

IMPACT OF TELEVISION DIGITIZATION ON VIEWER SATISFACTION AND MEDIA CONSUMPTION IN INDIA

Dr. Gaurav¹

Email: gaurav2ibm@gmail.com

Abstract:

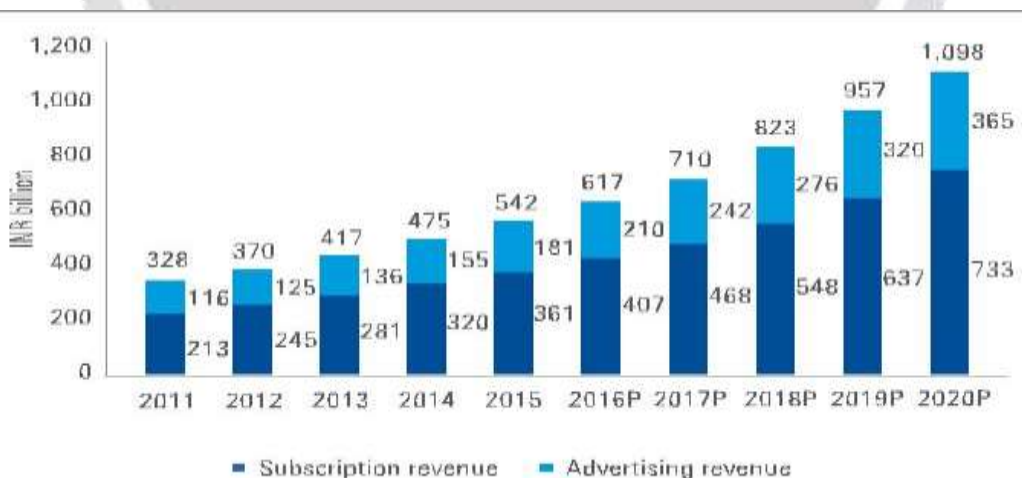
Indian Television Industry today is one of the fastest growing entertainment industries throughout Asia which is reachable even to the Aam Aadmi given the number of new channels erupting all over the country and new shows being churned out constantly. Television industry in India has faced a diverse change in script, screenplay, concept or themes and storytelling pattern with private channels coming to the front row like Zee TV, Star TV, Star Plus and Sony Entertainment TV. Due to Cable Television Digitization the consumption pattern of the viewers has changed because of knowledge, education and social changes and this has been facilitated by the spread and reach of cable network from urban to rural, home to home which makes viewers open to change and they have welcomed this change. Another reason for this change is their artistic and cognitive diet.

Keywords: Cable Digitization, Media Consumption, DTH, Viewer, Television

1. Introduction

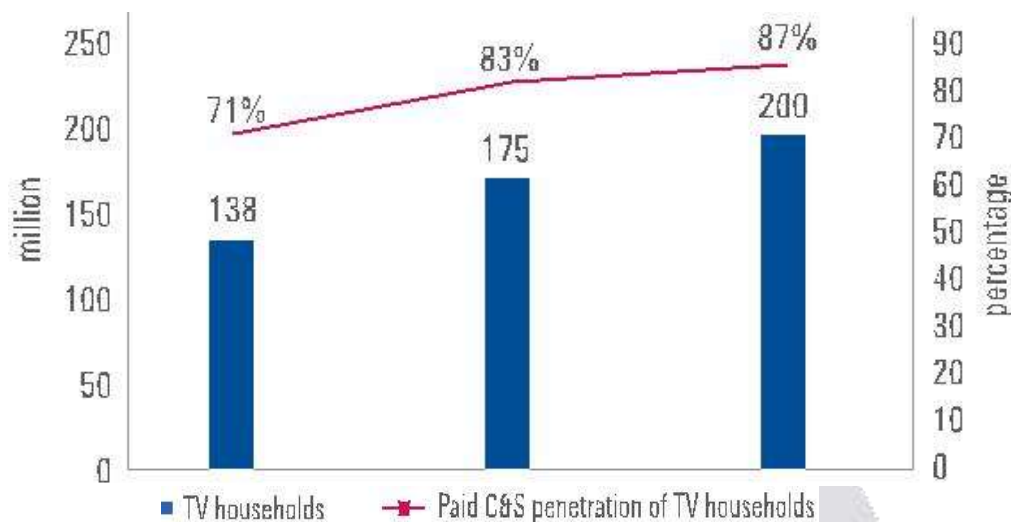
The Television industry in India is estimated at INR 542 billion in 2015 and is expected to grow at a CAGR of 15% to reach INR 1,098 billion in 2020. Subscription revenue is estimated to grow at a CAGR of 15% on account of the increased monetization while advertising revenue growth is also estimated to remain strong, growing at a CAGR of 15%. The number of Television households in India increased to 175 million in 2015, implying a Television penetration of 62%. The number of Cable & Satellite (C&S) subscribers is estimated to have reached 160 million.

