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THE STATE OF TV AUDIENCE MEASUREMENT IN INDIA

EXECUTIVE SUMMARY

The TV audience measurement (TAM) holds substantial significance in quantifying viewership patterns and preferences, offering crucial insights to broadcasters, advertisers, and content creators. This analysis presents an overview of the current state of TAM in India, examining its evolution and the diverse stakeholders involved. The note delves into various organizational structures and operational designs that have shaped this evolution and influenced its current status, especially in the U.S. This exploration aims to establish the contextual background for the shortcomings and distortions that have crept in over a period of time due to the monopolistic structure of this industry. This note further addresses the regulatory environment and industry structures that have emerged in India (and in the U.S.), including recommendations and guidelines formulated by TRAI. Additionally, a value chain analysis is provided to contextualise market dynamics and governmental influences impacting the TV audience measurement landscape. The concluding section reflects on the lessons derived from this journey and assesses emerging ideas crucial for enhancing TV audience measurement systems in India.

INTRODUCTION

Audience Measurement Systems aim to **gauge the size and composition of media audiences**, making them prominent sample surveys. These systems have a long history, tracing back to the emergence of sampling theories at the beginning of the century. The USA pioneered the measurement of print and radio audiences through survey sampling in the late 1920s-early 1930s, a practice that has continued ever since.

Audience measurement systems are a crucial aspect of sample surveys, especially in the private sector, and are now prevalent in various media industries: print, radio, television, cinema, outdoor, and, more recently, the Internet. TV Audience measurement (TAM) systems, in particular, hold a unique position, dominating media audience measurement systems with extensive sample sizes and advanced data collection techniques. For instance, the Indian television audience generated a substantial number of observations, **916 million viewing minutes in week 45 of 2023**.

The increasing number of TV channels, particularly in regional, children, and news segments, has intensified the challenge for both broadcasters and advertisers in retaining viewers. Audience measurement strategies, primarily employed by media owners, publishers, and advertisers, play a pivotal role in assessing media content success and establishing advertising rates. By comprehending viewership patterns and demographics of the target audience, advertisers can strategically place ads and tailor messaging to resonate effectively. Consequently, the measurement of TV audience ratings is pivotal in gauging the efficacy of TV advertising campaigns. However, amidst these considerations, the prime stakeholder, the viewer, seems to have been overlooked. What a select few find interesting dictates what the broader audience gets to watch. (*Consultation Paper on Policy Guidelines for Television Audience Measurement (TAM)/ Television Rating Points (TRP)*, 2008)

IMPORTANCE OF TV RATINGS

TV audience ratings are a significant instrument of decision-making for a wide range of industry stakeholders. Television ratings provide information about the TV-watching habits of viewers

from different socio-economic backgrounds of the audience. Basically, this is the ranking list of popular TV programs released periodically by various rating agencies.

- **Government and Industry regulators:** Government and regulators use TV audience ratings to monitor the overall health of the TV industry and ensure that broadcasters are operating in the public interest. They may also use ratings data to inform policy decisions regarding content regulations and advertising practices.
- **Broadcasters, program producers and content creators:** Broadcasters use TV audience ratings to determine the value of their programming and negotiate ad rates with advertisers. With large sums of money spent annually on producing TV programmes and commercials, reliable TV audience information is required to evaluate and maximise the effectiveness of this investment. Ratings are useful data which inform programming decisions, ensuring content being aired resonates with their target audience. Program producers use TV audience ratings to gauge the popularity of their shows and identify areas for improvement. Writers, directors, and actors use TV audience ratings to gauge the success of their work. They also use rating data to negotiate higher production budgets, better personal payouts and secure better distribution deals for the programs broadcasted and themselves.
- **Advertisers and Media Agencies:** With large sums of money spent annually on producing TV programmes and commercials, reliable TV audience information is required to evaluate and maximise the effectiveness of this investment. Advertisers and Media Agencies use TV audience ratings to identify the most effective programs and time slots for reaching their target market and clients. They also use ratings data to measure the impact of their advertising campaigns among specific demographics and optimise their ad spend.
- **Researchers:** Audience researchers use TV audience ratings to study viewing habits, demographics, and preferences of different segments of the population. This information is valuable for understanding the evolving media landscape and informing future content and advertising strategies. Researchers also use TV audience ratings to conduct studies on the impact of television on society, culture, and individual behaviour

TV AUDIENCE MEASUREMENT INDUSTRY'S BACKGROUND

Emergence of TV Audience Measurement

The measurement of broadcast audiences has been around since the 1920s, starting with commercial radio. When television was introduced in the 1930s, methods from the radio industry were applied to TV audience measurement. Early on, those working on audience measurement understood its impact on media-oriented democracy. Ratings could influence viewer choices and shape advertising sponsorship, impacting broadcasting stations with specific political views.

The history of ratings originated in the United States, driven by commercial researchers seeking a scientific understanding of public opinion in the early 20th century. The connection between market research and technology emergence transformed public opinion research into a key aspect of political and communication sciences. Opinion polls, developed in the 1930s in the US and later exported to Europe, played a crucial role in making the public visible and quantifiable.

Unlike traditional market research, opinion polls presented their data openly to the population they measured. Individuals involved in opinion polling were also connected to early broadcast ratings. Both opinion polls and ratings share a professional worldview, claiming to represent the public and carrying out a mission beyond the market, aligning with the requirements of "modern democratic politics" (Igo, 2007).

Since the inception of commercial television in 1947, audience measurement has been essential to understanding viewer preferences. Initially, rating systems relied on audience phone calls, adapting methods from radio measurement. Clark Hooper improved survey methodologies by introducing "telephone coincidentals," asking listeners about their current activities during the call instead of relying on recall. This innovation influenced standard television ratings metrics, like audience shares. In 1950, Nielsen acquired Hooper's business and incorporated these advancements into the Nielsen Television Index, marking a significant evolution in audience monitoring for national television.

Organisational Patterns in TAM Organisations

The primary objectives of TAM research are to provide the TV industry with a standardised trading currency for commercial airtime and to offer program ratings that aid in schedule construction. These goals are closely linked, particularly for commercial broadcast channels, where a larger audience implies greater potential for advertising and sponsorship revenues.

To achieve a common trading currency, widespread acceptance of the source providing audience data is crucial. This has given rise to two main types of survey organisations. The first is the Joint Industry Committee (JIC), where all facets of the TV industry collaborate to establish TAM survey specifications, appoint a contractor for TAM data supply, and set terms and conditions for data usage. The second is an Own Service (OS), where a market research company with expertise in TAM research establishes and operates a TAM system, holding the data copyright and having individual contracts with subscribers. (Syfret & Ruud, 2017)

Between these extremes, variations include Media Owner Committee (MOC) structures, where TV stations collectively determine survey specifications, and Tripartite Research Company Contract (TRCC) structures, where ownership involves media companies, advertisers, and media buyers. Regardless of ownership, decisions vary, and subscriber interests are addressed by technical committees, advisory groups, and working parties. (Syfret & Ruud, 2017)

In summary, the four identified categories are (Syfret & Ruud, 2017):

1. **Joint Industry Committee (JIC):** Collaboration between TV stations, media buyers, and advertisers, with a formal committee overseeing TAM survey specifications, data processing, and licensing conditions.
2. **Media Owner Committee (MOC):** Contract between research companies and a single media owner or a committee of media owners, resembling JIC but with media owners guaranteeing 100% of TAM system funding.
3. **Tripartite Research Company Contract (TRCC):** Research company with a tripartite ownership structure (media companies, advertisers, and media buyers), having contracts with data purchasers and sub-contracted research suppliers.
4. **Own System (OS):** A market research company that operates TAM as a commercial venture, signing individual contracts with data purchasers who may influence survey design through independent industry committees.

THE STATE OF INDIA'S TV INDUSTRY

(compiled from EY-FICCI Report on India's media & entertainment sector April 2023, Pitch Madison Advertising Report for 2022, and BARC BI Study 2018)

The emergence of television is as significant a milestone for humanity as the introduction of the postal service, just like the postal service, which provided the first evidence of worldwide connectivity.

Television Segment Overview

In 2022, the television segment experienced a 1.5% decline, with the number of television channels slightly decreasing to 885. Despite this, television advertising demonstrated resilience, achieving a 2% growth, nearly reaching pre-COVID-19 levels.

M&E sector constitution	2019	2020	2021	2022	2023E	2025E	CAGR 2022-2025
Television	787	685	720	709	727	796	3.90%
Digital media	308	326	439	571	671	862	14.70%
Print	296	190	227	250	262	279	3.70%
Filmed entertainment	191	72	93	172	194	228	9.80%
Online gaming	65	79	101	135	167	231	19.50%
Animation and VFX	95	53	83	107	133	190	21.10%
Live events	83	27	32	73	95	134	22.20%
Out of Home media	39	16	20	37	41	53	12.80%
Music	15	15	19	22	25	33	14.70%
Radio	31	14	16	21	22	26	7.50%
Total	1,910	1,476	1,750	2,098	2,339	2,832	10.50%
Growth		-23.20%	19.30%	19.90%	11.50%		

SOURCE: E&Y-FICCI REPORT ON MEDIA AND ENTERTAINMENT SECTOR 2023

The growth in advertising was attributed to a 2% increase in volume, while rates remained relatively constant. In contrast, subscription revenue faced its third consecutive year of decline, dropping by 3.8% compared to 2021. This decline was primarily driven by a reduction of five million pay TV homes, while Average Revenue Per User (ARPU) remained relatively stable.

Television advertising grew 2% to end 2022 just behind its 2019 levels, on the back of volume growth. Subscription revenue continued to fall for the third year in a row, experiencing a 4% de-growth due to a reduction of five million pay TV homes and stagnant consumer-end ARPUs. While linear viewership declined 7% over 2021, 8 to 10 million smart TVs connected to the internet each day, up from around 5 million in 2021

Over the years, the broadcasting sector has grown significantly and has reached every home through television sets. As of 2022, the size of the television market in India was INR 70900 and

is expected to reach INR 79600 crores by 2023. In FY20, TV penetration in India stood at 69%, driven by the DTH market, which accounted for a market share of 37% of the total TV market against 34% in FY19.

Viewership and Reach

Viewership and reach in 2022 revealed 120 million active pay TV homes and 45 million free TV homes. However, time spent on linear television witnessed a 7% decrease due to declines in both Hindi and regional language viewership. The prevalence of smart TV sets increased to 25 million, though only 8 to 10 million were connected to the internet daily.

Looking ahead, the future outlook for television screens, including both linear and bi-directional, anticipates a rise to 206 million by 2025 from the current 180 million. This growth is expected to be driven by connected TVs, projected to exceed 40 million, and free television, expected to surpass 50 million by 2025. However, pay TV households are predicted to decrease by two million in 2023, gradually declining to 116 million households by 2025.

The industry's future growth is contingent on the implementation of ad caps and regulatory pricing restrictions. It is projected that pricing growth will be approximately half of inflation for subscriptions and inflationary for advertising. Consequently, television revenues are anticipated to continue growing, reaching INR 796 billion by 2025.

Television Channels and Providers

In 2022, the television segment experienced a 1.5% decline, with the number of television channels slightly decreasing to 885. Notably, 60% of these channels were free-to-air, a decrease from 64% in 2020, reflecting the impact of the New Tariff Order (NTO), where several broadcasters converted free-to-air channels into paid ones. Among the total channels, news channels constituted 44%. The registrations of Multi-System Operators (MSOs) remained constant at 1,747 in 2022. The Indian market was served by four paid Direct-to-Home (DTH) providers and one free DTH provider as of December 2022, including Dish TV, Tata Play, Airtel DTH, Sun Direct, and DD FreeDish. Additionally, NXT Digital continued to operate the lone Headend in the Sky (HITS) service in India.

In 2022, DD FreeDish faced a notable development as four major broadcast networks—Star India, Viacom18 Media, Zee Entertainment Enterprises, and Sony Pictures Networks India— withdrew their content from the platform. As of January 2023, DD FreeDish hosted a total of 179 channels, comprising 91 Doordarshan channels, including 51 educational channels introduced during the pandemic, and 79 private channels. Additionally, the FreeDish service delivered All India Radio's audio programming content through approximately 48 satellite radio channels.

Viewership Patterns

Impressions in Hindi-speaking markets (HSM) decreased by 6%, while south markets witnessed a more substantial 10% decline. The viewership in both HSM and south markets reached its lowest levels since 2018, attributed to factors such as the availability of high-quality content on OTT streaming platforms, the growing popularity of YouTube, and the rise of social media and gaming, which compete for consumer free time. Industry sources suggested that the availability of TV content on OTT platforms contributed to delayed recharges of subscriptions.

