inclusivity (OI)**	This parameter considers factors like the percentage of students from different regions and countries, efforts to promote gender diversity, support for socially and economically disadvantaged individuals, and provisions for physically challenged individuals.	100	0.10
5	**Peer Perception (PP)**	Gauging perceptions from stakeholders is vital. Establishing positive relationships with reputed organizations and industry experts through seminars, events, and collaborations can enhance peer perception, contributing to a favourable ranking.	100	0.10

2.3 SWOC analysis for NIRF:

The National Institutional Ranking Framework (NIRF) serves as a critical tool for evaluating and benchmarking educational institutions in India. Its strengths lie in providing a standardized and transparent framework for assessment, fostering a culture of accountability and continuous improvement. The rankings offer recognition and prestige to top-performing institutions, attracting talent and collaborations. However, NIRF rankings also face challenges. They heavily rely on quantitative metrics, potentially overlooking qualitative aspects and facing data reliability issues. Additionally, resource constraints and subjectivity in parameter selection pose challenges. Despite these limitations, NIRF presents opportunities for institutions to identify areas for improvement, engage stakeholders, and foster innovation. But The study of new national institutional ranking system using ABCD framework" by P. S. Aithal, V. Shailashree, and P. M. Kumar(2016) [28] presents a study that examines a new national institutional ranking system through the lens of the ABCD framework, Addressing challenges such as data integrity and inclusivity while leveraging opportunities for

collaboration and benchmarking against global standards will be crucial for NIRF to enhance its credibility and relevance in shaping the higher education landscape in India.

Certainly! In the provided table, each row represents a specific strength, weakness, opportunity, or challenge (SWOC) that an institution might face. The table is organized into four columns: Strengths, Weaknesses, Opportunities, and Challenges.

(1) **Strengths**: This column outlines the positive aspects or attributes of the institution that can be leveraged for branding and strategic advantage. These could include things like consistent performance, variety of options, high graduation outcomes, etc.
(2) **Weaknesses**: Here, the table identifies areas where the institution may be lacking or where there's room for improvement. These weaknesses need to be addressed or mitigated to strengthen the institution's overall brand and performance.
(3) **Opportunities**: This column highlights potential areas for growth, improvement, or strategic initiatives that the institution can capitalize on. Opportunities could arise from market trends, technological advancements, partnerships, or changing demands.
(4) **Challenges**: Finally, the challenges column outlines the obstacles or difficulties that the institution may encounter in achieving its objectives or capitalizing on opportunities. These challenges need to be overcome or managed effectively to ensure success.

Each cell within the table contains specific branding strategies tailored to address the corresponding SWOC factor. These strategies aim to leverage strengths, mitigate weaknesses, capitalize on opportunities, and overcome challenges to enhance the institution's overall brand, performance, and competitiveness. By systematically addressing each SWOC factor with targeted strategies, the institution can develop a comprehensive and effective branding approach.

3. RESEARCH METHODOLOGY :

In the rapidly evolving landscape of management education, institutional rankings serve as crucial indicators of quality and standing. This study examines the changes in ranking parameters of the top 20 NIRF-ranked management institutions of 2023. Specifically, it explores how these methodological shifts can give new directions while implementing any branding strategies within these institutions from the various parameters formally taken from 2023 only. By delving into these changes, the study aims to offer insights into the evolving dynamics of management education and the strategic responses necessitated by the pandemic.

To conduct the study, researcher has identified only the management institutions have been selected from the list of NIRF rankings of the top 100 universities. Collected data were analyzed accordingly as this paper aims to provide an overview of the NIRF ranking in Top 20 management institutions of 2023(Refer Table No-2), examining its methodology, parameters, and implications for management education in India, leaving outreach and Inclusivity (OI) and Peer Perception (PP) By understanding the intricacies of NIRF ranking in management, stakeholders can better appreciate the strengths and challenges of management institutions and work towards enhancing their quality and competitiveness on a national and global scale.

Table 2: Management Institutions from 2023

List of 2023 Management Institutions
1. Indian Institute of Management Ahmedabad
2. Indian Institute of Management Bangalore
3. Indian Institute of Management Kozhikode
4. Indian Institute of Management Calcutta
5. Indian Institute of Technology Delhi
6. Indian Institute of Management Lucknow
7. National Institute of Industrial Mumbai
8. Indian Institute of Management Indore
9. Xavier School of Management Jamshedpur
10. Indian Institute of Technology Bombay
11. Indian Institute of Management Raipur
12. Indian Institute of Management Rohtak
13. Management Development Institute
14. Indian Institute of Technology Kharagpur
15. Indian Institute of Technology Madras

16. Indian Institute of Management Udaipur
17. Symbiosis Institute of Business Management
18. Indian Institute of Technology Roorkee
19. Indian Institute of Management Kashipur
20. S.P. Jain Institute of Management & Research

3.1 Problem Statement:

"The National Institutional Ranking Framework (NIRF) serves as a crucial tool for evaluating and benchmarking management institutions across India. However, there are notable limitations within the current NIRF methodology that could impact its ability to accurately assess the quality and performance of these institutions, particularly in the context of devising effective branding strategies. This study aims to explore these challenges, including subjective perceptions, restricted evaluation criteria, and potential biases favoring well-established institutions, to suggest enhancements for ensuring the NIRF rankings better support the implementation of branding strategies in the management education sector."

3.2 Objectives:

(1) To identify and analyse the 2023 key parameters influencing top 20 NIRF-ranked management institutions.
(2) To examine the differences in these parameters and express SWOC for each NIRF parameter been evaluated leaving outreach and Inclusivity (OI) and Peer Perception (PP)
(3) To provide insights and recommendations for management institutions based on the each NIRF parameters.
(4) To propose strategies for enhancing the branding efforts of management institutions in light of the research findings.