Fig.1.1 Size of the Television Industry



Source: KPMG-FICCI Indian Media & Entertainment Industry Report 2016: The Future -Now Streaming
Fig.1.2 TV households and paid C&S penetration of TV households

¹ Assistant Professor, University College of Commerce and Management, Guru Kashi University, Talwandi Sabo, Bathinda (Punjab)



Source: KPMG-FICCI Indian Media & Entertainment Industry Report 2016: The Future -Now Streaming

Excluding DD FreeDish, the number of paid C&S subscribers is estimated at 145 million in 2015, implying a paid C&S penetration of 83%. Television households are expected to increase to 200 million by 2020, with paid C&S subscriber base expected to grow to 174 million by 2020, representing 87% of Television households.

With 175 million Television households, India is the world's second largest Television market after China. At the end of 2015, the Digitization of C&S households (in terms of STBs rolled out) stood at 60% including DD FreeDish subscribers. However, challenges in improving addressability and increasing monetization continue to trouble the industry. In 2015 as well, there was no significant impact of Digitization on sharing of subscription revenues among stakeholders or carriage fees. Subscription revenue for the Television Industry is estimated to have grown at 13% in 2015 to reach INR 361 billion (Daily News Analysis, 2016).

In 2015, during the first half, MSOs continued to focus on improving their operating models in Phase I & II cities, while changing focus in the latter half of the year to rolling out STBs in Phase III areas. MSOs are continuing to build internal processes to reflect the change in business model from B2B to B2C service providers but different players have had varying degrees of success in achieving this continuing delays in rollout of packaging and challenges in collection along with deadlines getting pushed back has resulted in several industry participants lowering their expectations from the Digitization process. The distribution industry appears to be split about the role of the regulator going forward. While many industry participants believe that de-regulation and price forbearance are the need of the hour, there are several who now believe that stronger regulations are imperative to drive the industry towards better pricing and revenue sharing models. Going forward, the implementation of TDSAT's order that all content deals between Broadcasters and Distributors have to be non-discriminatory in nature and based on RIO is likely to significantly impact the distribution economics (Laghate & Sharma, 2016)

Meanwhile, competition in Television distribution could intensify with the entry of Reliance Jio into the cable Television business. The launch has been delayed multiple times, but the company has been tying up with hundreds of LCOs to get access to the last mile. The company has plans to provide a bundled package which provides Television channels, video streaming services (Jio Play), broadband, landline phone along with additional

services such as home surveillance (Mukherjee, 2016). MSOs and DTH operators are also likely to see an increase in competition from new-age service providers such as Lukup Media, which provides converged Television, internet access and video-on-demand services through a single connection and has launched services in select areas in Mumbai, Hyderabad, Pune and Bengaluru (The Economic Times, 2016).

1.1 TRAI's Recommendations on Digitization of Cable Television sector

- Complete addressable Digitization in a time bound manner, in 4 phases.
- Amendment in the Cable Television Act for paving way for addressable Digitization.
- Right of way for MSOs/ LCOs.
- Equipments, devices and accessories to be compliant to the BIS standards.
- Income tax holiday for service providers.
- Rationalization of Taxes/ levies.