In 2022, viewership across nearly all demographic segments experienced a decline compared to the heightened levels observed during the pandemic-induced peak in 2020. The overall viewership, encompassing all individuals aged 2 and above, witnessed a substantial 16% decrease in viewing minutes compared to the abnormal surge in 2020. Among specific demographic groups, the lower socio-economic classes (NCCS CDE) were most significantly affected, experiencing a notable 28% drop in viewership. Contrarily, the NCCS A segment saw a marginal

1% increase in viewership. The age group of 20 to 40 years exhibited the highest declines, particularly as individuals returned to work, contributing to a more pronounced drop in male audiences compared to female audiences. This shift in viewership patterns reflects the evolving dynamics in media consumption during the post-pandemic period.

Revenues

Television advertising is anticipated to experience a Compound Annual Growth Rate (CAGR) of 5.3%, reaching INR 371 billion by 2025, according to estimates by EY. The optimistic outlook is attributed to several key factors, including the resolution of the Russia-Ukraine crisis leading to a stable global economy, robust performance of regional channels and sports on Free TV, the expected growth of India's per capita income, and upcoming state and national elections in 2023 and 2024, respectively. However, potential risks include the emergence of new sectors to replace lost ad income from areas like gaming, crypto, and betting, as well as the impact of free IPL on digital platforms affecting TV's share of ad revenues from the property.

EY's future outlook indicates an expected growth in television revenues to INR 796 billion by 2025. Subscription income is projected to witness a 2.7% CAGR, reaching INR 425 billion by 2025. This growth is influenced by factors such as an increase in television households due to *population growth, low entry barriers for consuming free television, continued electrification of rural areas, distribution of free Set-Top Boxes (STBs) (as planned by Prasar Bharati), and subsidised STBs by private players*. Despite these positive factors, active television homes may face downward pressures due to the ongoing shift of the pay-TV base to Over-The-Top (OTT) platforms, increased time spent on alternate platforms like YouTube, social media, and gaming, and challenges in passing on inflationary pricing growth to end consumers in a declining market.

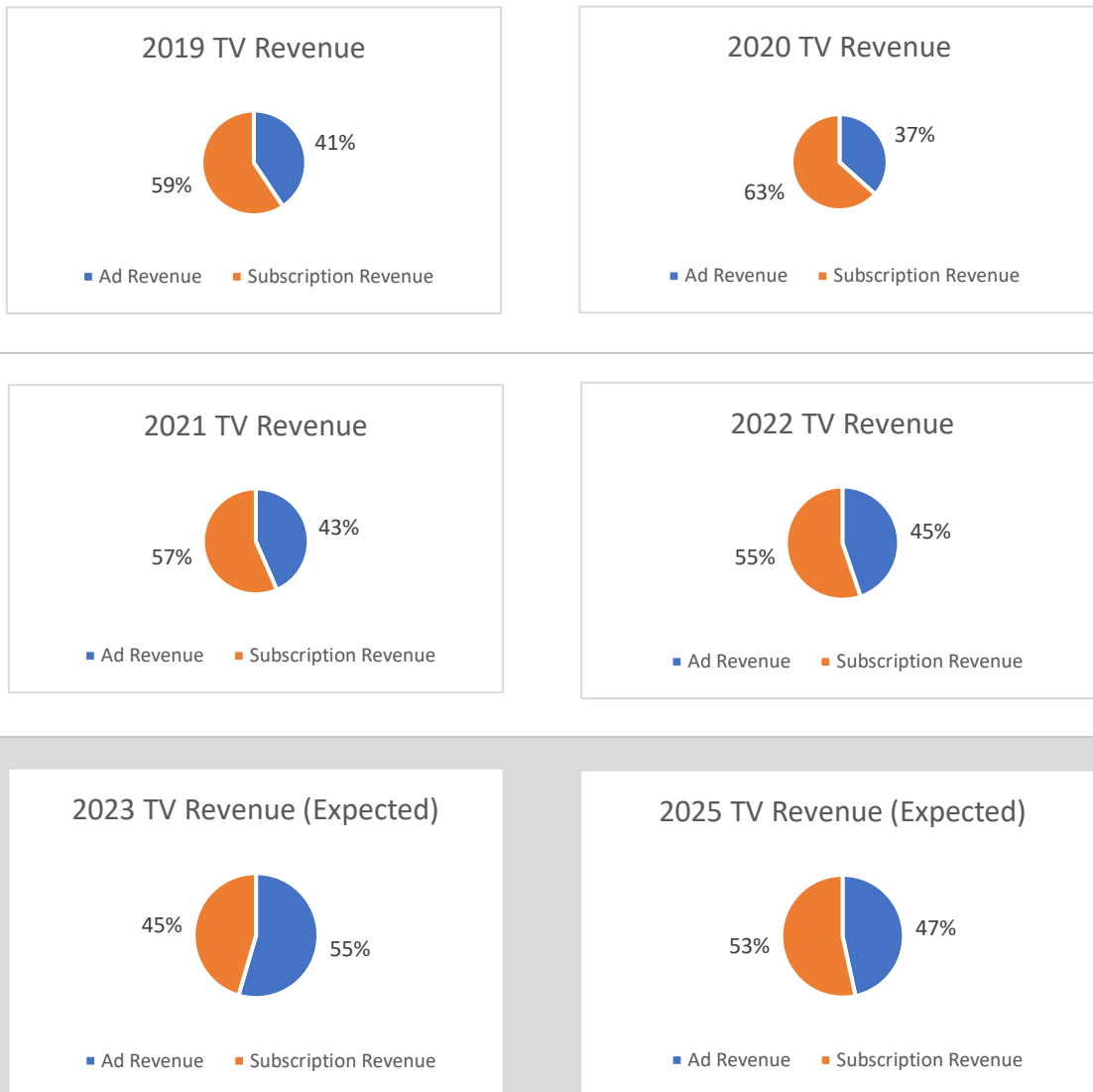
Considering the mentioned factors, the overall revenues for the total television segment are expected to grow at a CAGR of 4%, reaching INR 796 billion by 2025.

Advertising

In 2022, TV advertising revenue demonstrated a growth of 2%, from 313 INR Billion in 2021 to 318 INR Billion in 2022, marking the second consecutive year of recovery after the significant decline experienced in the COVID-19-affected year of 2020. The industry has nearly reached its 2019 revenue levels. This growth was observed in both volume and rates. The volume of advertising increased by 2%, while rates experienced a marginal reduction of 0.4% on average, notably post the Diwali festive season. Despite changes in rates, television continues to assert itself as the most effective mass medium from an ad rate perspective.

In 2022, advertising volumes experienced a growth of 2%, with a notable increase in ad insertions in the second quarter compared to the same quarter in 2021, which had been affected by the pandemic. However, caution among marketers prevailed in Q4 of 2022 (at 247 Mn secs), resulting in a 4% decline in ad volumes compared to Q4 of the previous year (at 257 Mn secs). This caution was influenced by concerns related to the Ukraine war, the threat of recession in developed markets, and various events such as the FIFA World Cup 2022, ICC Men's T20 World Cup, and Gujarat state elections. Several factors contributed to the impact on ad volumes, including reduced venture capital funding for direct-to-consumer (D2C) start-ups, bans on gaming, betting, and cryptocurrencies, supply shortages in sectors like automobiles, and layoffs at global tech companies affecting domestic discretionary spending.

FIGURE 1: IMPORTANCE OF ADVERTISING IN TV SEGMENT:
Revenue distribution over the years between Advertisement and Subscription



SOURCE: E&Y-FICCI REPORT ON MEDIA AND ENTERTAINMENT SECTOR 2023

FMCG remained the dominant sector, contributing 45% of TV ad spends, sustaining its position as the largest advertiser on television. E-commerce continued to be a significant driver of revenue growth, accounting for 42% of absolute growth for the second consecutive year. Conversely, education and telecom reduced their television ad spends, while the 'Others' category experienced a notable 22% growth.

According to the Pitch Madison Advertising Report for 2022, FMCG and e-commerce played pivotal roles in driving the overall increase in television ad spends. FMCG's contribution slightly decreased from 46% to 45%, while e-commerce witnessed a rise from 18% to 20%, making it the leading contributor to absolute growth.

TABLE 2: CATEGORY WISE SPENDING ON ADS ON TV			
Product category	Category contribution 2021	Category contribution 2022	Contribution to growth
FMCG	46%	45%	35%
E - commerce	18%	20%	42%
Education	6%	4%	-16%
Auto	5%	5%	6%
Telecom	4%	3%	-4%
Household durables	4%	4%	5%
Real estate and home improvement	3%	4%	5%
Banking, financial services, insurance	3%	3%	4%
Others	11%	12%	22%
Total	100%	100%	100%
<i>SOURCE: E&Y-FICCI REPORT ON MEDIA AND ENTERTAINMENT SECTOR 2023</i>			

In terms of advertising volumes, there was a shift towards national channels, with regional channels receiving 19% more ad volumes than national channels in 2022. However, this shift was less pronounced than in 2021 when regional channels had a 26% advantage in ad volumes. The number of advertisers using television increased from 8,932 in 2021 to 9,245 in 2022, marking the first growth in the advertiser base in three years. Notably, 4,705 advertisers exclusively utilized television as their advertising medium, without a presence in print and radio.

Among the top five genres experiencing the highest increase in new advertisers, three were related to regional languages. The expansion of the advertiser base in the sports genre indicated a rising interest in and viewership of non-cricket sports in India.

The preceding discussion on revenues and advertising underscores the Television and broadcasting industry's reliance on advertisement revenues, contingent on audience profiles and content popularity gauged through Television Audience Measures (TAM) and Ratings. This encompasses news channels as well. In a democracy, where news and information are fundamental public goods, they cannot be wholly subjected to fluctuations in advertising revenues merely to ensure broadcasters' profitability. Therefore, it is crucial for the TAM and TRP processes to be objective, fair, neutral, and transparent.

It is for the same reason, that the process of TAM and TRP engages continued attention from the government regulators, leading to periodical reviews and reforms.

TELEVISION AUDIENCE RATING MEASUREMENT SYSTEM IN INDIA: ORGANISATIONAL STRUCTURES, OPERATIONAL DESIGN AND COMPETITION

In a brief period of commercial broadcasting, India has witnessed multiple contests in television audience measurement (Taneja, 2011). Television viewership data in India is currently provided

solely by the Broadcast Audience Research Council (BARC) India, a Joint Industry Body founded by stakeholder bodies representing Broadcasters, Advertisers, and Advertising and Media Agencies. The body is set up to provide an accurate, reliable and timely television audience measurement system for India.

However, BARC is not the first audience measurement agency. Television audiences have been measured in India since the 1990s.

Competition begins

In 1988, comprehensive viewing surveys were initiated, followed by the introduction of panel diaries in 1989, both of which remained in practice until 2001. In 1993, television viewership measurement, denoted as television rating points (TRPs), was introduced in India, with state-owned Doordarshan audience ratings (DART) providing initial data through its 40 offices and 100 government-owned All India Radio stations. The year 1994 saw the establishment of INTAM (Indian National Television Audience Measurement) by ORG-MARG, initially focusing on major metropolitan areas. In 1998, TAM, a second rating agency, was established, running concurrently with INTAM. The merger of INTAM and TAM was officially confirmed in 2001. (*Consultation Paper on Policy Guidelines for Television Audience Measurement (TAM)/ Television Rating Points (TRP)*, 2008)

During this period, the industry transitioned from diaries to peplemeters, and TAM Media Research emerged as the endorsed currency for advertising transactions, offering weekly updated ratings. In 2004, aMap, a new rating agency, entered the scene, officially starting operations in February 2007. Positioned as an independent entity, aMap competed with TAM by introducing a national peplemeter panel, providing overnight ratings, a departure from the traditional weekly updates.

In 2008, both TAM Media Research and aMap ventured into commercial television ratings services, utilizing panels with restricted sizes for audience measurement in major cities, raising concerns about the reliability of India's rating system. This period marked a duopoly in the Indian TV audience measurement market, with TAM and aMap ratings circulating, even though TAM held unanimous recognition as the advertising currency. Both entities sampled a nationally representative group of urban Indian homes.

Despite aMap not receiving industry endorsement, some broadcasters found it useful, leading to 12 national broadcasting companies subscribing to its data by 2007.