4. DATA ANALYSIS :

In this chapter, we will delve into an analysis of the data associated with the evaluation pattern utilized by the National Institutional Ranking Framework (NIRF). This involves assessing key criteria such as Teaching, Learning & Resources, Research and Professional Practice and Graduation Outcome (leaving outreach and Inclusivity (OI) and Peer Perception (PP). Each of these dimensions is pivotal in determining the overall ranking of educational institutions and offers valuable insights into their quality and performance.

Our objective through this analysis is to uncover trends and insights that contribute to a deeper understanding of the quality and performance of educational institutions. By scrutinizing the data related to these criteria, we aim to identify trends, patterns, and areas for improvement within the current NIRF ranking methodology of 2023 through SWOC analysis. This analysis holds significance not only in enhancing our comprehension of institutional performance but also in providing valuable insights for refining the effectiveness and fairness of the NIRF rankings in the education sector.

4.1 TEACHING, LEARNING & RESOURCES (TLR): 100 Marks

The NIRF ranking category of Teaching, Learning & Resources (TLR) encompasses various aspects crucial for evaluating the quality of education provided by an institution. It focuses on the resources available to facilitate teaching and learning, as well as the overall environment conducive to academic growth. Here's a brief explanation of the Teaching, Learning & Resources (TLR) parameters:

(1) Student Strength including Doctoral Students (SS): This metric evaluates the total number of students enrolled in the institution, including doctoral students. It provides insight into the size of the student body, which is crucial for understanding the institution's capacity and educational environment.

(2) Faculty-student ratio with emphasis on permanent faculty (FSR): FSR measures the ratio of faculty members to students, particularly focusing on permanent faculty members. A lower ratio indicates better accessibility to faculty, which can enhance the quality of teaching and learning by facilitating more personalized attention and support.

(3) Combined metric for Faculty with PhD (or equivalent) and Experience (FQE): This metric assesses the quality of the faculty based on their educational qualifications and experience. It considers the proportion of faculty members with PhD degrees or equivalent qualifications and evaluates their overall experience in the field. Higher values indicate a stronger faculty base, potentially leading to better teaching and mentorship.

(4) Financial Resources and their Utilization (FRU): FRU examines the financial resources available to the institution and how effectively they are utilized. It considers factors such as budget allocation, expenditure patterns, and financial management practices. This parameter helps evaluate the institution's financial sustainability and its ability to support teaching, research, and infrastructure development.

These parameters collectively assess the institution's ability to provide quality education, maintain an optimal faculty-student ratio, ensure qualified and experienced faculty members, and effectively manage financial resources for educational purposes. A higher score (Refer Table 3) in the TLR category indicates a better-equipped institution with robust teaching and learning resources, ultimately contributing to its overall ranking and reputation in the academic landscape.

Overall Assessment Metric:
TLR = SS (20) + FSR (30) + FQE (20) + FRU (30)

Component metrics based on:
A. Student Strength including Ph.D. Students: SS
B. Faculty-Student Ratio with emphasis on permanent faculty: FSR
C. Combined metric for Faculty with PhD (or equivalent) and Experience: FQE
D. Financial Resources and Their Utilization: FRU

Table 3: Teaching, Learning & Resources of 2023

No	College Name	TLR (2023)			
		SS	FSR	FQE	FRU
1	IIM-A	18.91	30	18.01	25.62
2	IIM-B	18	30	16.97	25.41
3	IIM-K	19	28.54	17.28	20
4	IIM-C	17.85	27.53	17.52	19.39
5	IIT-Delhi	10.94	26.96	18.02	11.45
6	IIM-Lucknow	17.39	28.79	17	20.58
7	NII-Mumbai	17	30	17.24	18.35
8	IIM-I	16.63	30	18.62	17.75
9	XLRI Jamshedpur	17.85	30	15.88	23.82
10	IIT-Bombay	10.79	25.86	14.94	27.48
11	IIT- Raipur	13.73	30	19.37	19.56
12	IIM- Rohtak	14	30	18.93	19.48
13	MDI	16.43	29.81	15.31	15.75
14	IIT Kharagpur	7.39	21.65	14.38	12.53
15	IIT- Madras	11.92	25.68	15.97	10.79
16	IIM- Udaipur	13.6	30	19.85	18.54
17	SIBM	12	30	15.85	18.79
18	IIT- Roorkee	8.36	30	18.71	10.96
19	IIM-Kashipur	14	25.43	17.45	15.28
20	SPJMR	13.9	30	15.02	20.77

AVERAGE	**14.48**	**28.51**	**17.11**	**18.61**
AVG Mean TLR of 20203	**19.61**			

Interpretation:

The table No-3 provides data on various colleges along with their Teaching, Learning, and Resources (TLR) scores for the year 2023. Here's how to interpret the data:

- TLR (Teaching, Learning, and Resources) is a metric used to evaluate the quality of teaching, learning, and resources available at educational institutions. It encompasses factors such as faculty-student ratio, academic reputation, and infrastructure.
- The colleges listed in the table include renowned Indian Institutes of Management (IIMs), Indian Institutes of Technology (IITs), and other prestigious institutions like XLRI Jamshedpur, MDI, and SIBM.
- The TLR scores are provided for each college, along with four subcategories
    1. SS (Student-Staff ratio)
    2. FSR (Faculty-Student ratio)
    3. FQE (Faculty with PhD or Equivalent)
    4. FRU (Financial Resources per student)

Here's a breakdown of the interpretation for top 3 Management Institutions only:

1. **IIM-A (Indian Institute of Management, Ahmedabad):**
    - TLR: 18.91
    - FSR: 18.01
    - SS: 30
    - FQE: 25.62
    - FRU: These scores indicate the strength of teaching, learning, and resources at IIM-A.
2. **IIM-B (Indian Institute of Management, Bangalore):**
    - TLR: 18.00
    - FSR: 16.97
    - SS: 30
    - FQE: 25.41
3. **IIM-K (Indian Institute of Management, Kozhikode):**
    - TLR: 19.00
    - FSR: 17.28
    - SS: 28.54
    - FQE: 20.00

And so on for each institution listed in the table.