Table 1.1 DTH and Digital Cable ARPU

ARPU (INR per month)	2015	2016P	2017P	2018P	2019P	2020P	5-Year CAGR
DTH	248	258	266	299	334	367	8%
Digital Cable	214	219	230	261	298	343	10%

Source: KPMG-FICCI Indian Media & Entertainment Industry Report 2016: The Future -Now Streaming

1.2 Television Ad-Tech

Television business is going through a fundamental metamorphosis worldwide. The art of storytelling in video continues to be and will be a dominant form of entertainment. It is the underlying business models, technology and operating methods that are changing to adapt to the new world of globalised content distribution and its changing behaviour of watching video on our mobile devices. All media other than Television have always been targeted, be it local editions on print, city-specific FM radio, area-specific billboards and personalized media consumptions in Internet enabled devices. Television, although being one of the largest advertising mediums, sorely lacked targeted advertising options. With the advent of Internet devices and IP connected set-top boxes, Advertisers have woken up to the idea of targeted advertising on Television. Television ad tech is expanding in three dimensions i) Geographic and demographic targeting on pan-regional Television, ii) Personalized targeting on live and on-demand Television content on connected devices, iii) Data-driven programmatic buying.

1.3 Impact of Cable Digitization on Viewers

There is various positive impact of Cable Television Digitization on Viewers as follows:

- Better signal quality.
- More choice of channels/services.
- Pays for what he gets and so can budget his bill.
- Have access to triple play services including broadband and innovative value added and interactive services.
- Additional features such as EPG (Electronic Programming Guide), enhance the viewing experience.

2. Objective of the Study

To examine the impact of Television Digitization on Viewer Satisfaction and Media Consumption in India

3. Hypotheses

Five Hypotheses is formulated to achieve above objective

- H₀₁:** There is no significant difference among respondent opinion (demographic-wise and stakeholder-wise) regarding Indian Television Industry being the largest medium for media delivery in India and thus assuming critical importance.
- H₀₂:** There is no significant difference among respondent opinion (demographic-wise and stakeholder-wise) regarding Indian Television Market (already the second largest market in the world after China) witnessing robust growth and having a lot of untapped potential.
- H₀₃:** There is no significant difference among respondent opinion (demographic-wise and stakeholder-wise) regarding Cable & Satellite segment dominating Indian Television Industry because of ease of operations, scalability and affordability for the masses.
- H₀₄:** There is no significant difference among respondent opinion (demographic-wise and stakeholder-wise) regarding Indian Television Industry being poised for a Digital Revolution with Cable Television getting Digitalized and DTH gaining favour among the discerning Audience.
- H₀₅:** There is no significant difference among respondent opinion (demographic-wise and stakeholder-wise) regarding Nation-wide Digitalization of Indian Cable Television through a Digital Addressable System heralding a historic structural and technological reform in the Indian Television Industry.

4. Research Methodology

The present research being exploratory cum descriptive in nature, primary data has been collected from a sample of 350 television viewers and cable operators from diverse socio-economic backgrounds and regions from the National Capital Region using judgmental sampling technique through a structured questionnaire with 5 key statements to collect relevant demographic information having a bearing on their psychographic attitudes, interests and opinions. A 5-interval Likert scale from Strongly Disagree (measuring 1) to Strongly Agree (measuring 5) has been employed to measure the psychographics (attitudes, interests and opinion) of respondents. Secondary data has been collected from diverse offline and online national/international research publications.

5. Data Analysis & Interpretation

The main objective is to analyze the impact of Cable Television Digitization on viewer satisfaction and media consumption in India. Five hypothesis was formulated to achieve this objective and a total sample size of 350 respondents have been collected i.e. 250 respondents from viewers and 100 from cable distributors/operators. A General Linear Model (Univariate) test has been applied to check the significant level (gender-wise, residence-wise, occupation-wise, age-wise, education-wise, income-wise, and type of beneficiary-wise) of all the hypotheses to achieve this objective.