Each provider's panel sampled homes in all 34 metropolitan cities (population of greater than 1 million), and both, included representative towns with population greater than 100,000 in each local market. (The names of specific towns are not made public to ensure the secrecy of the panel homes, but the panels are audited by independent auditors). Both used the 2001 census of India as a sampling frame and conducted their own nationwide surveys to establish their panels. This led to concerns about the reliability of India's rating system as rural audiences were left out of metering system.

Both TAM Media Research, a Nielsen subsidiary, and aMAP utilised similar peplemeter technology (TVM5 for TAM Media Research and Telecontrol VII for aMAP) to collect viewership data from both digital and analogue homes. Both companies remotely retrieved data using modems connected via dedicated mobile telephone lines, with TAM Media Research switching to remote collection after aMAP's entry. Both provided user-friendly software packages and had comparable terminology for interpreting outputs. The main difference for subscribers was the update frequency of ratings. TAM released fresh data once a week (biweekly for the six largest cities), while aMAP delivered overnight ratings, making them available by mid-morning the day after a program aired. Starting in early 2010, TAM introduced bi-weekly updates

for the six largest cities, releasing ratings on Thursdays for viewing from Sunday to Tuesday before the complete week's ratings became available the following Wednesday. (Taneja, 2011)

aMAP gained traction among broadcasters as a secondary audience information provider. While not widely used for advertising decisions, program executives utilised aMAP alongside TAM for tactical scheduling due to its overnight data updates. The more frequent data offered a small competitive edge, filling a niche in the market. Three key market conditions contributed to aMAP's success: the surge in channel numbers, especially new broadcasters with significant investments; dissatisfaction among existing broadcasters with TAM, with Zee TV being a notable example; and the growth in pay television and direct-to-home adoption, boosting subscription and advertising revenues. These factors led to aMAP becoming a valuable resource for broadcasters seeking an alternative perspective on audience measurement. However, it could not gain recognition as the advertising currency. (Taneja, 2011)

The rapid market expansion and specific needs of new channels in India might explain aMAP's adoption as a secondary system between 2005 and 2010. Newer channels, in search of even a little advantage, utilised aMap's overnight data to alter the program content on the forthcoming day. However, the aMap's competitive advantage over TAM Media Research was slim. (2011) contend that suggests that for multiple audience information systems to coexist, each must avoid overlapping significantly with others. Interviews conducted by Taneja (2011) revealed that some broadcasters chose not to subscribe to aMAP, deeming it unnecessary to invest in newer audience information without added value from overnight ratings.

Broadcasters kept discontinuing subscriptions to aMAP, which indicated high niche overlap, as they found the data no longer valuable. TAM's ability to provide weekly ratings when needed puts it in a strong position. aMAP was not able to find a new niche, which meant that the market in India reverted to a single system. The market leaders and others discontinued subscriptions as it became apparent aMAP wouldn't serve as the advertising currency. Eventually, aMAP discontinued its services and exited the market in 2011, leaving TAM Media Research the sole provider of Television Rating services on a commercial basis. (Taneja, 2011)

Government becomes a Stakeholder in Television Audience Measurement

In her letter dated 17th January 2008 to TRAI, the then secretary of the Information & Broadcasting Ministry set the ball rolling for the formal intervention of the government in the TV audience measurement process. The crux of the problem the letter identified was that viewership ratings lie in the expanded scope and influence of ratings beyond their original purpose.

Initially intended to guide advertisers in optimising their spending, the letter contended that ratings have transformed into a benchmark for determining the priorities of TV and programs. This shift assumes that the momentary interests of a small viewer sample align with the "interest of the people" at large.

Critics asserted (in India and across the world in general) that this transformation stifled original Indian creative genius and regional plurality, forcing channels and broadcasters to conform to uniform programming. The system, implemented by major players (of that time, i.e., 2008) like TAM and a-Map, was perceived as more favourable to larger channels, creating an imbalance in the industry. Moreover, the benchmark yardstick exclusively focused on urban areas, neglecting the representation of rural India in ratings. Additionally, the cooperation of a few active households from specific sections of society, which formed the foundation of the rating system, led to a failure to represent all segments of the population. (*Consultation Paper on Policy Guidelines for Television Audience Measurement (TAM)/ Television Rating Points (TRP)*, 2008)

The letter also recognised the call for transparency and independent agencies across the TV Industry to handle the TV viewership rating process, highlighting the need for reform to address these shortcomings and prioritise the larger public interest.

Thus, the letter identified the following problems:

1. Small sample size of monitored households
2. The adverse effect of ratings on the diversity of content inhibiting plurality
3. Rural-urban divide emanating from higher attention being given to the urban population in the sample database
4. Lack of transparency and independence of TV audience measuring agencies

This letter eventually formed the backdrop of the government's initial communication on Television Audience Measurement (TAM) and Television Rating Points (TRP) in the form of a consultation paper.

BARC Born

On August 19, 2008, TRAI proposed government regulation of television ratings and supported the idea of self-regulation through the creation of the Broadcast Audience Research Council (BARC), an industry-led body suggested by the industry at that time (Chakrabarti, 2014). In 2010, a committee led by Dr. Amit Mitra, then-Secretary General of FICCI, appointed by the Ministry of Information & Broadcasting (MIB) to review TRP measurement in India, endorsed the establishment of a transparent and credible self-regulatory process for television ratings by BARC. The committee highlighted the importance of credible industry self-regulation to improve the quality and methodology of the rating system continuously, ensuring accurate, current, and relevant findings. This led to the determination that industry self-regulation was the most practical approach (Chakrabarti, 2014). The committee saw BARC as a potential player in the market that could potentially break the duopoly of TAM Media Research and aMap.

Moreover, the committee endorsed, in line with TRAI's draft recommendation of 2008, the elimination of cross-holdings among broadcasters, advertisers, and advertising agencies to prevent conflicts of interest. This was perceived as a direct challenge to TAM Media Research, as half of its parentage was linked to the advertising conglomerate WPP, which also owned major media planning agencies in India. On the other hand, aMap's parentage, though unclear, was not traced back to any advertising agency. TAM's defence, arguing that this elimination would reduce competition rather than promote it, and emphasising its global ethical standards across 30 countries, was swiftly dismissed by the committee. Instead, aMap's perspective, highlighting the issue of cross-holding as a problem, took precedence. However, the committee's stance didn't necessarily declare aMap the winner, as it explicitly called for BARC to disrupt the duopoly of TAM Media Research and aMap in the TRP metering market.

However, in a letter dated December 9, 2009, MIB informed TRAI that the self-regulation through BARC, as recommended by TRAI, had not become operational. MIB requested TRAI to suggest the next course of action. In response, TRAI, in a letter dated May 4, 2010, suggested that if BARC did not become operational, the government might consider assigning the task of laying down guidelines and accrediting suitable agencies for measuring television audiences to the Indian Institute of Mass Communication, New Delhi. If this was not feasible, the government might consider entrusting this responsibility to TRAI under section 11 (1) (d) of the TRAI Act, 1997.

Despite the Mitra Committee providing recommendations on various issues related to television ratings, including sample size, transparency, reliability, viewership across platforms, shareholding patterns of rating agencies, operational norms, disclosure norms, tampering, manipulation, and guidelines for BARC, BARC was unable to establish any rating system until 2013.

In 2012, MIB sought recommendations from TRAI for comprehensive guidelines and accreditation processes for Television Rating Agencies in India. In September 2013, TRAI provided MIB with its suggestions for "Guidelines/Accreditation Mechanism for Television Rating Agencies in India." MIB adopted TRAI's suggestions on January 10, 2014, and published Policy Guidelines for Television Rating Agencies in India.

Finally, on January 16, 2014, MIB granted BARC recognition as a Television Rating Agency for a ten-year duration. BARC, a self-regulatory, non-profit organisation, was established by the IBF (now IBDF), the Indian Society for Advertisers (ISA), and the Indian Advertising Agencies Association (AAAI). It commenced monitoring over 550 television channels for audience measurement purposes, installing around 44,000 meters that continuously and passively capture audio codes from real-time television channels. The raw data undergoes pre-processing to rectify mistakes and inconsistencies, followed by further processing for data editing, validation, and weighting. The final weighted and anticipated audience viewing output is encrypted and made available weekly to BARC's customers.

An Era of Turbulences

The central objective of a TV audience measuring organisation is to measure television viewership data through an impartial and rigorous methodological process to measure television viewership. Television ratings are important in the broadcast industry as it is instrumental in attracting advertisers and viewers. These television ratings produce rivalry between various channels, and the race between channels for television ratings reaches its peak when viewership data is released, generating a mad rush among channels to claim their triumph to viewers, advertisers and competitors

In 2020, it was disclosed by the Mumbai Police that three channels (including some news channels) were found guilty of manipulating TRP ratings. These channels were discovered colluding with the agency responsible for gathering and providing viewership information, BARC India, to inflate their viewership ratings. According to the police, the motive behind this manipulation was to attract more advertisements. (Tanishka Sodhi & Tanishka Sodhi, 2022)

In October 2020, BARC "temporarily suspended" the ratings on the news genre following an alleged TRP scam that involved top executives from the news channel. Seventeen months after BARC suspended data for individual news channels, it resumed issuing the data on March 17, 2022. (Tanishka Sodhi & Tanishka Sodhi, 2022)

Since the "TRP scam" surfaced in 2020, BAR-O-Meters have faced increased scrutiny. The Mumbai Police alleged that at least three channels/broadcasters paid homeowners, in whose houses BAR-O-Meters were installed, between 400 to 500 rupees per month. These homeowners were instructed to stay constantly tuned in to a particular channel to artificially boost their ratings. The police claim that these channels made crores of rupees based on these manipulated TRPs. Such allegations of bribing individuals in metered homes have compromised BARC's integrity. However, BARC has acknowledged meter manipulation in the past, expressing concern about "viewership malpractice" by unscrupulous elements seeking to skew viewership data in favour of certain channels. (Ayush Tiwari & Ayush Tiwari, 2020)

Still, such revelations are not new. The ability to manipulate TV ratings has been an open secret, with similar cases emerging in the past. In 2012, NDTV questioned the authenticity of ratings provided by TAM Media Research, leading to the replacement of TAM by BARC India. In 2016, three channels were accused of enhancing viewership figures by bribing members of BARC panel homes. Ratings were suspended for four weeks following these allegations. (Tanishka Sodhi & Tanishka Sodhi, 2022)

In 2018, household (which formed part of the survey panel) details were leaked to a former employee of Hansa Research, an organisation earlier contracted by BARC to conduct household surveys (Hansa Research is no longer contracted by BARC). These leaks were used to promote certain channels. (Tanishka Sodhi & Tanishka Sodhi, 2022)

The recurring nature of such incidents highlights the flaws in the system that have yet to be addressed. Over the past two decades, a competitive race among 24/7 private TV channels has fuelled a desire to be influential, leading to various unethical practices. As a result, even though the channel ratings have been constantly released by BARC, ever since it was formed, every Thursday since it started, concerns regarding the robustness of the rating and methodology are raised by multiple sections of media and civil society. Some of the key concerns raised by the stakeholders include the use of various distribution tactics, including landing pages, to jack up ratings. (Shruti Menon & Shruti Menon, 2017)

Rigging ratings is relatively easy due to the specific dynamics of the TV industry. With an overall sample size of 50,000+ households, a channel being watched in even a per cent of those homes can significantly impact ratings. Still, India's sample size exceeds that of the USA (42000 sample size) and Australia (7000+ sample size).

Channels can also manipulate ratings through other means as well. Two other methods involve the landing page feature and acquiring multiple logical channel numbers (LCNs). The landing page feature positions a channel as the first one displayed when a TV is turned on, boosting reach and average viewing time. Acquiring multiple LCNs allows a channel to appear more than once while viewers browse channels, influencing ratings. In 2018, TRAI directed against placing channels on the landing page, but the order was overturned in 2019. (Shruti Menon & Shruti Menon, 2017)

However, TDSAT, in 2019, termed television channels buying landing pages a legal practice. Still, the issue pertaining to whether landing page data should be counted in viewership data or not and whether the impact of the landing page is still visible in news channel ratings remained a point of contestation (Shruti Menon & Shruti Menon, 2017). Later, BARC acknowledged the impact of the landing page on ratings, and in September 2023, announced algorithms to address this. However, this decision led to a legal dispute with Times Now. BARC's stance on multiple LCNs is that it's a common industry practice, and BARC is not mandated to regulate such issues among broadcasters. (Tanishka Sodhi & Tanishka Sodhi, 2022)

Issues with Control, Ownership Patterns and Management at BARC

TRAI, in its consultation paper released in 2020 on the review of television audience measurement and ratings in India, held that 'IBF's (now IBDF) majority ownership of BARC compromises the organisation's objectivity and neutrality'. In its response to the TRAI's consultation, BARC India said that it does guarantee adequate representation of all stakeholders, ensuring the neutrality and transparency of TV ratings. According to its articles of association, the Core Technical Committee, which plays a pivotal role in decision-making, has equal representation from the three key constituents. All methodological decisions are made through consensus within the Core Technical Committee (in other words, the shareholders of BARC have equal voting rights). Moreover, any deviation from the Technical Committee's recommendations requires a voting majority of over 75% from the Board members, ensuring a system free from bias.