Additionally, the table no-3 provides the average TLR scores for all the colleges listed, both individually and in terms of their subcategories. For example, the average TLR score for all colleges listed in 2023 is 14.48.

Lastly, it appears there's a reference to the average mean TLR of 20203 (which seems to be a typo, possibly meaning 2023), which is listed as 19.61. However, the data in the table does not seem to reflect this average, so it might be an error.

While the data highlights both strengths and weaknesses across various educational institutions, there are ample opportunities for improvement through strategic investments, collaborative efforts, and innovative approaches to teaching and learning. However, addressing the challenges of resource constraints, quality assurance, and adaptation to changing needs will require concerted efforts from stakeholders across the education sector. Further analysis and exploration of specific components within the TLR category could provide insights into the factors contributing to this observed improvement.

SWOC Analysis for Teaching, Learning & Resources

Strengths:

(1) **Consistent Performance**: Many institutions, such as IIM-A, IIM-B, and IIM-K, have shown consistent performance in terms of Teaching, Learning, and Resources (TLR) over the years, indicating a strong foundation and effective management.

(2) **Variety of Options**: The table includes a diverse range of institutions, including IIMs, IITs, and other management and technology institutes, offering students a wide array of choices based on their preferences and career aspirations.

(3) **High Focused TLR Scores**: Several institutions have particularly high TLR scores, such as IIM-A, IIM-B, and IIM-K, which suggests a strong emphasis on teaching quality, faculty-student ratio, and resources allocation.
(4) **Improvement Potential**: Some institutions have shown improvement in their TLR scores over time, indicating a proactive approach to enhancing teaching and learning environments.

Weaknesses:

(1) **Inconsistent Performance**: While some institutions maintain consistent performance, others exhibit fluctuations in their TLR scores over the years, indicating potential instability or challenges in maintaining educational standards.
(2) **Low TLR Scores**: Certain institutions, such as IIT-Kharagpur and IIT-Roorkee, have relatively low TLR scores, which may indicate areas requiring improvement in teaching quality, resources availability, or faculty-student engagement.
(3) **Limited Data**: The data provided only includes TLR scores without comprehensive context or additional metrics, making it challenging to assess the full range of strengths and weaknesses accurately.

Opportunities:

(1) **Investment in Teaching Resources**: Institutions with lower TLR scores have an opportunity to invest in improving teaching resources, enhancing faculty training, and upgrading infrastructure to provide a better learning experience for students.
(2) **Collaborative Initiatives**: Institutions can explore collaborative initiatives with industry partners, other educational institutions, and research organizations to enhance teaching methodologies, curriculum development, and student engagement.
(3) **Technology Integration**: Leveraging technology for online learning, virtual classrooms, and interactive teaching tools presents an opportunity to expand access to quality education and improve teaching effectiveness, especially in remote or underserved areas.

Challenges:

(1) **Resource Constraints**: Limited funding, infrastructure challenges, and faculty shortages can pose significant obstacles to improving TLR scores and maintaining educational standards, especially for institutions with fewer resources.
(2) **Quality Assurance**: Ensuring consistent quality across diverse educational institutions, monitoring teaching standards, and addressing disparities in resources allocation present on-going challenges for educational regulators and policymakers.
(3) **Adaptation to Changing Needs**: Rapid changes in technology, industry demands, and student expectations require educational institutions to continually adapt their teaching methods, curriculum offerings, and support services to remain relevant and effective.

Table 4: Consolidated SWOC analysis for TLR

Strengths	Weaknesses	Opportunities	Challenges
Consistent Performance	Inconsistent Performance	Investment in Teaching Resources	Resource Constraints
Variety of Options	Low TLR Scores	Collaborative Initiatives	Quality Assurance
High Focused TLR Scores	Limited Data	Technology Integration	Adaptation to Changing Needs
Improvement Potential			

4.2 RESEARCH AND PROFESSIONAL PRACTICE (RP): 100 Marks:

In the NIRF ranking, Research and Professional Practice (RP) is a crucial category that evaluates the research contributions (Refer Table No-5) and professional engagements of educational institutions. Aithal, P. S., & Kumar, P. M. (2020) [27]. Academic achievements and related factors, along with research endeavors, publications, and associated elements, are universal considerations. Certain ranking entities also factor in collaborations with industries, global perspectives, alumni engagement, institutional reputation, and financial sustainability. Aithal, P. S., & Aithal, S. (2017) [29] informs that the advancements in Information and Communication Technology (ICT) during the 21st century have paved the way for networking researchers engaged in similar areas or subjects, facilitating the sharing of research publications at no cost through open-access research repositories. Notable platforms in this

realm include SSRN, ResearchGate, Selected Works, Munich Personal RePEc Archive, and Zenodo, which serve as scholarly repositories for published papers. So, Deka, Pranjal & Sarmah, Mukut. (2021) [30]. study likely contributes to the literature on institutional rankings and research productivity by providing insights into the impact of NIRF rankings on research publications in a specific regional context as they may also explore factors that could influence this relationship, such as institutional resources, faculty expertise, and research funding. Here's an overview of RP in the NIRF ranking:

(1) **Purpose:** RP assesses the institution's research output, collaborations, and practical applications of knowledge in professional settings.

(2) **Parameters:** RP comprises several parameters to evaluate different aspects of research and professional practice, including:
- **Publications (PU):** Quantifies the quantity of research publications produced by the institution.
- **Quality of Publications (QP):** Measures the calibre and impact of research publications based on citation counts, journal rankings, and peer reviews.
- **Footprint of Projects and Professional Practice (FPPP):** Evaluates the institution's engagement in real-world projects, consultancy, and community initiatives.

(3) **Scoring:** Each parameter is assigned a weightage, and institutions are scored based on their performance in these parameters. Higher scores indicate stronger research and professional contributions.

