

Digital Behavior Analysis and Decoding Marketing Merits of Top Indian Institutes

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ABSTRACT: The impact of social media on higher education institutions is extensive, making it a crucial focus for studying the role of social media marketing in education. In India, the National Institutional Ranking Framework (NIRF) plays a pivotal role in assessing the position of higher education institutes, categorized as public/private and technical/non-technical. NIRF 2022 ranked 1,350 institutes, considering parameters such as academics, research, innovation, financials, graduate outcomes, inclusivity, and perception. While perception holds a 10% weight, it significantly influences other primary parameters. Post-COVID and thanks to rapid digitalization, there has been a significant surge in social media usage by the youth of the country. Consequently, social media has emerged as a prime source of communication for educational institutes as well. This study focuses on analyzing "Digital Marketing Strategies," referred to as "Digital Behaviour," by examining Twitter usage among the top 50 institutes in the NIRF 2022 overall category in India. It also suggests a reference model, FACHIO©, for digital marketing by higher education institutions, which can be followed by institutes abroad. The conclusion discusses how FACHIO© can play a pivotal role in the era of digital marketing in higher education. The basic idea can be utilized to make comparative analyses and develop suitable strategies for digital marketing in other sectors as well.

KEYWORDS: FACHIO[©]; digital behavior; digital marketing; social media; Twitter; NIRF; perception; microblogging

1. Introduction

The role of media is riveting in the growth of a nation, the social well-being of an individual, and global cognizance. During the pandemic, when we were confined to four walls, social media networks kept alive the humanness and networking active among us. This increase in Social media usage has immensely affected the education sector [1–4], especially in countries like India where the majority of the population is digital-prone (Age Group 15-29 years), which are likely students. Social media presence, whether of an individual or institute, reflects their inner self; hence, the study centered on the influence of Social media and Higher Education Institutes in India [5–7] is of critical importance. Further steps will elaborate the process, and the conclusion will contain a suggestive finding by the researcher. The need for digital platforms where people can connect and learn has gained significant momentum. Digital platforms like Twitter, Facebook, Linked In, Instagram, YouTube, etc., were used by

organizations and students earlier, too. However, the increased use of digital platforms and digital presence affecting most of the educational institutions' perceptions in India are gearing up and creating their profile on various social media platforms [8–11]. Social media gives them an easy, economical & efficient way to spread their updates to fellow followers, and it acts as a tool for internal and external communication.

The fact proven in this study will not only help these 50 institutes but, due to the different genres of the institutes in this sample set, will assist various other institutes in India and other digitally-developed countries to understand and draw their digital marketing strategies for building the brand of their institute. This strategic digital behavior analysis will let institutes create their unique identity, engage internal & external audiences, and effectively, efficiently & economically promote the courses and activities. Additionally, the NIRF ranking framework quite tactically evaluates the performance of the institutes, owing to which it seems the institute taken in the study is also being ranked by QS World University Ranking 2023 [12]. Hence, the methodology used in this study can be applied to the Top QS World University Ranking as an extension of this research work with an increased number of institutes and an enhanced data collection mechanism. Even this method of analyzing a specific sector's digital behavior can be implemented for other sectors like healthcare, construction, or any sector-specific corporate organization. As the digital behavior of the entity reflects its core values and beliefs, its digital imprint (reaction of the audience) reflects a proportionate correlation that has been discussed in the first-of-its-kind study.

2. Methodology

2.1. Concept framework.

Due to the advancement of technology, every platform, even a mere website, provides a statistical analysis of user behavior. There has been a significant increase in social networking usage in the last 3 years, as per available secondary data from some of the top institutions in various studies. The angle of post-pandemic (COVID-19) is critical as when we all were confined to four walls of our homes, it was microblogging through the phone that kept us socially connected and globally relevant [13]. In this Analysis, the education institute's digital behavior (creator behavior) termed 'Digital Behavior' is analyzed using explicit data instead of the complex equation to focus on evident facts based on qualitative & quantitative analysis rather than a calculative conclusion. In this study, the researcher has reviewed the existing literature about how Social media is being used as a strategic digital marketing tool and found that previous studies were done only for the top-10 specific categories of institutes like engineering, management, and university. Also, these studies only cater to a few of the categories of the institutes in which the NIRF rankings have been announced.