The response further stated that the three bodies constituting BARC India's board, namely the Indian Broadcasting Foundation (IBF, now IBDF), the Indian Society of Advertisers (ISA), and the Advertising Agencies Association of India (AAAI), collectively form a comprehensive representation of the industry. IBF, with 60% representation, holds an industry-wide reputation and covers over 90% of television viewership in India, playing a significant role in funding

BARC operations. ISA, with 20% representation, is a 65-year-old body contributing to fair competition and a founder of the Advertising Standards Council of India. AAAI, also with 20% representation, comprises small, medium, and large-sized agencies, aligning with the core recommendations of the Amit Mitra committee report.

BARC further added that this inclusive representation from reputable and self-regulated bodies affirms that it effectively represents the TV sector. Additionally, it stated that it operates under the regulation of the Information & Broadcasting Ministry and TRAI, further establishing its transparency, credibility, and neutrality.

Comparing itself in the global context in audience measurement, including countries like Canada, South Africa, the UK, Australia, and France, BARC said that it has a similar tripartite structure involving broadcasters, advertisers, and agencies. These structures ensure independent executive teams operate the measurement systems, contributing to transparent and credible functioning.

TRAI's Recommendations

In its 2020 consultation paper, the TRAI recommended several structural reforms for the Governance structure of BARC. These reforms were deemed necessary to address potential conflicts of interest, enhance credibility, bring transparency, and instil confidence among all stakeholders in the TRP measurement system.

The proposed changes included altering the composition of the Board of BARC India, advocating for at least fifty per cent independent members, including a measurement technology expert, a nationally reputed statistician, and two representatives from the Government/Regulator. The restructured Board was intended to ensure equal representation of the three constituent Industry Associations (AAAI, ISA, and IBF) with equal voting rights, regardless of their proportion of equity holding, and members were to have a tenure of two years. Active participation of representatives from Advertisers and advertising agencies was encouraged to enhance accuracy, transparency, credibility, and neutrality.

The constituent Industry Associations were granted the right to nominate representatives with a cooling-off period of 4 years between two consecutive tenures. The Chairman's tenure was proposed to be limited to two years, with a rotational system among the constituent industry associations every two years. The number of members in the technical committee was recommended to be increased to 5, with the addition of two external technical experts.

Additionally, the TRAI suggested the formation of an Oversight Committee to guide BARC India in research, design, and analysis, aiming to improve the rating system constantly. The Oversight Committee was proposed to be broad-based, featuring representation from various entities, including the National Council of Applied Economic Research, IIM, IIT, media research experts, demography experts, nominees from the Ministry of Information & Broadcasting, and TRAI. The committee would also be responsible for nominating or appointing independent members of the Board and providing policy direction to BARC India if required.

Issues in Panel size

Currently, BARC collects household and individual details through establishment surveys and studies, using this information alongside census data to create a comprehensive estimate of television audience characteristics which in turn help constitute a survey panel or sample. Panel size represents the number of homes, drawn from samples collected during the establishment survey, where the audience measurement device is placed. It should be representative of age, socio-economic class, gender, working status, delivery platforms and geographical coverage (both urban and rural markets). In the TRAI's 2020 Consultation Paper, stakeholders presented a multitude of views.

Those supporting an increase in the panel size argued that a scientifically designed small sample would offer more accurate and representative results compared to a larger sample with lower design quality. They emphasised that beyond a certain threshold, the incremental gains in data precision diminish. Additionally, they pointed out that smaller samples surprisingly provide accurate results at an overall level, citing the ease of calculating the margin of error for estimates based on sample size as evidence of the robustness of smaller samples in offering accurate population estimates at the national level.

In contrast, some stakeholders asserted that a small sample size presents challenges in predicting or establishing accurate measurement data, advocating for a larger panel to enhance robustness and assign more weight to measurement ratings. They highlighted the limited data available for analysis with smaller panel sizes and deemed the expectation for a 30,000-panel to represent a market with 200 million Television homes across diverse languages and channel combinations as unrealistic.

Stakeholders advocating for an expansion in the panel size proposed several measures. They suggested leveraging multiple technologies such as people meters, Reverse Path Data (RPD), channel video players, and software for measuring OTT consumption, along with data modelling, to increase the overall sample size without proportional cost escalation. Additionally, they recommended the development of mobile phone apps capable of wider reach and data extraction. The use of Image Recognition via Machine Learning/AI (IRMAI) with equitable representation in the census, ensuring equal dispersion across the distribution landscape, was proposed.

The rating data, seen as a reliable representation of content popularity, should be integrated with daily supplementary ground census-based data. To mitigate commercial challenges, stakeholders emphasised the importance of having one primary agency and one supplementary agency operating independently to validate each other.

However, the industry faces substantial installation and maintenance costs with this approach, making panel expansion financially challenging. A smaller panel size results in limited analysable data and lacks true representativeness, while a larger panel size would enhance robustness and add more value to measurement ratings.

To overcome these challenges, the TRAI recommended mandating the rating agency to increase the sample size from 44,000 to 60,000 by the end of 2020 and to 100,000 by the end of 2022, using existing technology. It urged BARC to collaborate with reputable institutes for a study to determine the appropriate sample size, ensuring accurate representation, including regional and niche channels. Financial disincentives, including registration cancellation, should be implemented if BARC fails to meet the specified targets within a defined timeframe.

Changes Post 2020 TRP Scam

BARC released a new methodology dated March 2022, which overwrites and replaces all earlier versions. It describes the measurement methods and processes, including the most recent TV Universe Estimate 2020 and the increase in the design sample to 50,000-panel households. The document provides details of ascription rules used during production processing to maximise the quality and reliability of the audience estimates published by BARC India.

BARC's TV panel size is mandated by the Ministry of Information and Broadcasting's (MIBs) Policy Guidelines for Television Rating Agencies in India. The panel size is currently 55,000 households. The initial panel of 22,000 HHs was allocated per state group/metro based on Relative Errors (REs). RE is a type of statistical sampling error described as the potential deviation expressed as a percentage of the observed value from the actual/expected value due to using a sample. As the sample size is increasing (currently at 55,000 HHs), REs are naturally

reducing. For the increased sample, BARC India has also considered improved weighting efficiencies for designing the panel (i.e., decreasing the variance in assigned individual weights). All cities with a population above 5 lakhs as per Census 2011 are selected individually (except for Srinagar). Sample allocations for all other town classes within a State are based on the town-class group, which is further Selection of actual Towns/Villages performed using systematic random amongst Towns and Villages with TV-owning household populations.

In order to deal with the issue of the landing page, which was the backbone of the TRP Scam, BARC introduced a concept of ‘Magnetisation’. There is generally a gap between the time viewers switch on the TV set, move to the channel intended to be viewed, and press their viewing buttons on the BARC India remote (distributed among households and OOH under sampling). Unless removed, this gap would depress viewing by the duration from the time the TV is switched on and the individual button is pressed. A Magnetisation algorithm is applied in such cases and the viewership of these individuals is ‘magnetised’ or linked back to the time when the first watermarked channel was started to be viewed.

		Region HSM	South	Total
Region Type	Urban	1,06,110	48,438	1,54,548
	Rural	1,15,710	29,742	1,45,452
Total		2,21,820	78,180	3,00,000

Source: BARC’s Description of Methodology, March 2022

Additionally, the total sample target for BI 2021 was set at 3,00,000 households and is set for two dimensions: Urban/Rural and Hindi Speaking Markets (HSM)/South (Table 1). The Urban/Rural split is based on market needs and determined by BARC’s Technical Committee. The HSM/South split is based on the current Universe Estimates (UEs). ES targets are re-assessed before every survey and are adjusted accordingly. Listing Studies have sample targets based on the shortfalls in the available sample for recruitment and panel recruitment needs.

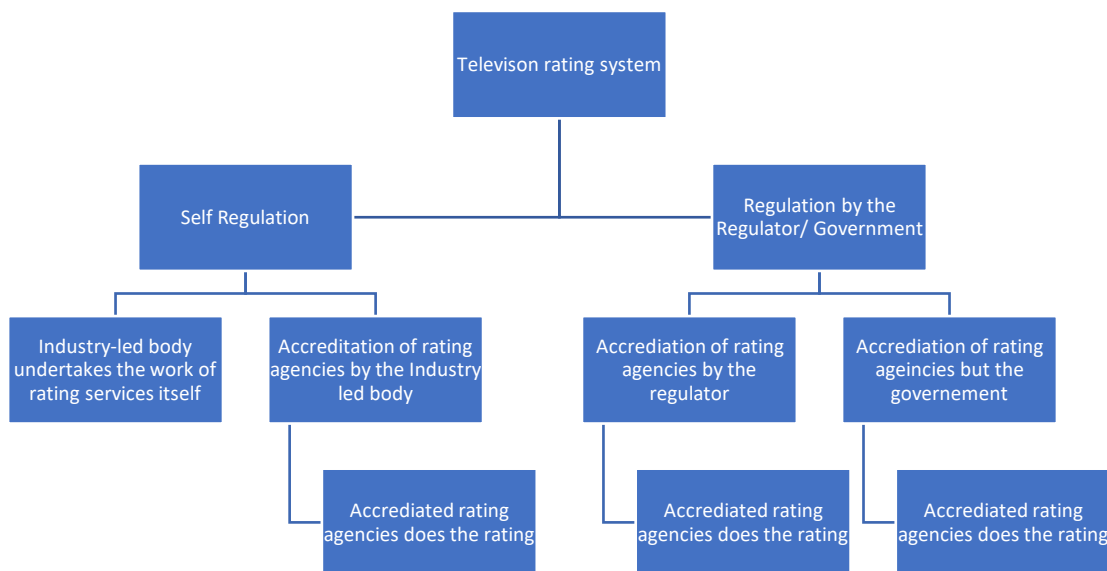
REGULATORY PERSPECTIVES ON THE TV AUDIENCE RATING SYSTEM

TRAI’s 2013 Consultation Paper on ‘Guidelines/Accreditation Mechanism for Television Rating Agencies in India’ came up with several perspectives on regulating the television rating system. According to it, the television rating system operates with two key components: the accreditation of rating agencies and the actual rating process conducted by the accredited agency. There are various perspectives on the rating process. One viewpoint suggests that as television ratings primarily impact the business decisions of broadcasters, advertisers, and advertising agencies, they should remain free from government or regulator intervention. On the contrary, another perspective argues that since television ratings directly affect diverse stakeholders, including audiences and commercial interests, it is essential to establish an effective accreditation framework. This framework ensures that the measurements carried out by rating agencies are unbiased and accurately represent TV audience information.

In the self-regulation model, the industry forms a body comprising representatives from broadcasters, advertisers, and advertising agencies. This body takes responsibility for conducting rating work and publishing the ratings, with decisions being collective rather than controlled by any individual section of the industry. Data collection or research may be outsourced, and accreditation of other agencies is unnecessary since the industry body directly handles the rating.

Alternatively, the industry-led accreditation system involves setting up a body with industry representatives to establish minimum requirements/standards for rating agencies. This body accredits rating agencies based on these standards, monitoring compliance for accreditation continuation. The regulator-led accreditation model sees the regulator accrediting rating agencies, ensuring compliance with prescribed standards and reporting requirements. Lastly, in the government-led accreditation model, the government or its designated agency accredits rating agencies, which must adhere to prescribed standards and reporting requirements set by the government.

Figure 2: Methods of government’s regulation of the TAM system



Source: TRAI’s 2013 Consultation Paper on ‘Guidelines/ Accreditation Mechanism for Television Rating Agencies in India’

However, the situation has changed since 2013. The evolution of audience ratings in Television post-1991 liberalisation has arisen outside public management and, since then, been a very competitive space. The government has still remained an important entity in the media audience measurement space, performing the role of regulator and facilitator.