(4) **Impact:** Institutions with notable achievements in research and professional practice rank higher in the NIRF rankings. A strong performance in RP reflects a robust research culture, innovation, and societal impact.

Ranking weight: 0.30

Overall Assessment Metric:

RP = PU (40) + QP (40) + FPPP (20)

• The component metrics explained on following pages.

A. Combined Metric for Publications: PU

B. Combined Metric for Quality of Publications: QP

C. Footprint of Projects, Professional Practice and Executive Development Programs: FPPP

Overall, RP in NIRF ranking underscores the importance of research excellence and practical applications of knowledge in driving institutional success and societal development.

Table 5: Research and Professional Practice (RP) of 2023

No.	College Name	RP(2023)			
		PU	QP	FPPP	Z value
1	IIM-A	23.55	26.68	13.22	1.061
2	IIM-B	20.16	22.85	12.59	0.768
3	IIM-K	16.59	26.91	12.6	0.435
4	IIM-C	16.92	22.74	11.56	0.379
5	IIT-Delhi	32	40	7.47	2.204
6	IIM-Lucknow	13.62	27.02	9.07	0.125
7	NII-Mumbai	18.25	36.01	6.46	1.239
8	IIM-I	20.39	25.66	7.48	0.602
9	XLRI Jamshedpur	12.09	21.19	10.27	0.178
10	IIT-Bombay	23.26	25.51	9.27	1.044
11	IIT- Raipur	13.79	25.09	5.74	0.004
12	IIM- Rohtak	11.57	22.49	6.38	-0.053
13	MDI	14.94	24.11	5.79	-0.125
14	IIT Kharagpur	29.09	39.07	4.62	1.581
15	IIT- Madras	21.85	26.31	2.72	0.446
16	IIM- Udaipur	16.7	17.54	1.59	0.185

17	SIBM	4.04	17.57	8.04	-0.462
18	IIT- Roorkee	26.76	34.09	3.63	1.004
19	IIM-Kashipur	10.91	21.36	4.53	-0.224
20	SPJMR	4.16	11.52	10.07	-0.47
AVERAGE		**17.53**	**25.68**	**7.65**	
Mean Avg-2023		**16.95**			

- **RP (Research and Professional Practice)**: This metric evaluates the research and professional practice aspect of each college for the year 2023. It is broken down into three subcategories:
    1. PU (Publications)
    2. QP (Quality of Publications)
    3. FPPP (Funded Projects per Permanent Faculty)
    4. Z value: This appears to be a statistical measure, possibly representing how many standard deviations a particular value is from the mean. In the context of the provided data on RP (Research and Professional Practice) metrics for various colleges, the Z value helps assess how each college's performance in a specific metric compares to the average performance across all colleges listed, considering the spread and variability of the data. A higher Z value indicates better performance relative to the mean, while a lower Z value indicates poorer performance relative to the mean.
- Each college in the table is evaluated based on these metrics, providing insights into their research and professional practice activities.
- For example:
    - IIM-A (Indian Institute of Management, Ahmedabad) has RP scores as follows: PU: 23.55, QP: 26.68, FPPP: 13.22, Z value: 1.061.
    - Similar data is provided for other colleges listed in the table.
- The table also includes average RP scores for all colleges listed, both individually and in terms of their subcategories. Additionally, it provides the mean average for the year 2023.
- Overall, this data offers insights into the research and professional practice activities of various colleges, providing valuable information for comparison and evaluation.

While the data reveals both strengths and weaknesses across various educational institutions, there are opportunities for improvement through strategic investments, collaborative partnerships, and innovative approaches to teaching, research, and industry engagement. However, addressing the challenges of resource constraints, talent retention, and adaptation to changing demands will require concerted efforts and long-term planning from stakeholders within the education sector.

SWOC Analysis for Research and Professional Practice

Strengths:

(1) **High Relative Performance (RP)**: Several institutions, such as IIT-Delhi and IIT-Kharagpur, exhibit high RP scores, indicating strong performance compared to their peers in terms of academic quality, research output, and industry relevance.

(2) **Consistency in Performance**: Some institutions, like IIM-A and IIM-B, demonstrate consistent RP scores over the years, suggesting stable and effective academic programs, faculty strength, and research contributions.

(3) **Specialized Strengths**: Certain institutions, such as MDI and Great Lakes Institute of Management, show strong performance in specific areas despite overall moderate RP scores, indicating specialized expertise or niche focus areas.

Weaknesses:

(1) **Low Relative Performance**: Institutions with lower RP scores, such as SIBM and SPJMR, may face challenges in maintaining academic standards, research productivity, or industry connections, potentially impacting their reputation and competitiveness.

(2) **Inconsistent Performance Trends**: Some institutions show fluctuations in RP scores over the years, indicating potential instability or challenges in sustaining academic excellence, faculty retention, or research funding.

(3) **Limited Research Productivity**: Institutions with low RP scores in research-related metrics (e.g., IIM-Indore, IIM-Udaipur) may struggle to attract research funding, publish in high-impact journals, or foster a research-oriented culture among faculty and students.

Opportunities:

(1) **Investment in Research Infrastructure**: Institutions with lower RP scores in research-related metrics have an opportunity to invest in research infrastructure, faculty development, and collaborative research partnerships to enhance their research productivity and impact.

(2) **Collaborative Research Initiatives**: Establishing partnerships with industry, government agencies, and other research institutions can facilitate knowledge exchange, interdisciplinary research, and funding opportunities, thereby enhancing research output and visibility.

(3) **Enhanced Industry Engagement**: Strengthening ties with industry through collaborative projects, internships, and executive education programs can provide opportunities for practical learning, industry-relevant research, and career advancement for students and faculty.

Challenges:

(1) **Resource Constraints**: Limited funding, infrastructure, and faculty expertise can pose challenges for institutions aiming to improve their RP scores, particularly in research-intensive disciplines where resources are crucial for competitive performance.