Table 1.2 Television Industry is the largest medium for media delivery in India and thus assumes critical importance.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	6886.882 ^a	18	382.605	529.010	0.000
Gender	5.310	1	5.310	7.341	0.007*
Residence	0.099	1	0.099	0.136	0.712
Occupation	1.009	2	0.505	0.698	0.498
Age	9.256	4	2.314	3.199	0.013*
Education	0.687	3	0.229	0.317	0.813
Family Income	5.963	5	1.193	1.649	0.147
Type of beneficiary	30.160	1	30.160	41.700	0.000*
Error	240.118	332	0.723		
Total	7127.000	350			

Source: Primary Data

a. R Squared = 0.966 (Adjusted R Squared = 0.964)

*Significant at 5% level of significance

Table 1.2 points to the affirmation of the hypothesis (H_{01}) by majority of respondents across categories there being no significant difference in respondent opinion (residence-wise, occupation-wise, education-wise and family income-wise) w.r.t agreement with the research statement “Television Industry is the largest medium for media delivery (in terms of revenue, reach and penetration) in India and thus assumes critical importance”, but there is significant difference w.r.t. gender, age and type of beneficiary (p-value is less than 0.05).

The value of adjusted R Squared is 96.4%, which represents that percentage of variation explained by all variables. Additionally, taking into account the mean value (3.94) and S.D (1.072)) along with little statistical difference among respondent opinion it could be concluded that the majority of respondents across categories validate the null hypothesis “There is no significant difference among respondent opinion (gender-wise, residence-wise, occupation-wise, age-wise, education-wise, income-wise, stakeholder-wise) regarding Indian Television Industry being the largest medium for media delivery in India and thus assuming critical importance.”

Table 1.3 points to the affirmation of the hypothesis (H_{02}) by majority of respondents across categories as there is no significant difference in respondent opinion (gender-wise, residence-wise, occupation-wise, education-wise, family income-wise, and age-wise) w.r.t. agreement with the research statement “Indian Television Market (already the second largest market in the world after the China) has been witnessing robust growth and has a lot of untapped potential (penetration still being ‘three-fifths’ of total households)”, but there is significant difference w.r.t. type of beneficiary (p-value is less than 0.05).

Table 1.3 Indian Television Market has been witnessing robust growth and has a lot of untapped potential.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	6914.799 ^a	18	384.155	526.586	0.000
Gender	0.155	1	0.155	0.212	0.645
Residence	0.118	1	0.118	0.162	0.688
Occupation	2.381	2	1.190	1.632	0.197
Age	3.808	4	0.952	1.305	0.268
Education	3.153	3	1.051	1.441	0.231
Family Income	2.555	5	0.511	0.701	0.623
Type of beneficiary	20.164	1	20.164	27.639	0.000*
Error	242.201	332	0.730		
Total	7157.000	350			

Source: Primary Data

a. R Squared = 0.966 (Adjusted R Squared = 0.964)

*Significant at 5% Level of Significance

The value of adjusted R Squared is 96.4%, which represents that percentage of variation explained by all variables. Additionally, taking into account the mean value (4.16) and S.D (1.081) along with little statistical difference among respondent opinion it could be concluded that the majority of respondents across categories validate the null hypothesis “There is no significant difference among respondent opinion (gender-wise, residence-wise, occupation-wise, age-wise, education-wise, income-wise, stakeholder-wise) regarding Indian Television Market (already the second largest market in the world after China) witnessing robust growth and having a lot of untapped potential.”

Table 1.4 Cable and Satellite segment dominates Indian Television Industry because of ease of operations, scalability and affordability for the masses.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	6710.090 ^a	18	372.783	641.563	0.000
Gender	0.688	1	0.688	1.183	0.277
Residence	0.007	1	0.007	0.013	0.910
Occupation	0.528	2	0.264	0.455	0.635
Age	2.458	4	0.615	1.058	0.377
Education	0.554	3	0.185	0.318	0.813
Family Income	11.676	5	2.335	4.019	0.001*
Type of beneficiary	25.369	1	25.369	43.660	0.000*
Error	192.910	332	0.581		
Total	6903.000	350			

Source: Primary Data

a. R Squared = 0.972 (Adjusted R Squared = 0.971)

*Significant at 5% level of sig.