Currently, BARC is the only Agency providing rating services in India. The monopolistic situation has become the central concern invariably on account of the market behaviour, quality of service, and cost inefficiencies. Entry of more players and the resultant increased competition might contain the ill effects of market dominance and lead to a better quality of service and reduced costs. At the same time, setting up credible and transparent rating services requires substantial capital investments, which are to be ultimately borne by the stakeholders. (Chakrabarti, 2014)

The larger media audience measurement marketplace in India faces a paradox: While acknowledging the flaws in the existing audience measurement system, it vehemently opposes state intervention. Major players argue that the industry, comprising broadcasters and advertisers,

can address the issues independently. They cite global examples, emphasising that government interference hampers innovation and reliability. The fear of compromising the freedom of media and the belief that audience measurement is market research further discourage state involvement. (Chakrabarti, 2014)

Yet TRAI's 2020 Consultation Paper sought to regulate even more keenly in light of the past turbulent decade but stopped short of making explicit rules. It recommended structural reforms to improve credibility, bring transparency, and instil confidence in all stakeholders in the TRP measurement system.

Additionally, several stakeholders in TRAI's 2020 call for consultation endorsed the notion of introducing competition, asserting that it would bring forth innovations in technology, research methodologies, analytical approaches, and more effective means to ensure superior data quality. They argued that in a monopolistic structure, BARC lacks the motivation to improve, invest, or modernise its processes to align with changing demands. The introduction of competition, they contended, would force BARC to prioritise neutrality and fairness, given that any attempts at manipulating ratings would become easily detectable.

USA'S STORY AND PERSPECTIVE ON COMPETITION

The history of TV audience measurement in the U.S. traces back to Nielsen's inception in the 1950s, introducing the iconic people-meter technology that became the industry standard for estimating national viewership. This dramatic shift in data collection, from hand recorded diaries to digital recording, led to the creation of a massive, easily accessible database containing significantly more specific information about who was watching what than was previously available. (Taneja, 2011)

The proliferation of cable television impacted the audience measurement data produced and how it was utilised. In the 1940s, cable television was built to provide TV broadcasts to isolated communities. Operators extracted signals from locations with solid reception and distributed them to subscribers via coaxial wire. Cable systems could handle more stations, and beginning in the 1970s, networks were developed expressly for cable distribution, and programming became increasingly diverse. In 2011, more than 5300 systems were operational in the United States, with over 60 million customers.

From 1985 to 1999, Buzzard (2002) identified four occasions in the United States when rivals contested Nielsen's position in national TV ratings, such as the competition between AGB and Nielsen from 1985 to 1987 and the conflict involving SMART and Nielsen from 1994 to 1999. Similarly, Arbitron and Nielsen were competitors in TV ratings for local markets in the United States from 1949 to 1993, after which Arbitron withdrew from this area. (Taneja, 2011)

Nielsen's initial competitor, Audits of Great Britain (AGB), introduced a novel technology called Peoplemeter, showcasing its potential through successful demonstrations in Europe. The Peoplemeter originated from a collaborative effort in the 1950s in the UK. Nielsen partnered with the prominent English market research firm led by Bedford Atwood, establishing a joint laboratory in Bergenstead. This collaboration resulted in the development of the first Peoplemeter. However, an interesting turn of events occurred when three employees of the joint company—Audley, Gapper, and Brown—were terminated after requesting a raise. Subsequently, when the contract for measuring TV in the United Kingdom was up for bidding, Audley, Gapper, and Brown secured the patent for the combined Atwood/Nielsen Company. They then renamed the company AGB, incorporating the first letter of each of their names. (Buzzard, 2002)

Despite its promise, Peoplemeter was not yet suitable for commercial use. AGB, being the largest audience measurement service in Europe, expressed that it brought valuable experience and credibility as it readied itself to enter the American audience rating market. It claimed the ability to perform the task at half the cost charged by Nielsen while doubling the sample size for increased accuracy. (Buzzard, 2002)

However, AGB faced formidable barriers when attempting to enter the U.S. national ratings marketplace. The failure of AGB in the U.S. market can be attributed to several significant challenges. Managerial unfamiliarity with the U.S. market, underdeveloped distribution channels, and inadequate marketing efforts posed hurdles. Additionally, AGB encountered substantial technical complexities in measuring the dynamic TV audience in the U.S., a stark contrast to the European landscape at that time. These challenges included setting up operational meters, managing a field force, obtaining viewer permissions, and navigating the intricate landscape of numerous broadcasting stations and cable companies. The dynamic nature of U.S. TV programming further exacerbated the difficulties, necessitating constant adjustments to align program schedules with audience preferences. Cumulatively, these challenges resulted in AGB's inability to establish a foothold in the highly competitive U.S. marketplace. (Buzzard, 2002)

In April 1988, R. D. Percy unveiled a new nationwide Peoplemeter service with a distinctive focus on measuring commercial audiences rather than program audiences. Percy's Peoplemeter utilised a passive infrared device to ascertain the number of viewers present in a room, emphasising passive viewership. However, despite its innovative approach, R. D. Percy's national Peoplemeter service encountered significant obstacles, leading to its failure. Privacy concerns and technical issues, coupled with insufficient capital and distribution channels, impeded the progress of Percy's 'Voxbox'. The venture remained in the entrepreneurial phase, unable to secure the necessary capital investment and effectively address technical challenges. The lack of adequate distribution channels further hindered the transition from a local to a national rating service. (Buzzard, 2002)

Percy's legacy influenced discussions on meter types, but the industry shifted focus to new technologies like Nielsen's Active/Passive Meter. The failures of AGB and Percy underscored that invention alone was insufficient for success in the competitive TV ratings industry. (Buzzard, 2002)

In the 1980s, Arbitron emerged as a competitor to Nielsen, dominating the radio ratings market. By introducing the Portable People Meter (PPM) in the television ratings market, Arbitron contributed to improving the accuracy and granularity of TV ratings. This competition between Nielsen and Arbitron spurred innovation in audience measurement methodologies, fostering a more competitive TV ratings market. Arbitron attempted to challenge Nielsen's TV ratings monopoly with the ScanAmerica service. However, this attempt ultimately failed due to a combination of factors. Despite offering product differentiation with on-screen prompts for viewer data entry and merging peoplemeter ratings with consumer purchase data, ScanAmerica faced challenges. (Buzzard, 2002)

Arbitron aimed to break Nielsen's monopoly by offering competitive pricing, unique distribution channels, and targeting advertisers concerned about value for their money. However, Nielsen quickly responded with its version, Scan Trak, incorporating similar features. Both services utilised UPC code scanning for product purchase data and TV viewing measurement. (Buzzard, 2002)

ScanAmerica distinguished itself by using peoplemeters rather than household meters, aiming for a single-source service. It sampled 1,000 households in five markets, planning to increase to 2,000 by 1993. Despite launching with three major clients, including Cap/ABC, Fox, and NBC, and adding advertisers, ScanAmerica faced financial challenges. After only ten months of

operation, Arbitron discontinued its network ratings service in the fall of 1992 due to insufficient client support. (Buzzard, 2002)

Arbitron continued ScanAmerica at the local level, engaging in fierce competition with Nielsen in the measurement of local TV stations. However, by the fall of 1993, after 43 years of rivalry with Nielsen, Arbitron decided to exit the TV ratings field altogether. Factors contributing to this decision included local stations claiming affordability issues, a price war with Nielsen, declining contracts and revenue, and Nielsen's dominance in both network and local TV ratings. Arbitron's withdrawal left Nielsen as the sole monopoly in the TV ratings industry. (Buzzard, 2002)

One further attempt to enter the network ratings marketplace using Peoplemeter technology was undertaken by a former Nielsen employee through a company called Statistical Research Inc (SRI). It started a research project in 1994 which was commissioned by the three networks, the National Association of Broadcasting, and the joint industry Committee on National Audience Measurement and named it SMART- System for Measuring and Reporting Television. (Buzzard, 2002)

SMART, a venture aiming to revolutionise TV audience measurement with a universal TV product code, failed due to a flawed business model and lack of support. Despite a promising concept of using a barcode-like code embedded in the video portion of programs to keep up with the ever-increasing quantity of shows and to account for time shifting, SMART encountered difficulties during its development and test phase. The major setback came when broadcast networks, initially supporting SMART with seed money, refused to provide the necessary funding for a national launch. SMART's unworkable business plan heavily relied on financial support from major networks, who were unwilling to make the extraordinary economic commitment needed. Concerns about secrecy in the SMART process and suspicions in the cable industry further contributed to its demise. The industry anticipated the obsolescence of SMART's technology and favoured more advanced measurement methodologies by 2005, leading to SMART's failure. (Buzzard, 2002)

Although it quit the TV audience measurement market, Arbitron found its core market in radio audience measurement and introduced several innovations which created sizeable value for both radio broadcasters and advertisers. In December 2012, Nielsen Holdings N.V. finalised the acquisition of Arbitron Inc., aiming to enhance its audience measurement capabilities, particularly in emerging areas like streaming audio and out-of-home media consumption. The acquisition marked a strategic move to address the evolving landscape of media consumption. ((*Nielsen Holdings N.V., and Arbitron Inc., in the Matter Of*, 2021)

The Federal Trade Commission (FTC) expressed concerns about the potential anticompetitive effects of the Nielsen-Arbitron merger, particularly in the cross-platform measurement services market. To address these concerns, a proposed Consent Order required Nielsen to divest and license specific assets related to Arbitron's cross-platform audience measurement services. This mandated divestiture was aimed to ensure the preservation of competition in the evolving industry. (*Nielsen Holdings N.V., and Arbitron Inc., in the Matter Of*, 2021)

Television audience measurement has undergone significant transformations over the years, with Nielsen playing a pivotal role since the 1950s. The iconic people-meter technology introduced by Nielsen became the industry standard, influencing advertising rates and program development for decades. Yet, criticisms have persisted regarding accuracy and adaptability to digital-age viewing habits.

TV networks consistently voiced concerns about Nielsen undercounting viewers, intensifying as streaming gained prominence. The networks express frustration with perceived outdated

measurement methodologies that fail to consider evolving content consumption habits. The breaking point occurred during the pandemic, with Nielsen conceding in May that it had underestimated audiences by up to 6%, confirming networks' fears and prompting intensified calls for change. In the aftermath, Nielsen lost its MRC accreditation, leading networks to increasingly turn to competitors such as Comscore and VideoAmp Metrics. (Baine, 2023)

Following the November 2022 audit of Nielsen's National TV Audience Measurement service, the MRC engaged independent auditors to review Nielsen's progress against identified non-compliance areas. In April 2023, Nielsen regained its accreditation, following which it now remains the only accredited national TV audience measurement provider in the USA. (Baine, 2023).

The evolution of television audience measurement reflects a dynamic interplay of innovations, challenges, and market competition. Nielsen's longstanding dominance, criticisms, and the emergence of competitors like Arbitron have shaped the landscape. It can be seen that the TV entertainment industry has been reluctant to accept changes and invest capital, allowing monopolists like Nielsen to sustain dominance. Although new entrants and smaller firms can be more technologically innovative, they face challenges in the entrepreneurial and investment functions, hindering their ability to enter the market.

BOX-1

TV AUDIENCE MEASUREMENT REGULATION IN THE U.S

The Media Rating Council (MRC) is a funded organisation within the industry dedicated to reviewing and accrediting audience rating services in the United States. Presently, the MRC comprises around 95 Board members representing various sectors, including TV and Radio Broadcasting, Cable, Print, Internet, Advertising Agencies, Advertisers, and Trade Associations.