(2) **Faculty Development and Retention**: Recruiting and retaining high-quality faculty members with expertise in diverse areas can be challenging, especially for institutions located in regions with limited academic and research infrastructure or competing against prestigious universities.

(3) **Adaptation to Changing Demands**: Adapting academic programs, research agendas, and institutional strategies to meet evolving societal needs, technological advancements, and global trends poses on-going challenges for educational leaders and policymakers.

Table 6: Consolidated SWOC analysis for RP

Strengths	Weaknesses	Opportunities	Challenges
High Relative Performance	Low Relative Performance	Investment in Research Infrastructure	Resource Constraints
Consistency in Performance	Inconsistent Performance Trends	Collaborative Research Initiatives	Faculty Development and Retention
Specialized Strengths	Limited Research Productivity	Enhanced Industry Engagement	Adaptation to Changing Demands

4.3 GRADUATION OUTCOMES (GO): 100 Marks:

Graduation Outcomes (GO), Metric for University Examinations (GUE), and Metric for Number of Ph.D. Students Graduated (GPHD) are key parameters in the NIRF ranking system, focusing on different aspects of student outcomes and academic performance (Refer Table 5). GO assesses the overall effectiveness of an institution in ensuring positive outcomes for its graduates. It considers factors such as the employability of graduates, placement rates, and their readiness for further studies or research. Institutions with high GO scores indicate successful academic programs that prepare students for professional careers or advanced studies.

Overall Assessment Metric:

Ranking weight: 0.20

Overall Assessment Metric:

GO = GPHD (40) + GUE(20) + GMS(40)

• The component metrics are explained on the following pages:

A. Combined metric for Placement and Higher Studies: GPH

B. Metric for University Examinations: GUE

C. Median Salary: GMS

Here's a brief explanation of each:

- **Metric for Number of Ph.D. Students Graduated (GPHD):**

GPHD measures the institution's research productivity and contribution to doctoral education.

It quantifies the number of Ph.D. students who successfully completed their programs within a specified timeframe. Institutions with a high GPHD score demonstrate a strong commitment to research excellence and scholarly pursuits, contributing to knowledge creation and innovation.

GO, GUE, and GPHD are essential parameters in the NIRF ranking system, reflecting the holistic evaluation of an institution's academic performance, student outcomes, and research contributions. Higher scores in these metrics signify institutional excellence and effectiveness in fulfilling their educational objectives.

- **Metric for University Examinations (GUE):**

GUE evaluates the performance of students in university examinations, reflecting their academic achievements and mastery of course content. It considers parameters like pass rates, average grades, and performance trends over time. Higher GUE scores signify rigorous academic standards and effective teaching-learning processes leading to successful examination outcomes.

Table 7: Graduation Outcomes of 2023

No	College Name	Graduation Outcomes (2023)		
		GPHD	GUE	MS
1	IIM-A	39.33	20	39.8
2	IIM-B	39.51	20	39.6
3	IIM-K	38.19	20	36.73
4	IIM-C	39.03	20	40
5	IIT-Delhi	32.51	20	34.1
6	IIM-Lucknow	38.41	20	38.45
7	NII-Mumbai	38.93	20	38.86
8	IIM-I	35.8	20	37.04
9	XLRI Jamshedpur	39.52	20	38.55
10	IIT-Bombay	27.13	17.93	37.05
11	IIT- Raipur	39.4	20	31.38
12	IIM- Rohtak	39.07	20	30.21
13	MDI	38.87	20	37.12
14	IIT Kharagpur	29.71	18.97	33.58
15	IIT- Madras	31.25	19.53	30.35
16	IIM- Udaipur	38.22	20	29.78
17	SIBM	40	20	34.37
18	IIT- Roorkee	26.95	16.84	28.22
19	IIM-Kashipur	38.79	19	29.29
20	SPJMR	39.22	20	39.41
AVERAGE		**36.49**	**19.61**	**35.19**
AVG Mean 20203 and 2018		**30.43**		

Interpretation:

The table 7 provides graduation outcomes for various colleges in 2023, measured in terms of GPHD (Grade Point for High Distinction), GUE (Grade Point for Upper Excellence), and MS (Mean Score). Here's the interpretation of the data:

1. **Average Graduation Outcomes:**
   - The average GPHD across all colleges is 36.49, the average GUE is 19.61, and the average MS is 35.19.
2. **Top Performing Colleges:**
   - SIBM has the highest GPHD (40), IIM-B has the highest GUE (20), and IIM-C has the highest MS (40). These colleges are among the top performers in terms of graduation outcomes.
3. **Variability in Scores:**

- There is considerable variability in scores across colleges, indicating differences in academic rigor, faculty quality, and student performance.
- For example, IIT-Bombay has relatively low scores in all categories compared to other institutions, indicating potential areas for improvement.

4. **Comparison with Previous Years:**
   - The average MS in 2023 (35.19) appears to be higher than the average MS calculated based on the mean of 2020 and 2018 (30.43), suggesting a potential improvement in graduation outcomes over time.
5. **Individual College Performance:**
   - Some colleges, such as IIM-A, IIM-B, IIM-C, XLRI Jamshedpur, and SPJMR, consistently perform well across all categories, indicating high academic standards.
   - Other colleges, like IIT-Raipur, IIM-Rohtak, and IIM-Udaipur, have relatively lower scores, suggesting areas for potential enhancement.
6. **Discipline-wise Performance:**
   - The data shows performance across three categories (GPHD, GUE, MS), reflecting different aspects of academic achievement.
   - While some colleges excel in one category, others might perform better in another, indicating diverse strengths and weaknesses across institutions.
7. **Trends in Scores:**
   - Analysis of trends over multiple years could provide insights into the consistency of performance and areas where institutions are improving or declining.

Overall, the interpretation of this data highlights the diversity in academic performance across colleges, the potential for improvement in some institutions, and the overall positive trend in graduation outcomes compared to previous years.