A total of 1350 institutes in India were ranked in the NIRF rankings 2022 announcement [14]. Perception is the one parameter among various parameters, including verticals like academic, research, innovation, financial, graduate outcome, inclusivity, and perception. It weighs less (10%) but significantly influences other primary parameters. Perception in NIRF Ranking is evaluated based on Survey methodology, but the opinion of individual experts has a critical contributing factor: awareness about the institute's performance. A constructive viewpoint about any institute is developed based on the outreach of outstanding development in the peer group and with the public. The concept and variables chosen are after a detailed

analysis of the media and education domain narrowed down to higher education and Twitter using NIRF rankings best suited for the given study as shown in Figure 1.

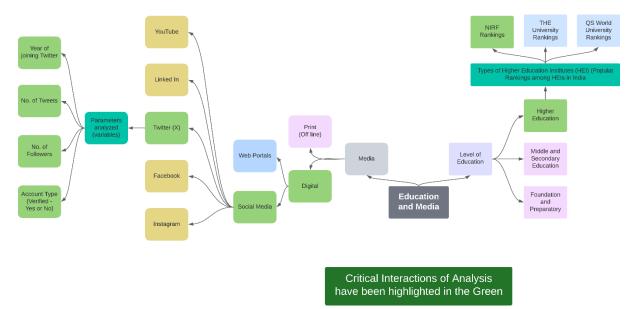


Figure 1. Concept framework for digital behavior analysis.

2.2. Research Methodology.

With a thorough analysis of the profile of institutes ranked in the overall categories, the top-50 institutes have been chosen as per NIRF rankings 2022 by applying the non-probabilistic purposive sampling technique. The sample set of 50 institutes is optimum in terms of the variety of institutes covered as shown in Figure 2. In addition, there is a considerable variation in how this institute uses microblogging sites that have been analyzed using a unique term defined here as "Digital Behavior" as observed during the preliminary research. This variation in digital behavior makes the study further holistic in nature enabling and entrusting the proposed solution based on the best practices from the outstanding digital behavior followed by the institutes and better to be followed by an Institute so that others can implement it as a model of reference.

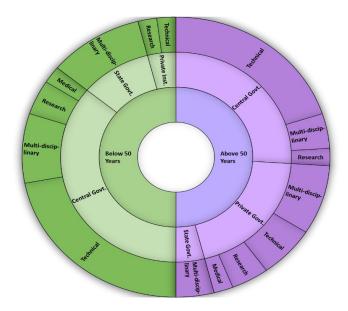


Figure 2. Sampling distribution of top-50 Institutes as per NIRF rankings 2022.

Further, Twitter is selected to conduct the comparative analysis due to its popularity amongst higher educational institutes in India and to ensure the sufficiency of the data set chosen for the studies. Many of the top-50 NIRF 2022 Ranked Institute are making their mark in the global education ecosystem, making this study inclusive and giving importance to the term 'Digital Behavior' globally. Due to the global perceptive of NIRF that is comparable with any international university ranking, this study not only benefits Indians but can also help public relations practitioners and communication experts to innovate communication in their domain.

2.2.1. Key parameters of analysis.

As discussed, the media plays an essential role in conveying such information. With the availability of social media, it has become convenient to share significant announcements like admission to awards of the institute's fraternity. The secondary data sufficiency makes this study a wholistic being India has a wide variety of educational institutes and a significant Social media user base to frame and follow various digital behavior-influencing strategies. But when it comes to higher education institutes, upon doing a primary case-taking of the Social media presence of the Top NIRF-Ranked Institute, it is mostly Twitter where most of the updates are shared. There is a sharp decline in the usage & followership of users on Facebook. However, there is a significant increase in the utilization of Linked In, but the data availability for the chosen sample data is small, and Instagram is popular among youth but still needs to be explored widely by these institutes.