Table 1.4 points to the affirmation of the hypothesis (H_{03}) by majority of respondents across categories as there is no significant difference in respondent opinion (gender-wise, residence-wise, occupation-wise, education-wise, and age-wise) w.r.t. agreement with the research statement “Cable and Satellite (C&S, popularly called Cable Television) segment dominates Indian Television Industry (with penetration of ‘four-fifths’ of Television households) because of ease of operations, scalability and affordability for the masses”, but there is significant difference w.r.t. family income and type of beneficiary (p-value is less than 0.05).

The value of adjusted R Squared is 97.1%, which represents that percentage of variation explained by all variables. Additionally, taking into account the mean value (3.89) and S.D (0.994) along with little statistical difference among respondent opinion it could be concluded that the majority of respondents across categories validate the null hypothesis “There is no significant difference among respondent opinion (gender-wise, residence-wise, occupation-wise, age-wise, education-wise, income-wise, stakeholder-wise) regarding Cable & Satellite segment dominating Indian Television Industry because of ease of operations, scalability and affordability for the masses.”

Table 1.5 DTH gaining favour among the ‘discerning’ Audience during Digital Revolution of Indian Television Industry

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	5203.310 ^a	18	289.073	285.046	0.000
Gender	0.583	1	0.583	0.575	0.449
Residence	2.950	1	2.950	2.909	0.089
Occupation	1.782	2	0.891	0.879	0.416
Age	3.620	4	0.905	0.892	0.469
Education	2.983	3	0.994	0.980	0.402
Family Income	4.188	5	0.838	0.826	0.532
Type of beneficiary	14.215	1	14.215	14.017	0.000*
Error	336.690	332	1.014		
Total	5540.000	350			

Source: Primary Data

a. R Squared = 0.939 (Adjusted R Squared = 0.936)

*Significant at 5% Level of Significance

Table 1.5 points to the affirmation of the hypothesis (H_{04}) by majority of respondents across categories as there is no significant difference in respondent opinion (gender-wise, residence-wise, occupation-wise, education-wise, family income-wise, and age-wise) w.r.t. agreement with the research statement “Indian Television Industry is poised for a ‘Digital Revolution’ with Cable Television getting ‘Digitalized’ and DTH (Direct-To-Home) gaining favour among the discerning Audience”, but there is significant difference w.r.t. type of beneficiary (p-value is less than 0.05).

The value of adjusted R Squared is 93.6%, which represents that percentage of variation explained by all variables. Additionally, taking into account the mean value (3.84) and S.D (1.042) along with little statistical difference among respondent opinion it could be concluded that the majority of respondents across categories validate the null hypothesis “There is no significant difference among respondent opinion (gender-wise, residence-wise, occupation-wise, age-wise, education-wise, income-wise, stakeholder-wise) regarding Indian Television Industry being poised for a Digital Revolution with Cable Television getting Digitalized and DTH gaining favour among the discerning Audience.”

Table 1.6 Nation-wide Digitization is a historic structural and technological reform in the Indian Television Industry.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	6725.152 ^a	18	373.620	577.346	0.000
Gender	1.441	1	1.441	2.226	0.137
Residence	0.030	1	0.030	0.046	0.830
Occupation	1.302	2	0.651	1.006	0.367
Age	1.059	4	0.265	0.409	0.802
Education	1.014	3	0.338	0.523	0.667
Family Income	3.313	5	0.663	1.024	0.403
Type of beneficiary	17.495	1	17.495	27.035	0.000*
Error	214.848	332	0.647		
Total	6940.000	350			

Source: Primary Data

a. R Squared = 0.969 (Adjusted R Squared = 0.967)

*Significant at 5% level of sig.