The MRC engages in several key activities, including establishing and administering Minimum Standards for rating operations, accrediting rating services based on their submitted information, and conducting audits of rating service activities through independent Certified Public Accounting (CPA) firms. (*Consultation Paper on Guidelines/Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

MRC enforces the disclosure of numerous methodologies and performance measures by rating services, revealing otherwise unknown details. This includes information about the source of the sample frame, selection methods, demographic group representation versus population, response rates, special survey treatments for challenging respondent groups, editing procedures, minimum reporting requirements for media, data adjustment procedures, errors in published reports, and standards for data reissue. (*Consultation Paper on Guidelines/Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

A crucial aspect of MRC's monitoring involves an annual external audit of rating service operations conducted by an independent team of CPA auditors. The resulting audit reports are comprehensive, containing methodological and proprietary details, highlighting the primary strengths and weaknesses of the rating service operations. These reports remain confidential among MRC members, the independent CPA firm, and the rating service. They cover detailed testing and findings related to sample design, selection, and recruitment; sample composition of the demographic group; data collection and fieldwork; accuracy of metering, diary, or interviewing processes; editing and tabulation procedures; data processing, rating calculations, and the assessment of rating service disclosures regarding methodology and survey performance. (*Consultation Paper on Guidelines/Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

TV AUDIENCE RATING ACROSS THE WORLD

Australia

Television ratings in Australia are provided by two agencies, OzTAM and Regional TAM, in different geographical areas. OzTAM is an independent company owned by Australia's major commercial television broadcasters (Seven Network, Nine Network and Network Ten) and is the official source of television audience measurement in the five metropolitan cities (Sydney, Melbourne, Brisbane, Adelaide and Perth) and nationally for subscription television. Regional TAM Pty Limited is a joint venture comprising the five free-to-air (FTA) regional commercial networks - NBN Limited, Prime Television Pty Ltd, Seven Queensland, Southern Cross Austereo and WIN Corporation Pty Ltd. Regional TAM data is the official source of free-to-air and subscription television measurement in the five east coast aggregated regional markets including its 19 component sub-markets and the regional Western Australian market. Both OzTAM and Regional TAM have an agreement with Nielsen TAM for collecting and producing rating data on their behalf. (*The OzTAM Panel*, n.d.)

OzTAM TV ratings are audience estimates based on actual viewing behaviour in 5,250 panel homes in Australia's five mainland capital cities - Sydney, Melbourne, Brisbane, Adelaide and Perth - and 2,120 homes nationally for subscription television (STV). The Regional TAM panel comprises a total of 3198 households. (*The OzTAM Panel*, n.d.)

People meters are installed on each TV set in panel homes, formed through a large-scale face-to-face questionnaire survey. These meters continuously monitor and store individual viewing habits, collecting data every second, 24/7, 365 days a year. The stored data is retrieved through polling daily between 0200 hrs and 0600 hrs via the home's fixed telephone line or a GSM modem in the meter's transmission unit. (*The OzTAM Panel*, n.d.)

Captured data is matched with a reference library of available TV channels to measure viewership, distinguishing between Live, As Live, and Time Shift viewing. The production system then collates, processes, analyzes, validates, and weighs the data, generating a final report of each household's viewing. After completing production processes, television program schedules from networks are integrated with ratings. Rigorous quality control, both electronic and manual, ensures data accuracy. (*The OzTAM Panel*, n.d.)

The Regional TAM ratings data is independently audited by an independent agency.

Canada

BBM Canada, a non-profit broadcast research company established in 1944, conducts television audience measurement. It operates as a cooperative venture of the Canadian Association of Broadcasters and the Association of Canadian Advertisers, with members including television and radio stations, networks, major advertising agencies, and national advertisers. (*Consultation Paper on Guidelines/ Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

BBM Canada employs various methods for gathering ratings data. Semi-annual surveys involve reaching out to thousands of Canadians and providing paper diaries to record their viewing or listening habits. Additionally, electronic meters are used in a carefully selected panel of homes. The survey diary method is applied to measure audiences in seven major markets and 29 minor markets, conducted biannually in the fall and spring. Household members record viewed TV programs in diaries, which are then submitted to BBM Canada after the survey week. The Portable People Meter (PPM) is also utilised, automatically identifying TV stations through an encoded signal sent by each station in selected households. (*Consultation Paper on Guidelines/ Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

Italy

Auditel is the entity responsible for furnishing television ratings in Italy and operates as a Joint Industry Committee (JIC) comprising advertising investors, agencies, media centres, and target companies. Utilising a robust statistical methodology, Auditel has established a representative sample of the Italian population, encompassing individuals aged 4 years and above throughout the national territory. (*Consultation Paper on Guidelines/ Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

Households in the panel are equipped with People Meters that automatically track daily, minute-by-minute viewership on all TV channels in the house. The collected information, processed by a central computer between 2 AM and 5 AM daily, is released by 10 AM the following morning. AGCOM, the Italian regulator, has stipulated rules for measurement, requiring meters to operate on every platform, reflecting platform penetration rates, and considering rotation frequency and acceptable error margins based on platform differences. (*Consultation Paper on Guidelines/ Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

Annually, on December 31, Auditel is obligated to submit a statement to AGCOM containing corporate and shareholders' data, methodology details, viewers panel specifics, audience measurement system details, error rates for each category, measurement periods, costs for broadcaster access to audience data, and information on entities controlling Auditel. This information is published on the AGCOM website. (*Consultation Paper on Guidelines/ Accreditation Mechanism for Television Rating Agencies in Indi*, 2013)

AGCOM has collaborated with ISTAT (the National Institute of Statistics) to certify the quality of audience research and the accuracy of audience data.

France

Médiamat, the leading TV audience measurement system in France, considers audiences for programs watched at home on various screens, including TV, computer, smartphone, and tablet. As of December 26, 2022, the Médiamat panel comprises 11,235 individuals aged 4 years and older in 5,002 households, each equipped with an audience meter. This panel represents individuals in mainland France with a TV set in their main residence. Audiences outside the home are measured by a panel of about 4,500 individuals aged 15 years and older, equipped with a miniature audience meter while engaged in daily activities. (Médiamétrie, n.d.)

STRUCTURAL ANALYSIS OF TV AUDIENCE RATINGS MEASUREMENT INDUSTRY USING PORTER'S FIVE FORCES

Michael Porter's Five Forces Framework, introduced in 1979, is a crucial tool for understanding industry dynamics and economic value distribution. It aids organizations in assessing industry attractiveness, anticipating competitive trends, and strategizing for success. The analysis provides insights into profit distribution among industry forces, helping organizations recognize key players and assess strengths and weaknesses. The framework offers a holistic view, enabling strategists to identify critical factors impacting market position and uncover non-obvious opportunities. Essentially, it serves as a guide for organizations to navigate industry complexities, enhance competitiveness, and make informed strategic decisions.

This section analyses two highly related industries: the TV Broadcasting Industry and the TV Audience Measurement Industry (namely BARC) specific to India. These twin analyses will try to navigate complexities in the competition that exist within these two industries separately and bring out the relationship between the two industries.

Five Forces Analysis of the Broadcasting Industry

- 1. Bargaining Power of Buyers:** Viewers wield substantial bargaining power in the TV broadcasting industry, given the myriad options available, including traditional channels, streaming services, and online platforms like YouTube. The ease with which viewers can switch between providers based on factors like price, content offerings, and convenience amplifies their negotiating strength. Advertisers also exert considerable influence, seeking cost-effective ad slots while viewers demand diverse and high-quality content. The decline in subscription revenue, driven by a reduction in pay TV homes and stable ARPU, further indicates a power shift towards consumers, as digital alternatives become more accessible. The increase in the advertiser base, especially in regional languages and sports genres, signifies a dynamic advertising landscape influenced by buyer preferences. The proposed ad cap rule adds another layer of potential impact on revenues, as its implementation could significantly affect ad volumes, particularly for news channels and certain entertainment channels. The dominance of FMCG and e-commerce in TV ad spends underscores the stiff competition for advertising slots, and the industry's future growth hinges on regulatory factors such as ad caps and pricing restrictions. Overall, buyers, both viewers and advertisers, play a pivotal role in shaping the competitive dynamics and future trajectory of the TV broadcasting industry.
- 2. Bargaining Power of Suppliers:** In the TV broadcasting sector, TV channels (including production houses or companies) and delivery platforms such as DTH Platforms and MSOs function as mutual suppliers. Established TV channels and delivery platform providers distinguish themselves based on genres for TV channels and demographics for audience delivery platforms, strengthening their respective bargaining powers. Simultaneously, both entities avoid differentiation among their various counterparts to reach a broader audience. This equilibrium not only contributes to cost efficiency but also facilitates the establishment of economies of scale over time.
- 3. Threat of New Entrants:** Launching a TV channel in India presents formidable barriers to entry. Regulatory hurdles include obtaining permissions from the Ministry of Information and Broadcasting, with distinct criteria for News and Non-News channels, coupled with clearances from multiple government departments. The infrastructure demands, from establishing a studio facility to utilising teleport services for signal distribution, require substantial investment and technological acumen. Newcomers must navigate the complexities of technology selection, including cloud-based solutions, and compete with established channels in content differentiation. Connecting with DTH Platforms and MSOs for distribution poses challenges in negotiation and partnership establishment. Global content distribution introduces complexities in signal transmission and connectivity, while financial considerations, including budget constraints, add to the entry barriers. In essence, the TV broadcasting industry demands a comprehensive and resource-intensive approach, making it challenging for new entrants to navigate and succeed.
- 4. Threat of Substitutes:** The ascendancy of streaming platforms and online content creators poses a formidable challenge to traditional TV broadcasting. While entering the traditional broadcast space demands substantial capital for licensing and infrastructure, online streaming services encounter a comparatively lower barrier to entry. Establishing a sizable subscriber base and competing with industry giants like Netflix, Disney+, and Amazon Prime Video remains a formidable challenge. The rapid growth of digital media, online gaming, and OTT platforms, especially among the younger demographic, underscores the significant threat to traditional television, with changing viewership

patterns signalling a shift toward digital substitutes. Moreover, alternative entertainment forms such as gaming and social media intensify the competition for viewers' attention.

6. **Competitive Rivalry:** The TV broadcasting industry is marked by intense competition, where numerous players strive for viewers' attention. Traditional broadcasters engage in fierce competition with each other and with streaming services. The decline in the number of television channels, especially the shift from free-to-air to paid channels due to the New Tariff Order (NTO), reflects strategic manoeuvres among broadcasters to maintain competitiveness. Regional channels exhibited a 19% increase in ad volumes compared to national channels in 2022, showcasing the dynamic nature of competition. Free television's growth, reaching an estimated 45 million subscribers, is driven by cost-effective television sets and economic considerations. The GEC and news genres dominate, capturing 56% of all television ads, underscoring the competitive landscape. Significant growth in reach is observed in Assamese, Gujarati, Marathi, and Bhojpuri channels, while Malayalam, Bangla, and Oriya channels experienced declines. Overall, the industry's competitive intensity is evident in the diverse strategies and fluctuations in viewership across regional and national channels.

Five Forces Analysis of BARC

1. **Bargaining Power of Buyers (TV Networks, Advertisers):** Buyers, consisting of TV channels, production companies, and media advertisers, have low bargaining power with BARC. These buyers, collectively represented by industry organisations like IBDF, ISA, and AAAI, own BARC. IBDF, with 60% representation, is a significant contributor to BARC's funding and holds an industry-wide reputation, covering over 90% of television viewership in India. ISA, with 20% representation, has a 65-year history promoting fair competition, and AAAI, also with 20% representation, includes agencies of various sizes, aligning with core industry recommendations.

While BARC's wide representation ensures checks and balances in decision-making, allowing it to prescribe rates for its services, internal influences from larger stakeholders may impact pricing decisions. The diverse ownership structure, with industry stakeholders as buyers, provides a nuanced dynamic to BARC's pricing strategies.

2. **Bargaining Power of Suppliers (Data Providers, Technology Providers):** Due to BARC's market monopoly, it wields significant influence in setting prices, determining payment terms, and establishing contractual agreements. This advantageous position allows BARC's non-rating suppliers, such as creditors and technical component providers, to negotiate favourable terms and ensure timely contract execution. However, concerns raised in TRAI's 2020 consultation paper suggest that stakeholders in the TV broadcasting industry feel the need for more cost-effective and efficient ratings measurement.

This implies an opportunity for BARC to enhance its operational efficiency but also poses a risk to its suppliers due to potential leakages in BARC's operations. TV channels and broadcasting entities rated by BARC act as suppliers of raw viewership data, contributing to the generation of weekly TV audience ratings. These entities engage in separate agreements with BARC known as Statements of Work (SOW), which define the negotiation power and balance between BARC and broadcasting entities.

Despite having SOW agreements, stakeholders expressed concerns in TRAI's 2020 consultation paper, suggesting that BARC maintains higher bargaining power over broadcasting entities. This situation may prove unfavourable, especially for new and smaller entrants in the broadcasting industry.