As a data collection strategy, four explicit secondary data parameters, Date of Joining Twitter, Follower, No. of Tweets, and The Blue Tick, have been collected over three days as secondary data collection for the Top-50 NIRF Ranked Institute 2022. Further, the correlation between number of tweets (digital footprint of an institute on the platform) & number of followers (digital imprint of the audience) is studied for the various sub-sets of the institutes to understand the effect of the nature of the institute on the digital behavior on the platform. In this study, the researcher has not only collated and analyzed the graphical interpretation of these secondary data available on Twitter but has also looked at and hence could analyze the type of content/tweet and its effects on the audience in terms of the type of tweets for the twenty institutes which either at the top or bottom (in the sample set of 50) of chart for the number of tweets or performance in NIRF Ranking. Knowing the lack of awareness about strategic usage of social media among Indian Institute, the nature/type of tweets has been briefly classified into three categories: announcements, happenings, and others. Based on this qualitative & quantitative analysis of factual data, the researcher planned to propose a set of recommendations on the effective utilization of social media, which will act as guiding codes of conduct for higher education institutes in India and globally.

3. Results and Discussion

3.1. Results.

Due to the advancement of technology, every platform, even a mere website, provides a statistical analysis of user behavior. There has been a significant increase in social networking usage in the past 3 years, as per available secondary data about some of the top institutions indicated in the previous studies. The angle of post-pandemic (COVID-19) is critical as when

we all were confined to four walls of our homes, it was microblogging through the phone that kept us socially connected and globally relevant. In this Analysis, the platform (creator behavior) termed 'Digital Behavior' is analyzed using explicit data instead of the complex equation to focus on evident facts rather than a calculative conclusion. Four explicit secondary data parameters, date of joining Twitter, follower, number of tweets, and blue tick (verified/non-verified account), have been collected over three days (from Jul-Oct 2022) of secondary data collection for the Top-50 NIRF Ranked Institute 2022, as summarized in Table 1.

Table 1. Parametric indicators of digital behaviors of top-50 NIRF 2022 ranked institute.

S. No.	Name	No. of years of Est.	Joining Month YY on Twitter	No. of Tweets	No. of Followers	Account Status (Y-Verified, N- Non-Verified)
1	IIT Madras	1959	Jan 13	6,355	150,300	Y
2	IISc Bengaluru	1958	Aug 14	2,007	133,800	Y
3	IIT Bombay	1958	Feb 09	2,720	178,400	Y
4	IIT Delhi	1963	Mar 09	3,312	111,800	Y
5	IIT Kanpur	1959	Sep 11	6,207	98,700	Y
6	IIT Kharagpur	1951	Aug 12	4,296	96,900	Y
7	IIT Roorkee	2001	Jun 15	7,124	41,100	Y
8	IIT Guwahati	1994	Jan 12	5,093	56,500	Y
9	All India Institute of Medical Sciences, Delhi	1956	Jan 15	814	44,800	Y
10	JNU New Delhi	1969	Jul 20	1,032	19,500	N
11	BHU Varanasi	1916	Jul 19	9,757	85,500	Y
12	Jadavpur University	1905	Jun 15	898	1,163	N
13	Jamia Millia Islamia	1988	Jul 19	2,738	46,000	Y
14	IIT Hyderabad	2008	Apr 14	2,825	36,600	Y
15	Calcutta University	1857	Nov 16	-	2,693	N
16	Amrita Vishwa Vidyapeetham	1994	Jun 10	5,132	5,413	N
17	Manipal Academy of Higher Education	1953	Sep 13	4,364	9,666	Y
18	VIT, Vellore	1984	Mar 09	5,150	14,000	N
19	Aligarh Muslim University	1953	Apr 18	2,575	37,400	Y
20	University of Hyderabad	1974	Jul 11	7,021	10,900	Y
21	National Institute of Technology, Tiruchirappalli	1964	Oct 17	545	5,031	N
22	Anna University	1978	Aug 15	1,195	12,900	N
23	University of Delhi	1922	Dec 18	1,216	92,800	Y
24	Bharathiar University	1982	Jul 22	-	-	N
25	Savitribai Phule Pune University	1949	Jul 22	4	82	N
26	IISER Pune	1953	Mar 18	2,538	20,200	Y
27	NIT Surtkala	1960	Dec 17	2,390	6,955	Y
28	Institute of Chemical Technology	1933	Jul 19	277	1,197	N
29	IIT BHU	1919/2012	Feb 20	225	19,500	Y
30	Siksha `O` Anusandhan	2007	Jul 18	150	854	N
31	IIT Indore	2008	Apr 18	593	17,400	Y
32	Birla Institute of Technology & Science - Pilani	1964	Jun 14	1,400	17,400	N
33	Homi Bhabha National Institute	2005		Do not h	nave an account	
34	Kalinga Institute of Industrial Technology	1992	Aug 17	3,611	30,100	Y
35	IIT Ropar	2008	May 11	1,902	16,000	Y
36	S.R.M. Institute of Science and Technology	1985	Mar 11	3,415	9,706	N
37	IIT Gandhinagar	2008	Jan 11	6,058	38,500	Y
38	IIT (ISM) Dhanbad	1926	Apr 18	1,578	14,500	Y
39	NIT Rourkela	1961	Apr 18	954	8,740	Y
40	Indian Institute of Science Education & Research, Kolkata	2006	Apr 18	805	10,400	Y
41	Panjab University	1882	Nov 14	1,430	42,800	Y
42	Amity University	2003	Apr 10	1,131	10,300	Y
43	IIT Mandi	2009	Aug 18	1,087	14,800	Y