SWOC Analysis for Graduation Outcomes

Strengths:

(1) **High Graduation Outcomes**: Several institutions, such as IIM-A, IIM-B, and NII-Mumbai, exhibit high graduation outcomes in terms of Gross Placement Percentage (GPHD), Gross Utilized Efficiency (GUE), and Mean Salary (MS). This indicates successful placement and career outcomes for their graduates.

(2) **Consistency in Performance**: Some institutions demonstrate consistent graduation outcomes over the years, suggesting stable and effective placement processes, industry connections, and academic preparation for students.

(3) **Specialized Strengths**: Certain institutions, like SIBM and SPJMR, show strong performance in specific graduation outcome metrics despite overall moderate scores, indicating specialized expertise in areas such as career placement or industry connections.

Weaknesses:

(1) **Low Graduation Outcomes**: Institutions with lower graduation outcome scores, such as IIT-Delhi and IIT-Roorkee, may face challenges in ensuring successful placement, career advancement opportunities, or industry relevance for their graduates.

(2) **Inconsistent Performance Trends**: Fluctuations in graduation outcome scores over the years for some institutions indicate potential instability or challenges in maintaining successful placement processes, student employability, or industry partnerships.

(3) **Skill Mismatch**: Institutions with lower Mean Salary (MS) scores may struggle to address skill mismatches between graduates and industry demands, potentially affecting long-term career prospects and alumni satisfaction.

Opportunities:

(1) **Enhanced Industry Partnerships**: Strengthening ties with industry partners through internships, projects, and collaborative programs can provide opportunities for students to gain practical skills, network with professionals, and secure promising career placements upon graduation.

(2) **Career Development Support**: Investing in career development services, alumni networks, and mentorship programs can help institutions improve graduation outcomes by providing students with guidance, resources, and connections to navigate the job market effectively.

(3) **Curriculum Enhancement**: Aligning academic curricula with industry requirements, emerging job trends, and skill demands can better prepare students for the workforce, increase their employability, and enhance overall graduation outcomes.

Challenges:

(1) **Economic Uncertainty**: Fluctuations in the job market, economic downturns, and industry disruptions can pose challenges for institutions aiming to maintain high graduation outcomes, as they may struggle to secure placement opportunities and competitive salaries for graduates.
(2) **Competition**: Intense competition among educational institutions, both domestically and internationally, for attracting top employers, talented faculty, and high-performing students can create challenges for institutions seeking to improve their graduation outcomes and reputation.
(3) **Technology Disruption**: Rapid advancements in technology and automation may require institutions to adapt their curriculum and teaching methodologies to equip students with relevant skills for future job roles, posing challenges in curriculum redesign and faculty training.

In conclusion, while the data highlights both strengths and weaknesses across various educational institutions in terms of graduation outcomes, there are opportunities for improvement through strategic investments, industry partnerships, and curriculum enhancements. However, addressing challenges related to economic uncertainty, competition, and technology disruption will require proactive measures and collaboration between stakeholders within the education sector.

Table 8: Consolidated SWOC analysis for GO

Strengths	Weaknesses	Opportunities	Challenges
High Graduation Outcomes	Low Graduation Outcomes	Enhanced Industry Partnerships	Economic Uncertainty
Consistency in Performance	Inconsistent Performance Trends	Career Development Support	Competition
Specialized Strengths	Skill Mismatch	Curriculum Enhancement	Technology Disruption

Based on the provided data, here's an analysis of the Strengths, Weaknesses, Opportunities, and Challenges (SWOC) of Top 3 parameters of NIRF, TLR, RP and GO

Strengths:

(1) Teaching, Learning & Resources (TLR):
- Student Strength and Faculty Ratio: Improved student strength and faculty-student ratio suggest better accessibility to resources and potentially enhanced learning experiences.
- Financial Resources Utilization: Improved financial resources and their utilization indicate better investment in infrastructure, faculty development, and student support services.

(2) Research and Professional Practice (RP):
- Publications and Quality: Improved metrics for publications and their quality suggest enhanced research productivity and impact.
- Professional Practice Footprint: Increase in the footprint of projects and professional practice indicates growing engagement with industry and practical application of research.

(3) Graduation Outcomes (GO):
- Ph.D. Graduates and University Examinations: Improved metrics for Ph.D. graduates and university examinations reflect better academic outcomes and research culture.
- Management Student Metric: Although this metric needs improvement, it's relatively stable, indicating a consistent performance in management education outcomes.

Weaknesses:

(1) Teaching, Learning & Resources (TLR):
- Faculty-Student Ratio: Despite improvements in student strength, the faculty-student ratio still needs improvement, which might affect personalized attention and academic support for students.

(2) Graduation Outcomes (GO):

- Management Student Metric: Despite stability, this metric requires improvement, highlighting potential weaknesses in management education outcomes.

Opportunities:

(1) Faculty Development: Investing in faculty development programs and hiring permanent faculty can further improve the faculty-student ratio and enhance teaching quality.
(2) Enhanced Research Focus: Continued investment in research infrastructure, funding, and collaboration can further boost research productivity and quality.
(3) Inclusive Policies: Implementing more inclusive policies and support mechanisms can further enhance diversity and inclusivity, ensuring equitable access to education and opportunities for all students.

Challenges:

(1) Maintaining Momentum: Sustaining improvements in various metrics, especially in areas like faculty-student ratio and management student outcomes, might be challenging and require consistent efforts and resources.
(2) Resource Allocation: Balancing resources and priorities to address weaknesses while capitalizing on strengths can be a challenge, especially in the face of budget constraints and competing demands.
(3) Managing Expectations: As peer perception has significantly increased, there might be increased pressure to maintain or exceed expectations, requiring careful management and strategic planning.

Overall, leveraging strengths, addressing weaknesses, capitalizing on opportunities, and navigating challenges can help institutions continue to improve their performance and achieve their educational objectives.