3. **Threat of New Entrants:** Currently, BARC is the only Agency providing rating services in India. The monopolistic situation invariably raises concerns on account of market behaviour, quality of service, and cost inefficiencies. Entry of more players and the resultant increased competition might contain the ill effects of market dominance, and lead to a better quality of service and reduced costs. At the same time, setting up credible and transparent rating services requires substantial capital investments, which are to be ultimately borne by the 13 stakeholders. Therefore, the BARC faces a low risk of competition.
4. **Threat of Substitutes:** Although BARC holds a unique position as the industry-owned, self-regulatory body for TV audience measurement in India, which gives it significant authority and data access, making direct competition challenging, there are few players whose services broadcasters and media agencies do use in order to make their strategies and operations precise and more effective. Some of them are TAM Media Research (although it exited the TAM business around 2015, it still provides services such as ad delivery insights under the brand 'TAM AdEX'), Nielsen (media research), Hansa Research (a long-time collaborator of BARC but broke away post TRP Scam) and Chrome DM.
5. **Competitive Rivalry:** BARC currently holds a monopoly in the TV audience rating services sector. Previous providers ceased operations due to internal factors and market conditions. Despite enjoying industry support due to its unique ownership structure, BARC has experienced an erosion of trust from some stakeholders following various controversies.

Relationship Between Broadcasting and TV Audience Measurement Industries

The broadcasting and TV audience measurement industries have an intricate and symbiotic relationship. It is characterised by mutual dependence, a feedback loop, technological innovation, and regulatory influence.

Broadcasters seeking to gauge program effectiveness and set advertising rates accurately depend on the precise audience measurement data provided by the TV audience measurement industry. Simultaneously, the measurement industry thrives on broadcasters and advertisers as essential clients, emphasising the symbiotic nature of their association.

There is also a reciprocal influence that creates a loop where the success or failure of broadcasted content shapes the necessity for evolving and fine-tuning measurement metrics. Accurate audience measurement data not only guides content creation and scheduling decisions for broadcasters but also influences the overall demand for audience measurement services.

Government rules and regulations have a big impact on how broadcasting and audience measurement work together. If the rules change in one industry, it can affect the other. For example, if there are new rules for what can be shown on TV, it might change the variety of content available, which, in turn, affects what kind of measurement is needed. Government regulations related to content and ownership can impact the competitive landscape and profitability of the industry. So, the regulatory landscape becomes a shaping force, dictating the contours of both sectors.

Additionally, the increasing availability of content through streaming platforms is blurring entertainment spaces and creating a more fragmented market. Both industries need to navigate the challenges and opportunities presented by technological shifts.

ANALYSING COMPETITION IN THE TV AUDIENCE RATINGS MEASUREMENT INDUSTRY: A VALUE CHAIN ANALYSIS

BARC, established as a Section 8² company, materialised based on TRAI recommendations and MIB guidelines. As the sole agency providing independent TV viewership estimation in India, it holds strategic importance for the industry, backed by industry associations IBDF (formerly known as IBF), ISA, and AAAI with a shareholding ratio of 60:20:20, respectively.

BARC's viewership ratings serve as a pivotal benchmark for advertising decisions. Employing audio watermarking technology, it operates approximately 55,000 panels and 2,500 Out-of-Home meters (Bar-O-meters) for robust viewership data collection.

MDPL, recognised as a core subsidiary of BARC, ensures independent execution of the measurement process, introducing vital checks for data consistency. As the exclusive data-collecting agency for BARC, MDPL plays a crucial role in supporting BARC's mission in the TV viewership measurement landscape.

Transaction Costs in TAM Business

Transaction cost is the cost of making an exchange or a trade in a market. In the context of television audience measurement markets, transaction costs can be broadly categorised into two types:

1. **TAM Service costs:** These are the costs that **television networks and advertisers** incur in order to participate in the audience measurement process. These costs can include the cost of **purchasing data from audience measurement companies**, the **cost of developing and implementing audience measurement systems**, and the **cost of training staff on how to use audience measurement data**. For example, these can be costs associated with buying and selling advertising time based on audience information.
2. **Data acquisition and processing costs or Internal costs:** These are the costs that **audience measurement companies (BARC separately and through MDPL as well) incur** in order to collect and process audience measurement data. These costs can include the cost of **purchasing and maintaining measurement equipment**, the cost of **hiring and training data collectors**, and the **cost of developing and maintaining data processing systems**.

Apart from the above, transaction cost also includes the cost of obtaining, processing, and negotiating the audience data, as well as the cost of monitoring and enforcing the contracts between advertisers and broadcasters.

The magnitude and direction of transaction costs also matter, as it can affect the nature and characteristics of TAM data. Some factors that affect the transaction cost in television audience measurement markets are Quality, Accessibility, standardisation, and timeliness of the TAM data.

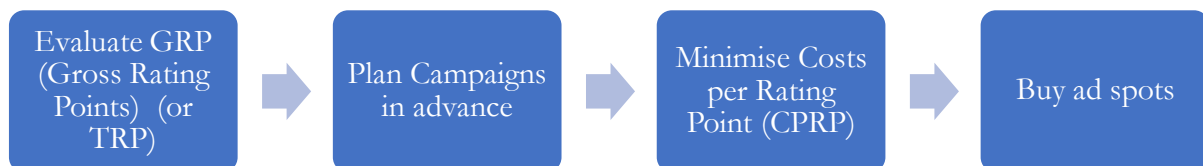
- **The quality and reliability of the audience data:** If the audience data is inaccurate, inconsistent, or incomplete, the transaction cost will be higher, as the parties will have to spend more time and resources to verify and reconcile the data, or to deal with disputes and conflicts arising from the data. It means that audience measurement companies need

² Section 8 firm is an entity that is registered under Section 8 of Companies Act, 2013 and has in its objects the promotion of commerce, art, science, education, sports, research, social welfare, religion, charity, protection of environment or any such other object. They are compelled by the law to apply its profits in promoting its objects; further, they are prohibited from declaring dividends.

to spend on infrastructure and processes in order to ensure the precision of their core operations and keep them bias-free at the same time.

- **The availability and accessibility of the audience data:** If the audience data are not easily available or accessible to the parties, the transaction cost will be higher, as the parties will have to incur more cost to acquire and access the data, or to use alternative sources of information. So, audience measurement companies need to incur marketing, selling cost and product development costs.
- **The standardisation and compatibility of the audience data:** Ratings serve as the currency for advertising trading, guiding planners and buyers in securing spots to reach their target audience, typically quantified in Gross Rating Points (GRP) (Napoli, 2003). Advertisers aim to minimize Costs per Rating Point (CPRP) and plan campaigns weeks in advance, relying on average ratings from previous weeks and future schedules to make channel selections. In the realm of advertising, rating data play a crucial role in predicting and evaluating GRPs pre- and post-campaigns. Unlike program executives, advertisers prioritise stable and reliable ratings over frequent updates. The standardization and compatibility of audience data across platforms, devices, and markets become imperative to avoid higher transaction costs. Parties may need to convert or adjust data for comparability, dealing with complexity or uncertainty. Additionally, if audience data lack regular updates, transaction costs rise. Parties may rely on outdated or irrelevant information, necessitating adjustments based on changing market conditions. Audience measurement companies, therefore, invest in maintaining updated, relevant, and error-free operations and services to mitigate transaction costs for their customer

Figure 3: Advertisers' Process of buying ad spots on TV channels



Thus, it can be inferred that establishing a useable and precise audience measurement service is heavily dependent on heavy capital investments, which in turn helps in the demonstration of technical expertise and 'proof of neutrality', all of which results in buy-in from major advertisers and broadcasters. An established system is a convention that provides standardised estimates of the audiences. Therefore, cost and capital requirements act as strong entry barriers in the TV audience measurement provider market and, as a result, have traditionally been monopolies.

BARC's Product Structure

BARC charges **broadcasters** a flat cess of 0.8% Flat Cess (as a % of net TV advertising billing) to be OR Base Price – whichever is higher. Its pricing policy for broadcasters is based on the following formula:

- 0.8% of net TV advertising billing

OR

- Rs. 18 Lacs per Channel per annum

whichever is higher.

BARC charges for its services to broadcasters in a quarterly manner. Since all payments are made in advance, broadcasters need to share relevant Annual Revenue estimates, after which a Statement of Work (SOW) is shared by BARC. The billing is completed thereafter, and the process is repeated every quarter. The SOW is ratified every subsequent quarter, and any change in Cess % is reviewed and approved by the BARC Board. With every change in the base cost due to changes in operating expenses, other costs, etc, the Cess % is revised accordingly.

Table 4: BARC’s Summary of Offerings to Broadcasters

Prime Package	Supreme Package	Other Offerings- Illustrative List (at additional cost)
AudView <ul style="list-style-type: none"> • Time band • Program • Promos AdView <ul style="list-style-type: none"> • Ad spots Planview <ul style="list-style-type: none"> • Plan builder 	AudView <ul style="list-style-type: none"> • Switching Grid • Individual Analysis • Behavioural Targeting PlanView <ul style="list-style-type: none"> • Optimiser 	<ul style="list-style-type: none"> • SpotTrek (Commercial) • SpotTrek (Commercial + Promo) • SpotTrek Certification • Preview • Language Feed • TBR Data • Special Promo Coding • Historical Data • Broadcast India

SOURCE: Pricing Policy - Broadcasters (2023-24)

BARC’s products offered to advertisers are priced being benchmarked to similar-sized agencies that are BARC clients. While ‘Yumi Prime’ is the base product offered to advertisers, ‘Yumi Supreme’ is offered at a 15% surcharge over and above ‘Yumi Prime’. After the SOW and EULA are signed and agreed on between BARC and the Subscriber (or advertiser), software to access the BARC’s services is installed on the Subscriber’s computers. Additional licences can also be provided but for a cost. Subscription Services can be renewed post Escalation over prices reserved last year after negotiating on Inflation.

A Subscriber process flow similar to advertising agencies is followed for media agencies.

Table 5: BARC’s Summary of Offerings to Advertisers and others

Yumi Prime	Yumi Supreme	Other Offerings
Aud View <ul style="list-style-type: none"> • Time band • Program • Promos Ad View <ul style="list-style-type: none"> • Ad spots Plan View <ul style="list-style-type: none"> • Plan builder 	Aud View <ul style="list-style-type: none"> • Behavioural TG definition • Switching Grid • Individual Analysis Plan View <ul style="list-style-type: none"> • Optimiser 	<ul style="list-style-type: none"> • Customised Reports • RLD • SpotTrek Certification

SOURCE: Pricing Policy - Advertisers & Others (2023-24)

Table 6: BARC’s Summary of Offerings to Media Agencies

Yumi Prime	Yumi Supreme	Other Offerings
Aud View <ul style="list-style-type: none"> • Time band • Program • Promos Ad View <ul style="list-style-type: none"> • Ad spots Plan View <ul style="list-style-type: none"> • Plan builder 	Aud View <ul style="list-style-type: none"> • Behavioural TG definition • Switching Grid • Individual Analysis Plan View <ul style="list-style-type: none"> • Optimiser 	<ul style="list-style-type: none"> • Customised Reports • RLD • SpotTrek Certification

SOURCE: Pricing Policy - Agencies (2023-24)

Value chain analysis

The value chain represents the comprehensive set of activities engaged in delivering value to customers. Developed by Michael Porter, it is a pivotal framework that serves as the foundation for understanding how businesses create, deliver, and capture value. Competitive advantage, a key goal for businesses, is intricately tied to the activities within the value chain. Each activity, and the interconnectedness of activities within the broader value chain, form the fundamental units that contribute to a company's competitive edge.

The figure below elucidates and expands on BARC’s value chain. Thereafter, some explanation is also provided to explain and add important details arising from the value chain diagram below. This section not only borrows from the framework developed by Michael Porter but also from publicly available CRISIL’s credit rating report on BARC, which is done as per the regulations laid down by the Securities and Exchange Board of India (SEBI) (and other applicable regulations, if any).

Competitive Advantages

According to CRISIL, BARC is set to maintain its robust market standing in the medium term, supported by a substantial panel base and widespread acceptance among broadcasters. CRISIL recently reaffirmed the 'CRISIL A/Stable' rating on BARC's INR 35 Crores Total Bank Loan

Facilities, emphasising BARC's solid business model, considerable revenue visibility, and strong customer retention.

CRISIL attributes BARC's enduring success to its established business model, where a significant portion of broadcasters' revenue comes from ads. As the exclusive provider of independent TV viewership estimates in the Indian TAM market monopoly, BARC holds a pivotal position for broadcasters, ensuring customer loyalty and sustained revenue visibility.

A noteworthy point is that broadcasters contribute about 75% to BARC's revenue, and the company's billing structure of quarterly advance payments contributes to efficient cash flow management. (CRISIL, 2023)

Additionally, the key stakeholders, including IBDF, ISA, and AAI, have a significant shareholding in BARC, reinforcing its strategic importance. The board of BARC comprises members from these industry bodies, further solidifying support for BARC's vital role as an independent provider of viewership data. The continued backing from these entities underscores BARC's enduring significance in the industry.