S. No.	Name	No. of years of Est.	Joining Month YY on Twitter	No. of Tweets	No. of Followers	Account Status (Y-Verified, N- Non-Verified)
44	Saveetha Institute of Medical and Technical Sciences	2005	Oct 10	105	381	N
45	National Institute of Technology Warangal	1959	May 18	476	7,736	Y
46	Osmania University	1918	Jan 21	264	4,989	N
47	Indian Institute of Science Education & Research, Mohali	2007	Oct 16	435	11,800	Y
48	Chandigarh University	2012	Nov 13	11,000	14,900	Y
49	Shanmugha Arts Science Technology & Research Academy	1984	Jun 15	1,236	11,600	N
50	Kalasalingam Academy of Research and Education	1984	Aug 14	429	242	N

A straightforward analogy can be drawn based on the Digital Behavior of the Institute's Presence on Twitter; the Frequency of tweeting affects their followers, and the follower's perception is affected by verified accounts. It significantly improves its perception as any institute becomes capable with a competent staff & students and perception plays a pivotal role in the institute's selection of a promising and prominent candidate. The following categorization helps us to understand how engaging and connected an institute is digitally.

3.1.1. The age of the institute - year of establishment.

This representational analysis suggests that all the institutes have completed at least 10 years of establishment in India. The oldest Institute ranked in NIRF 2022 is 165 years old in India. There is a significant number of institutes across the various decades, starting from 10 years to 100+ years. Even it is a 50:50 proposition if we see these Top-50 institutes as above 50 years & below 50 years. Hence, years of establishment – the age of the institute may not be a direct influencing factor, but the significant variation in the age of institutes (indicative of people's belief in its system) reconfirms the sufficiency of the sample set and robustness of the study.