Table 1.6 points to the affirmation of the hypothesis (H_{05}) by majority of respondents across categories as there is no significant difference in respondent opinion (gender-wise, residence-wise, occupation-wise, education-wise, family income-wise and age-wise) w.r.t. agreement with the research statement “Nation-wide ‘Digitization’ (by converting ‘Analog’ Signals into ‘Digital’) of Indian Cable Television through a ‘Digital Addressable System’ (DAS), is a historic structural and technological reform in the Indian Television Industry.” But there is significant difference w.r.t. type of beneficiary (p-value is less than 0.05).

The value of adjusted R Squared is 96.7%, which represents that percentage of variation explained by all variables. Additionally, taking into account the mean value (4.09) and S.D (0.926) along with little statistical difference among respondent opinion it could be concluded that the majority of respondents across categories validate the null hypothesis “There is no significant difference among respondent opinion (gender-wise, residence-wise, occupation-wise, age-wise, education-wise, income-wise, stakeholder-wise) regarding Nation-wide Digitalization of Indian Cable Television through a Digital Addressable System heralding a historic structural and technological reform in the Indian Television Industry.”

6. Findings

- Majority of respondents across categories (gender, residence, occupation, age, education, family income and type of beneficiary) feel that Television Industry is the largest medium for media delivery in India in terms of revenue, reach and penetration and thus assumes critical importance in the media landscape. Thus the implications for marketers and advertisers is the medium is and shall continue to be the primary medium for marketing communication and promotion and as the reach and penetration of television expands to its full potential millions of hitherto untargeted consumers could be reached, thus marketers/advertisers can never ignore the media goldmine of television which shall continue to consolidate its position as *numero uno* among all media entities for a long time to come.
- Majority of respondents across categories (gender, residence, occupation, age, education, family income and type of beneficiary) feel that Indian Television Market which has already become the second largest market in the world after the China has been witnessing robust growth and has a lot of untapped potential (penetration still being three-fifths of total households). Television has become the default **infotainment** (information + entertainment) medium of the masses and apart from a select pocket of rural hinterland has conquered almost the entire section of urban, literate and semi-literate India. The best thing about television is it is available in local vernacular languages, thus apart from Hindi and English all other important language are being supported by the television medium. The potential for growth is limitless and as the per capita and disposable incomes among the rural masses grow, television would be among the first aspirational products that the deprived would long for. Thus television shall continue to be a **sunrise** sector for a long time to come.
- Majority of respondents across categories (gender, residence, occupation, age, education, family income and type of beneficiary) feel that Cable and Satellite segment dominates Indian Television Industry because of ease of operations, scalability and affordability for the masses. Considering that the average number of audience in a household is 5, it translates to 800 million (80 crore) people which is a huge number which the marketers/advertisers can ill effort to neglect. Thus television shall continue be the preferred medium for marketing communication for a long time to come, representing the majority of upper-class, middle-class and lower middle-class.
- Majority of respondents across categories (gender, residence, occupation, age, education, family income and type of beneficiary) feel that Indian Television Industry is poised for a Digital Revolution with Cable Television getting Digitized and DTH (Direct-To-Home) gaining favour among the discerning Audience. As per the industry estimates 40% C&S households have been digitized and the rest shall take a little more time. In urban and semi-urban areas (and also difficult and sparsely populated terrain like the hills, jungles and deserts) DTH has become the number one choice among people who could afford DTH's somewhat higher price. The premium pricing of DTH is offset by its better viewing experience and services.
- Majority of respondents across categories (gender, residence, occupation, age, education, family income and type of beneficiary) feel that Nation-wide Digitization of Indian Cable Television through a Digital Addressable System (DAS) is a historic structural and technological reform in the Indian Television Industry. Now viewers could choose better viewing quality, more choice of channels and more value-added services which were not

possible in analog signals. Consumers are willing to pay marginally higher price for better quality of viewing experience, thus Digitization is the way to go for television Industry.

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