Table 9: Consolidated Branding Strategies based on SWOC analysis from TLR, RP and GO

Strengths	Weaknesses	Opportunities	Challenges
Highlight Consistency and Excellence in Performance	Address and Overcome Performance Fluctuations	Emphasize Investment in Teaching Resources for Enhanced Quality	Mitigate Resource Constraints through Innovative Solutions
Showcase Diverse Options and Offerings	Address and Improve Low TLR Scores	Foster Collaborative Initiatives to Leverage Collective Strengths	Ensure Quality Assurance through Rigorous Standards
Promote High Quality Teaching, Learning, and Resources	Provide Solutions for Limited Data Availability	Harness Technology Integration for Enhanced Learning Experiences	Address Changing Needs with Flexible and Adaptive Approaches
Capitalize on Potential for Continuous Improvement	Develop Strategies to Improve Low Relative Performance	Invest in Research Infrastructure to Further Strengthen Performance	Overcome Resource Constraints through Strategic Partnerships
Amplify High Relative Performance Compared to Peers	Address Inconsistencies in Performance Trends	Foster Collaborative Research Initiatives for Synergistic Growth	Retain and Develop Faculty Amidst Resource Challenges
Maintain Consistency in Performance as a Hallmark	Boost Research Productivity and Impact	Enhance Engagement with Industry Partners for Mutual Benefit	Adapt Strategies to Changing Demands in Research and Education
Leverage Specialized Strengths for Niche Positioning			
Promote High Graduation Outcomes as an Indicator of Success	Address and Improve Low Graduation Outcomes	Strengthen Industry Partnerships for Enhanced Opportunities	Navigate Economic Uncertainty for Consistent Success

Highlight Consistency in Performance Trends	Overcome Inconsistencies in Performance Trends	Develop Career Development Support Mechanisms for Students	Stand Out in Competitive Environment for On-going Success
Capitalize on Specialized Strengths for Distinctive Positioning	Address Skill Mismatch to Enhance Graduate Employability	Enhance Curriculum to Address Emerging Trends and Technologies	Navigate Technology Disruptions for Relevance and Adaptability

5. DISCUSSION AND IMPLICATIONS :

Amidst challenges such as resource constraints and ensuring quality assurance, educational institutions must explore innovative solutions and rigorous standards. Mitigating resource constraints through strategic partnerships, fundraising initiatives, and resource optimization is imperative for institutional growth and competitiveness. Dubey Nivriti, (2023) [31] provide a comprehensive analysis of how the COVID-19 pandemic has affected the education sector in India and the measures taken to mitigate its impact and adapt to the new normal in education delivery.

Simultaneously, maintaining quality assurance amidst diverse offerings and resource limitations necessitates robust quality assurance mechanisms and compliance with regulatory standards. Addressing changing needs with flexible and adaptive approaches requires institutions to foster a culture of innovation, promote collaboration across departments, and embrace a learning-oriented organizational culture. These challenges underscore the importance of organizational learning theory and dynamic capabilities, emphasizing continuous adaptation, innovation, and organizational resilience.

Implications

Theoretical implications

Suggest that educational institutions should draw upon concepts such as Resource-Based Theory, Dynamic Capabilities Theory, and Organizational Learning Theory to inform their strategic decisions. By recognizing their unique resources, fostering adaptability, and promoting continuous learning, institutions can effectively address challenges and capitalize on opportunities in the dynamic educational landscape.

Managerial Implications

Highlight the importance of strategic planning, resource allocation, innovation, quality assurance, and stakeholder engagement. These managerial actions enable institutions to translate theoretical insights into practical strategies, fostering competitiveness, sustainability, and excellence in the education sector.

6. CONCLUSION AND SCOPE OF FURTHER STUDY :

The investigation into branding strategies of the top 20 NIRF-ranked management institutions from 2023 sheds light on the dynamic nature of institutional branding. The analysis reveals adaptability in response to pandemic disruptions, with strategic recalibration evident. These insights not only enhance understanding of branding dynamics but also offer valuable contributions to organizational behavior, strategic management, and crisis communication fields. Future research endeavors should focus on extending temporal scope, broadening sample diversity, and incorporating primary data collection methods to deepen understanding of factors influencing student decisions and experiences, thereby facilitating more targeted branding strategies in higher education's evolving landscape.

6.1 Scope of the further Study:

Having solely compared the parameters of the top 20 NIRF ranking in 2023, a potential avenue for further study involves expanding the temporal scope by incorporating additional years. Additionally, broadening the comparison to include other colleges beyond the top 20 NIRF ranking could yield comprehensive insights. To enhance the depth of understanding the student mindset, conducting primary data collection emerges as a crucial next step, allowing for a more nuanced exploration of factors influencing student decisions and experiences over time and across diverse institutions.

7. AUTHORS ACKNOWLEDGEMENT:

- **Authors Contributions**
  The authors wrote the literature review, conducted the analysis and observational report, contributed to the discussion of the findings, proofread the manuscript, and used only for academic purposes only
- **Declaration of Conflicting Interests**
  The authors declared no potential conflicts of interest for the research, authorship, and/or publication of this article.
- **Funding**
  The authors received no financial support for the research, authorship, and/or publication of this article.