3.1.2. Type of institute.

The Top 50 NIRF Institutes in India comprise a diverse mix of multi-disciplinary universities, technical institutes, and research institutions. These institutions can also be categorized by their governing bodies, such as Central Government autonomous bodies, private deemed universities, and state universities. The NIRF Rankings are determined by various evaluation parameters, including the student-faculty ratio, research index, graduate index, and diversity index. These criteria ideally favor top universities and technical institutes like the IITs. Notably, research institutes such as the Homi Bhabha National Institute and medical institutions like the All India Institute of Medical Sciences, Delhi, also secured places in the Top 50 of the 2022 NIRF Rankings. Additionally, state universities like Jadavpur University and Calcutta University, along with private universities like Amrita Vishwa Vidyapeetham and the Manipal Academy of Higher Education, ranked in the Top-20. While technical institutes are prominently featured in the Top-50, the implementation of the National Education Policy (NEP) is expected to foster greater collaboration across disciplines and institutions. This collaboration will likely enhance the overall perception and performance of these institutes in their respective and related domains.

3.1.3. Date of joining Twitter.

Twitter is selected as the source of secondary data for analyzing and drawing analogies among the Top 50 NIRF Institutes. From August to October 2022, Twitter stood out as the most popular Social media platform among Indian educational institutes, with only one exception among the NIRF Top 50. This made it possible to effectively analyze the digital behavior of these institutes using critical statistics of digital emotions and digital responses. The study evaluated the institutes' age (year of establishment) alongside their presence on Twitter (date of account creation). It was observed that the year an institute was established did not correlate with its engagement in digital behavior. Despite the varying ages of the institutes, their average presence on Twitter was comparable across different age groups. Data collection spanned a crucial period, leveraging Twitter's ability to provide insights into profile activity, especially tweets per day. Initially, unverified users could scroll through 600 posts daily, while X Premium subscribers had a limit of 6,000 posts. These limits were later adjusted to 500 posts for new and unverified users and 1,000 posts for accounts without a verification badge. Consequently, gathering data for all Top 50 institutes within the same timeframe required a strategic plan essential for a comprehensive study. The findings of this study were submitted for a copyright grant to the Indian Patent Office by the researcher - the creator of the recommended model, hence this data, findings, and results were pending for publication till the date of this journal.

3.1.4. Authentic digital behavior (verified account).

On Twitter, accounts can be authenticated with a provision of "Blue Tick" indicating verification. To understand the influence of this authentication on digital behavior, the verification status of the Top 50 NIRF Institutes was examined. The data revealed that approximately 60% of the institutes in the sub-categories 10-20 and 61-70 had verified accounts. Other sub-categories showed a lower inclination toward obtaining a "Blue Tick." To gain deeper insights into the digital behavior of these institutes, two critical variables were further analyzed: the number of tweets and the number of followers. This analysis helps to understand how verified and non-verified accounts engage and interact on Twitter, shedding light on their overall digital presence and influence.

3.1.5. No. of tweets (institute's digital presence – active digital behavior).

To evaluate an institute's digital response on Twitter, the maturity of the institute, defined by its year of establishment, is considered a key factor. Unlike the age of the institute on Twitter, the number of tweets shows significant variation across different sub-categories of establishment years. Therefore, the number of tweets has been chosen as the first variable of analysis. By examining the trend in the number of tweets, we can draw analogies regarding the digital behavior and emotional engagement of these institutes on Twitter.

3.1.6. No. of followers (reflection of institute's behavior – digital imprint).

Another critical variable influencing digital behavior found during secondary data collection on Twitter is the number of followers. In this study, digital popularity is defined as the digital response to digital emotion. There are notable variations in the average number of followers across different sub-categories based on the institute's age. However, this does not always

correlate with the number of tweets (quantum of digital emotions) by the institutes. The institutes were analyzed based on the number of tweets and the number of followers, reflecting the volume of organic content produced by an institute and perceived by the audience. Retweets were excluded from the analysis considering their inorganic content. The relationship between the number of tweets and the number of followers indicates that an institute's digital behavior is significantly related to the audience's digital response. This is particularly evident in the Top-5 institutes with the highest number of followers.