Weakness

CRISIL highlights financial constraints on BARC's risk profile due to its Section 8 entity status. Fiscal year 2023 experienced subdued performance, marked by resumed field activities post-pandemic, impacting operating profitability. Future financial risk constraints are anticipated due to its Section 8 classification. However, BARC aims to address these challenges through cost reductions, expecting to meet debt obligations and execute capital expenditure plans using internal cash accruals.

BARC's effectiveness as a monopoly is constrained by inherent limitations in its ownership and operations. TRAI suggests that, ideally, an industry-led body like BARC India should focus on framing rating methodology, audit mechanisms, and data publication, with independent agencies handling measurement functions. However, BARC is extensively involved in end-to-end rating system operations, a structure criticized by TRAI. The current closed system, controlled by those with a direct stake and potential conflicts of interest due to skewed representation in the board of directors, raises concerns about independence in management functioning.

Strategic Resources

BARC's dominance in the market stands as its most critical asset, founded on two key pillars:

1. **Formidable Entry Barriers:** BARC's monopolistic position is fortified by high entry barriers, encompassing substantial capital requirements, extensive industry networks, and stringent government regulations.
2. **Technological Expertise:** The technology, processes, and skilled talent vital for TV viewership measurement contribute significantly to BARC's monopolistic stronghold.

CRISIL's report affirms BARC's financial prowess, commending its sustained revenue growth that has consistently elevated operating margins to the impressive 17-20% range. Additionally, the report underscores BARC's success in deriving substantial and consistent revenue from innovative products, coupled with heightened operating profitability, fostering a continuous upswing in cash accruals.

PORTER'S VALUE CHAIN FOR BARC

SUPPORT ACTIVITIES	Firm infrastructure	<i>A company's "corporate" functions, including executive management, accounting, and legal counsel.</i>			Day-to-Day Functioning: The primary focus of day-to-day operations is profit generation and enhancing organizational value. BARC's board of directors and management team oversee this function, with employees executing strategic actions aligned with the company's goals.
	Human resource management	<i>Hiring new employees, distributing compensation and benefits, and handling employee needs.</i>			Human resource management: It involves attracting, hiring, training, and retaining a skilled workforce, which is crucial for maintaining the quality of data and ratings. MDPL recruits talent tailored to its specific needs, especially for inbound logistics, operations, and research functions performed for BARC. BARC too has its hiring and HR policies
	Technology development	<i>Gaining a competitive advantage by creating more efficient internal processes and new customer-facing technologies.</i>			Technology development: This involves innovating technologies and methodologies for television audience measurement, encompassing advancements in set-top meters, refined data collection techniques, and the creation of algorithms for data analysis. BARC entrusts these responsibilities to its core tech committee.
	Procurement	<i>The company-wide structures that provide everyone with the tools and materials they need to work. All primary and support activities need supplies, but they won't all need the same ones (for example, the corporate office can't do much with raw product materials).</i>			Primary and secondary supplies: MDPL and BARC collaboratively handle the essential aspects of ratings measurement. As a result, their primary needs revolve around input materials, services, and infrastructure tailored to their specific functions. The requirements for non-core activities may differ between MDPL and BARC.
PRIMARY ACTIVITIES	Inbound logistics	Production/ Operations	Outbound logistics	Marketing and sales	Service
	<i>Acquiring raw materials and directing them to production centers</i>	<i>Processing raw material into a final product that has a greater value than the material does on its own</i>	<i>Distributing the processed product to wholesalers, retail locations, and eventually end customers.</i>	<i>Raising awareness of the product or service, cultivating new customers, and ensuring a continuous source of revenue.</i>	<i>Providing assistance to the customer outside the purchase itself, from in-store help to regular maintenance.</i>
	Panel recruitment and maintenance: This is the process of recruiting and maintaining a <u>panel of households</u> that agree to participate in audience measurement. This is a critical activity as the quality of the panel directly affects the accuracy of the ratings.	Data collection: This is the process of <u>collecting data from the panel households</u> . This data can be collected in a variety of ways, such as through the use of set-top meters, or online surveys.	Data processing and analysis: This is the process of processing and analyzing the data collected from the panel households. This involves tasks such as cleaning the data, identifying viewing patterns, and <u>calculating ratings</u> .	Sales and marketing: This is the process of selling and marketing audience measurement services to clients. This involves activities such as developing marketing materials, attending trade shows, and giving presentations	Ratings distribution: This is the process of distributing ratings to clients. Clients can include broadcasters, advertisers, and programmers.

MARGIN

Risk in Value Chain

CRISIL's report notes a sustained decline in operating performance, primarily attributed to a slow post-pandemic recovery. However, the overarching structural risk for BARC lies in its struggle with innovation and trust. Previous sections have highlighted BARC's challenge in maintaining trust among its stakeholders, who, crucially, are also investors and end customers. The perceived lack of rigour and transparency in BARC's operations has led stakeholders to feel that a specific section holds disproportionate influence, potentially impacting rating figures. Consequently, the situation has constrained innovation and modifications in BARC's technology and processes, primarily (and out of necessity) driven by increasing government scrutiny and, as a result, has been of a limited nature.

General Threat and Risk

According to CRISIL's assessment, a pivotal risk for BARC lies in any potential alteration to its status as the exclusive provider of TV viewership measurement in India. The report emphasises that guidelines introduced by the MIB and TRAI have the potential to impact BARC's exclusive status, serving as a crucial sensitivity factor for its performance.

Additionally, CRISIL highlights the risk of diminishing support from member entities of promoter bodies, which could be linked to events such as the TRP Scam (discussed earlier). While the report doesn't delve into specifics, erosion of trust due to such scandals could potentially jeopardize BARC's operational stability and its dominant position in the market, considering its current monopoly in the industry.

CONCLUSION

Organisational Setup and Structural Recommendations

The TRAI, in its 2020 consultation paper, recommended several measures to enhance the television rating system.

TRAI recommended substantial structural reforms for BARC India to enhance the accuracy, transparency, credibility, and neutrality of the TV audience measurement system. These proposals included changes to the Board composition, advocating raising independent members on it, including a technology and statistics expert along with representatives from the Government/Regulator. It called for a restructured Board aiming for equal representation of the three Industry Associations (AAAI, ISA, IBDF) with equal voting rights, regardless of equity holding proportions, and members' tenure was limited to two years. The Chairman's tenure was also capped at two years, with a rotational system among constituent industry associations. Recognising the importance of advertiser representation, active participation from advertisers and advertising agencies was emphasised for system accuracy and neutrality. TRAI also recommended that Initiatives should be taken to conceal the identity of channels, including names and numbers, during the data collection and processing phases. This transparency enhancement measure aims to instil more confidence in the entire process.

TRAI also emphasised the need for BARC to maintain an arm's length from its subsidiary, Meterology Data Pvt Ltd. (MDPL), which served as the sole data-collecting agency for BARC. This separation aimed to ensure an independent measurement process and introduce inherent checks to identify data inconsistencies. It was crucial to establish a clear demarcation of roles between the data collection agency and the data processing/publishing agency to bring in aspects of transparency and checks and balances.

Furthermore, TRAI recommended the division of BARC's functions into two units—one for prescribing methodology, validating data, publishing, and auditing, and the other for processing data, watermarking, and technical tasks. New entrants and smaller firms are typically more technologically and conceptually innovative in responding quickly to the marketplace, as was seen in the case of the U.S. With the entry of multiple agencies into the rating process, BARC's role was suggested to be limited to publishing ratings, framing methodology, and establishing audit mechanisms to foster a diverse rating system leveraging new technologies.

To create a credible and accurate collection of data, multiple data collection agencies need to be encouraged. Competition and multiple agencies for data collection and processing would bring in new technologies, new research methodologies, new methods of analysis, and new and better ways to ensure better data quality.

TRAI, in summary, suggested breaking BARC along functional lines. This would involve multiple agencies for data collection and processing. The goal is to introduce new technologies, research methodologies, and analysis methods. The aim is to improve data quality, fostering healthy competition. The available evidence indicates that new entrants in the ratings marketplace, unbound by a commitment to established technologies, have played a significant role in introducing innovative processes. These newcomers pose a threat to established methods and practices, prompting dominant firms to engage in more aggressive technological development. The competitive pressure from these innovative entrants stimulates a dynamic environment where established players feel compelled to enhance and evolve their technological approaches to maintain their market position. This cycle of challenge and response contributes to the continuous evolution and advancement of technologies within the ratings industry. (Buzzard, 2002)

Technology-related Recommendations

Television audience measurement is somewhat similar to exit polls done by psephologists, credit ratings done by credit rating agencies and reviews of various movies written by different columnists in print media.

TAM systems are encountering a range of challenges in the current landscape, especially in India. The problems that the 2008 letter (as mentioned in the earlier section) revealed, namely the small sample size of monitored households, the adverse effect of ratings on the diversity of content inhibiting plurality, the Rural-urban divide emanating from higher attention being given to the urban population in the sample database and lack of transparency and independence of TV audience measuring agencies were reconsidered and addressed in the TRAI's consultation papers in 2013 after that in 2020 as well in addition to new issues. It signifies that structural reforms are thus the need of the hour.

The viewership patterns of television have become increasingly fragmented, marked by a rise in time-shifted behaviours, resulting in diminished prime-time ratings for major broadcast network shows. As a result, traditional television measurement methods face difficulties in comprehensively accounting for the fragmented nature of viewing audiences. Thus, there is a critical need for improved cross-platform audience measurement systems capable of accurately capturing viewership across various platforms. Although TRAI did not explicitly flag cross-platform viewership concerns, the popularity of OTT platforms in India, especially with ad-supported subscription models, is giving tough competition to TV viewership in India. At the same time, it is important to establish common units of analysis, across platforms, such as advertising impressions, to ensure consistency in audience measurement across different platforms and facilitate meaningful comparisons.

In 2019-20, OzTAM, Regional TAM, and Nielsen introduced VOZ in Australia, for example, demonstrating the additional reach delivered by broadcast video on demand (BVOD). This

service recognises that TV content is consumed across various screens over time. VOZ aims to deliver independent, standardised, and transparent metrics for reporting Total TV, offering de-duplicated audience reach and frequency metrics for planning and evaluating Total TV audiences. This initiative seeks to enhance market comprehension of audience targets across all devices, facilitating advanced audience targeting for TV. The VOZ initiative also highlights that the media measurement industry is in the process of transitioning towards a platform-agnostic perspective on television measurement, emphasising the importance of consistent measurement across diverse platforms.

Currently, the BAR-O-Meter employs a handheld remote, with buttons assigned to each household member aged 2 years and older, as part of the viewer identification method. Panel participants are prompted to press their designated button when watching TV. Additionally, separate buttons on the remote are designated for guests, who are asked to input their gender and age bracket during TV viewing. (BARC, 2023a)

Critics have long argued that household members may or may not press the required buttons on the remote, which leads to incorrect data. Further, the evolving landscape of television measurement demands a broader utilisation of advanced audience descriptors beyond traditional age and gender demographics. This includes exploring and establishing advanced currencies for the buying and selling of television advertising inventory. (TRAI, 2020)

The current panel size is around 55,000 households, and expanding from a sample-based to a census-based model using secure and reasonably priced technology is recommended for increased accuracy in ratings. A sample size of 75,000 to 100,000 people-meter homes, supplemented with Return Path Data (RPD), is suggested (TRAI, 2020). Having two currencies, one based on a people-meter and the other on RPD enhances the accuracy of subscriber-viewing behaviour data. The use of RPD technology allows for a larger panel size, with random selection based on a computerised algorithm to mitigate panel tampering issues. Automation of the validation process and introduction of RPD-embedded Set-Top Boxes (STBs) would further improve accuracy and transparency. TRAI also advocates RPD-enabled STBs as a cost-effective solution for a larger sample size, emphasising the need for anonymity and individual consent in data collection. Directing DPOs to provide near-full census-based data requires modifications to their software. Mandating STBs capable of transferring viewership data and adopting RPD technology through amendments to DTH licenses and MSO registrations is proposed for effective implementation. (TRAI, 2020)

In summary, the prevailing challenges in television measurement centre around the need for improved cross-platform audience measurement, consistency across diverse platforms, and the shift towards RPD-enabled measurement. Addressing these challenges requires a proactive approach to developing new measurement approaches in alignment with the evolving dynamics of television viewership.

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