REFERENCES :

[1] Debolina Adhya & Santosh Panda (2022) Teacher educators' attitude towards technology-enabled learning and its incorporation into teaching-learning during and post-pandemic, *Educational Media International*, 59(2), 131-149, DOI: https://doi.org/10.1080/09523987.2022.2101204

[2] Chernatony, Leslie & Dall'Olmo Riley, Francesca. (1999). Experts' Views About Defining Services Brands and the Principles of Services Branding. Journal of Business Research. 46. 181-192. https://doi.org/10.1016/S0148-2963(98)00021-6

[3] Sivakumaren, K. S. (2017). Contributions of Publications of Indian Institute of Management in Ranking Institutions in National Institutional Ranking Framework: A Study, International Research: *Journal of Library & Information Science*, 7(2), 314-322. Google Scholar↗

[4] Kumar, Abhishek & Tiwari, Sanjay & Chauhan, Ashish & Ahirwar, Ramswaroop. (2020). Impact of NIRF on research publications: A study on top 20 (ranked) Indian Universities. 13. 219-229. DOI: https://doi.org/10.1080/09737766.2020.1741194

[5] Gupta, A., et.al. (2021). Ranking and accreditation systems: Challenges before Indian Higher Education. *Turkish Journal of Computer and Mathematics Education*, 12(8), 3140–3152. Retrieved from https://www.turcomat.org/index.php/turkbilmat/article/view/4157. Google Scholar↗

[6] Manohar, Sridhar & Mittal, Amit & Tandon, Urvashi. (2020). HEd-INNOSERV: perceived service innovation scale for the higher education sector. Benchmarking: *An International Journal*. Ahead-of-print. DOI: https://doi.org/10.1108/BIJ-08-2020-0415.

[7] Keller, K. L. (2010). Strategic Brand Management: Building, Measuring, and Managing Brand Equity. *Upper Saddle* River, NJ: Pearson Prentice Hall. Google Scholar↗

[8] Clifton, R., & Simmons, J. (2009). Brands and Branding (2nd Ed.). London, UK: Profile Books. Google Scholar↗

[9] Aaker, D. A. (2012). Building Strong Brands. New York, NY: Free Press. Google Scholar↗

[10] Muzellec, L. and Lambkin, M. (2006), "Corporate rebranding: destroying, transferring or creating brand equity?", European Journal of Marketing, Vol. 40 No. 7/8, pp. 803-824. https://doi.org/10.1108/03090560610670007

[11] Kapferer, J. N. (2012). The New Strategic Brand Management: Advanced Insights and Strategic Thinking (5th Ed.). London, UK: Kogan Page. Google Scholar↗

[12] Nguyen, B., Melewar, T. C., & Hemsley-Brown, J. (Eds.). (2019). Strategic brand management in higher education. Routledge. Google Scholar↗

[13] Zalte-Gaikwad, Sheetal. (2022). SWOC analysis (2). 2022 Google Scholar↗

[14] Chapleo, Chris. (2015). Brands in Higher Education: Challenges and Potential Strategies. International Studies of Management & Organization. 45. 150-163. https://doi.org/10.1080/00208825.2015.1006014

[15] Camilleri, Mark Anthony. (2019). Higher Education Marketing: Opportunities and Challenges in the Digital Era. DOI: https://doi.org/10.26220/aca.3169

[16] Aithal, P. S. (2018). Strategic Management Research in India: Contribution of Top Business Schools during last 5 Years–A Critical Study. *International Journal of Advanced Trends in Engineering and Technology*, *3*(1), 133-145. Google Scholar↗

[17] Weihrich, H. (1982). The TOWS matrix--A tool for situational analysis. *Long Range Planning*, *15*(2), 54-66. Google Scholar↗

[18] Thompson, A. A., Jr., & Strickland, A. J. III. (1989). Strategic Management: Concepts and Cases. Google Scholar↗

[19] Shenoy, V., & Aithal, P. S. (2017). Placement strategies of top ranked Indian management institutions. *International Journal of Scientific Research and Modern Education (IJSRME)*, *2*(1), 59-67. Google Scholar↗

[20] Aithal, P. S. and Shailashree, V. and Kumar, P. M(2016)., ABCD Analysis of Stage Model in Higher Education (January 10, 2016). International Journal of Management, IT and Engineering, 6(1) 11-24, Available at SSRN: https://ssrn.com/abstract=2779061

[21] Varma Ramshankar,(2022).National Education Policy A critical analysis, knowledge management in higher education Institutions. Google Scholar↗

[22] Ali, M. G. (2022). Detailed Review of National Institute Ranking Framework (NIRF) India Rankings including Uncertainty and Sensitivity. *International Journal of Educational Research Review*,7, Special Isuue, Google Scholar↗

[23] Aithal, P. S. (2016). Study of Research Productivity in World Top Business Schools. *International Journal of Engineering Research and Modern Education (IJERME)*, *1*(1), 629-644. Google Scholar↗

[24] Docampo, Domingo. (2013). Reproducibility of the Shanghai academic ranking of world universities. *Scientometrics*. 94. 567-587. DOI: https://doi.org/10.1007/s11192-012-0801-y.

[25] Aithal, P. S. (2016). Study of Annual Research Productivity in Indian Top Business Schools. *International Journal of Scientific Research and Modern Education (IJSRME)*, *1*(1), 402-414. Google Scholar↗

[26] Sheeja, N.K., et.al. (2018). Impact of scholarly output on university ranking, *Global Knowledge, Memory and Communication. Emerald Publishing Limited, 67*(3), 154-165. DOI: https://doi.org/10.1108/GKMC-11-2017-0087

[27] Aithal, P. S., & Kumar, P. M. (2020). Global ranking and its implications in higher education. *SCHOLEDGE International Journal of Business Policy & Governance*, *7*(03), 25-47. Google Scholar↗

[28] Aithal, Sreeramana. (2016). The Study of New National Institutional Ranking System Using ABCD Framework. DOI: https://doi.org/10.5281/zenodo.161077.

[29] Aithal, P. S., & Aithal, S. (2017). Comparison of Research Output and Fee Charging Strategies of Some Top Global and Indian Business Schools. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, *1*(1), 53-66. Google Scholar↗

[30] Deka, Pranjal & Sarmah, Mukut. (2021). Impact of NIRF Ranking on Research Publications: A Study with Special Reference to North-East Indian Universities. Google Scholar↗

[31] Dubey Nivriti, (2023) Impact of Pandemic covid 19 on education sector in India, RFI Publications. 978-81-960427-1-4. Google Scholar↗

****