3.2. Discussion.

The charts in Figure 3 reveal two important insights supporting this analysis. First, the top 5 NIRF-ranked institutes, which have the highest number of followers, also show significant digital activity. Interestingly, Chandigarh University ranked in the range of #45-50 in the NIRF Rankings 2022 but included in the Top-50, has a substantial digital presence. Despite not being a technical or research-oriented institute, it has the highest number of tweets among all institutes ranked in the Top-50 NIRF Rankings 2022, highlighting its active engagement on Social media. As per the analysis criteria, it can be mentioned that Chandigarh University has the most active Digital Behavior. Also, IIT Madras Digital's presence in all Top categories based on NIRF 2022 Ranking, No. of Tweets & No. of Followers reflects that for an institute to be best, it needs to have amazing, conducive Digital Behavior. The researcher has also attempted to create the Institute's Digital Behavior Pattern based on their No. of years of Establishment and No. of Year of Presence on Twitter, but no clear analogy can be formed. An institute should focus on strengthening its performance in the given domain. As an educational entity, public awareness of the institute's performance is equally important for which engagement strategies matter instead of credibility based on the Age of the Institute.

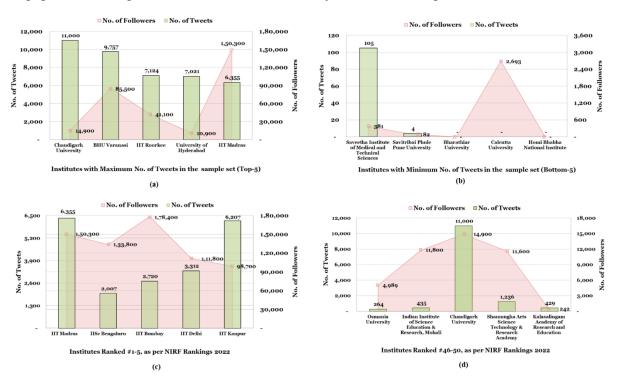


Figure 3. Study of Digital Behavior Analysis (Co-relation between No. of Tweets v/s No. of Followers): (a) Top-5 Institutes in the Context of No. of Tweets (Active Digital Behavior); (b) Bottom-5 (In the sample set of 50) Institutes in the context of No. of Tweets (Relatively Passive Digital Behavior); (c) Top-5 Institutes as per NIRF Rankings 2022; and (d) Bottom-5 (In the sample set of 50) Institutes as per NIRF Rankings 2022.



3.2.1. Types of tweets (study of digital behavior analysis).

Based on the above findings, the researcher wants to highlight the gap in understanding digital behavior, often referred to as digital presence. To address this, the researcher has chosen to conduct a deeper behavioral analysis of the digital emotions of educational institutes. Previous studies have primarily focused on the statistics of the top 10 institutes in various categories. In contrast, this research aims to analyze the digital behavior patterns of these institutes and perform a qualitative analysis of a broader sample set. The digital emotions of these institutes, as expressed through their tweets, were analyzed over a three-month period. The analysis categorized the digital behavior of the institutes into three types of digital emotions:

- Announcements: New and critical information shared by the institute, reflecting its external/public involvement.
- Happenings: Activities conducted in and around the institute, reflect its internal/collaborative involvement.
- Others: Formal messages on public events or national festivals.

3.2.2. Observations on existing digital behavior.

The study aimed to understand the digital behavior patterns of these institutes and their followers' responses to these digital emotions. Some institutes appeared in multiple categories of digital behavior analysis, such as the top 5 and bottom 5 for the number of tweets, the top 5 and bottom 5 for the number of followers, and the top 5 and bottom 5 NIRF-ranked institutes. Based on the data for these three sub-categories, an analogy for each institute's digital behavior was drawn, identifying best practices and strategies by categorizing tweets into three categories: Announcements, Happenings, and Others for qualitative study as shown in Figure 4. The behavior analysis covers 18 institutes, followed by observations of each institute's digital behavior (11 institutes, including IIT Madras, IIT Bombay, IISc Bengaluru, IIT Delhi, IIT Kanpur, Chandigarh University, Saveetha Institute of Medical and Technical Sciences, Savitribai Phule Pune University, Bharathiar University, Homi Bhabha National Institute, and Kalasalingam Academy of Research and Education, are common across two or more categories and are thus they were considered only once for analysis). This study attempts to correlate digital behavior with digital response and identify the major contributing factors behind an institute's successful digital presence.

- IIT Madras: IIT Madras has an excellent balance of tweet types, with a mix of announcements and campus happenings. This balanced approach attracts substantial digital engagement and supports its top-tier perception among NIRF-ranked institutes.
- IISc Bengaluru: IISc Bengaluru primarily focused on promoting its new BTech program in Mathematics & Computing, with the rest of its page consisting mostly of retweets. These retweets often go unnoticed due to other parties' logos and display pictures. Institutes with limited announcement content should actively engage with their audience to maintain follower interest.
- IIT Bombay: IIT Bombay maintains a good balance between announcements and sharing campus happenings. It has effectively promoted its Gen-Zero Women Campaign, celebrating its first batch of women alumni. Engaging alumni on digital platforms can enhance an institute's digital network and response.

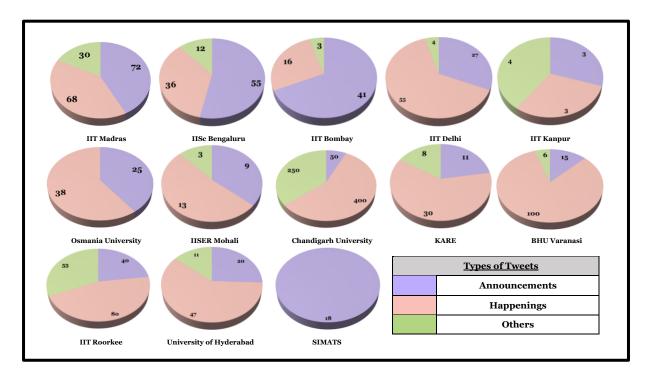


Figure 4. Type of Tweets (ToT) Analysis of the institutes as per criteria mentioned in the Section 3.2.2.

- IIT Delhi: IIT Delhi's strategy revolves around high-profile announcements, particularly visits from notable individuals. Hosting influential dignitaries can generate wider publicity and enhance digital engagement.
- IIT Kanpur: IIT Kanpur shows a balanced distribution of tweet types, primarily promoting
 events like the Smart India Hackathon. However, most critical announcements and
 happenings are tweeted from the institute head's personal account and then retweeted. This
 approach may limit the institute's digital influence.
- Osmania University: Osmania University, despite being over 100 years old and in the bottom 5 of the study, has established a significant digital presence within a year of joining Twitter. It promotes internal events with engaging photographs and highlights collaborations and visitor engagements, creating compelling digital content.
- Indian Institute of Science Education & Research, Mohali: IISER Mohali has a varied tweet composition but is not as significantly distributed as other top-performing institutes. Active digital engagement is essential for maintaining a strong digital presence.
- Chandigarh University: Chandigarh University leads in the number of tweets among the Top 50 NIRF-ranked institutes. Despite its high tweet volume, the focus should be on quality and retaining relevant followers. The university's active digital behavior has contributed to its rise in NIRF rankings from #77 to #48.
- Shanmugha Arts, Science, Technology & Research Academy: The institute did not have any digital presence during the study period.
- Kalasalingam Academy of Research and Education (KARE): Although KARE is an old account, its digital presence is limited. The significant improvement in its NIRF ranking from #74 to #50 is attributed to its outstanding graduate outcomes, as highlighted in the NIRF 2022 report.
- BHU Varanasi: BHU actively shares significant announcements, primarily related to recruitment and updates. With its long history (106 years) and extensive alumni base, BHU

ranks in the top 5 for the number of tweets and has a corresponding number of followers.

- IIT Roorkee: IIT Roorkee, the oldest technical institute in the country, has a decent digital presence. However, many of its tweets are repetitive, which may explain the disparity between the number of tweets and follower growth.
- University of Hyderabad: The University of Hyderabad shares a high volume of happenings-related messages, primarily focusing on alumni and community awards and recognition. Despite having one of the oldest Twitter accounts, its inconsistent digital presence may contribute to its fewer followers despite a high number of tweets.
- Saveetha Institute of Medical and Technical Sciences (SIMATS): SIMATS recently started
 its Twitter account and is gradually building its digital presence, with the potential for
 significant progress over time.
- Savitribai Phule Pune University: The institute did not have any digital presence during the study period.
- Bharathiar University: The institute did not have any digital presence during the study period.
- Homi Bhabha National Institute: The institute did not have any digital presence during the study period and does not have a Twitter account.
- Calcutta University: The institute did not have any digital presence during the study period.

On the basis of Overall Detailed Digital Behavior Analysis, it can be said yes the quantum of Digital Behavior Influences Digital Response. How much? It is based on the type of digital behavior. Following are the ready factors of influence an institute may work to form Internal & External Engagement Strategies. Hence, the researcher proposes the "FACHIO[©]" Model to improve the Digital Behavior of a Higher Educational Institute as illustrated in Figure 5.

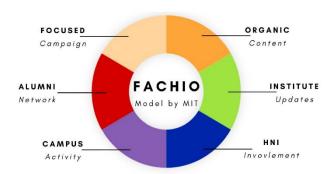


Figure 5. *FACHIO® for Basic **Digital Marketing by Higher Education **Copyright granted to the author of this paper/ researcher of this study **Copyright pending.*

4. Conclusions

During the course of the study, a critical change in the digital landscape prompted a reevaluation of how digital emotions - ways we express our true emotions in the digital era are understood. An additional conclusion emerged from the researcher's active digital behavior and awareness in response to this shift. Twitter has provided a substantial platform for Indian institutes and universities to share best practices, encourage collaboration, and create strong virtual networks. This allows institutions to learn from each other without direct connections. However, as Prime Minister Narendra Modi emphasizes the vision of Aatma Nirbhar Bharat (self-reliant India), relying solely on Twitter poses a risk to national communication strategies. Recent changes in Twitter leadership and policies, including potential cost implications, may not have immediate effects but could significantly alter digital socializing and behavior. While the study aimed to understand the digital behavior of top educational institutions, it also highlighted the need for a supplementary platform to ensure continuity in digital communication. In a country that is digitally supreme in terms of technology, artificial intelligence is widely utilized, and numerous free tools are available, paying for privileges on Twitter may not be sustainable in the long run. Therefore, promoting a parallel digital communication platform is crucial to mitigate potential disruptions from changes in Twitter's usage policies. Also, the latest study suggests the emergence of the fediverse - a buzzword in 2023 and will reinvent itself in 2024 [15]. Lastly, the 360° Analysis as highlighted by this study can be an apt model of reference for entities spanning across various sectors like Manufacturing, Healthcare, IT, Entertainment and list may go on. Future researchers can find the factors influencing the interest of the Target Audience to make a comparative study and find/ propose a model of reference that can suit their sector/ industry.

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The researcher expresses heartfelt gratitude to her employer for trusting her communication strategies and motivating her to explore the domain of Social media. She also extends her appreciation to the Social media Champion (SMC), a focused group comprising over 200 communication experts in India by the Ministry of Education, Government of India, which has enhanced her understanding of Social media marketing strategies and played a pivotal role in identify the need for such an exhaustive study. She acknowledges the dedicated and encouraging curriculum of IGNOU, New Delhi, which inspired her to compile years of observations and behavioral analysis into this research study for the public good. She permits the use of her copyrighted model of reference - FACHIO[©], with a simple note that this study belongs to Mitalee Agrawal or the FACHIO[©] Model by MIT. Finally, she commends the fantastic work done by microblogging sites and all communication enthusiasts who kept the conversation active on these platforms.

Competing Interest

The comparative study is the author's original idea and resulted from analyzing the freely available secondary data sources. The Copyright is self-funded and the researcher allows the citations of the copyrighted model of reference for the larger good of the Higher Education Ecosystem and Digital Marketing Professionals. Hence, it is free from any Competing Interest.

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