Impact of Direct-To-Home (DTH) on Indian Television Viewers

C.R.Senthilnathan, R. Jeyalakshmi, M.Manju Backiam, P.Vasumathi

Abstract— Direct to home has revolutionsied the television viewing in India. Despiteof the high switching costs, alternate offers like more regional channels, discounts, free installation, one month subscription waiver etc. attracted more customers. Three independent variables customer satisfaction, alternate offers and switching cost were used to understand the customer loyalty towards DTH service providers. The data collected was analysed using statistical tools revealed that, substantial amount of switching cost for changing DTH service provider is a biggest hurdle which makes the customer loyal. The customer satisfaction which has a positive influence on the customer loyalty is due the fact that irrespective of the service provider, their responsiveness towards customer calls and complains are not addressed to the expected level.

Key words: Cutomer Perception, loyalty, Customer satisfaction, Alternate offers, Switching cost

I. INTRODUCTION

Direct-to-Home (DTH) was proposed in India during 1996 and government permission was given during 2000 November. But the first DTH services was launched only during 2003 by DishTV. Currently there are 6 private DTH operators and one government DTH operator (Doordarshan), 300 paid TV channels, with a total of 877 TV channels in India. Total number of active DTH subscribers is 66.09 million in India. As the entry and growth of private service providers increased the government of India formed a regulatory body TRAI (Telecom Regulatory Authority of India) to monitor and control the telecom services.

Use of newer technology has moved the television viewers to the next level by using satellite signals. DTH is reception of the satellite TV signals with a dish in each individual house paring with a set-up box to decode.DTH has become more popular with the introduction of high definition (HD) channels and the choice of selected their favourite channels and paying only for those channels they have selected.

II. OBJECTIVES AND SCOPE OF THE STUDY

- To study the subscribers' perception on DTH service providers in India
- To find the extent of consumer loyalty towards service providers
 - Revised Version Manuscript Received on 10, September 2019.
- **Dr.C.R.Senthilnathan**, Associate Professor, Sri Sairam Institute of Technology, Chennai, Tamil Nadu, India.
- **Dr.R. Jeyalakshmi**, Assistant Professor, Sri Sairam Engineering College, Chennai, Tamil Nadu, India.
 - Ms.M.Manju Backiam,

Ms.P.Vasumathi Assistant Professor, Panimalar Engineering College, Chennai, Tamil Nadu, India.

- Associate Professor, Sri Sairam Institute of Technology, Chennai-44
- Assistant Professor, Sri Sairam Engineering College, Chennai-44
- 3. Assistant Professor, Panimalar Engineering College, Chennai-44

This study will help in analysing the satisfaction level of the DTH users and would help in identifying the reasons for user churn or switching service providers. This will also bring out the consumer expectations which can be addressed in near future for enhancing the customer loyalty.

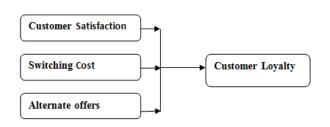
III. LITERATURE REVIEW

Direct-to-Home (DTH) is a high digitalised satellite services provided for the subscribers any part in the country to the television views. Cable and cable operators are complete eliminated in use of DTH. The advantage of absence of cable makes possible the television services even in the remote place in the country. So DTH has revolutionised the Indian television viewers entertainment scenario (Capt and Bhasin (2003)). Over the years the awareness and reach of DTH is remarkable in India (Irinsutha, Jayanthi (2013)). The growth of DTH is more in rural area compared with Urban cities in India (Daljeet S Kohli (2011), Dheeraj Gandla (2013)).

DTH though has many merits but it also has some demerits while utilizing it. MuleyKrutika (2009). Like any other business sectors, DTH also has many hurdles like new entrants, rivalry and threat of substitute. (Dheeraj Girhotra, 2012) To overcome these threats and to attract more new customers DTH service providers should resolve customer problems with a faster and clear response to their satisfaction(Senthil Kumar and Nagarajan (2012) and with more number of favorite channels (Sharika Khan, Lekh Raj;(2013)). To attract more customers value-added-services such as interactive education for students, farming advisory content and religious content are popular in DTH services DeepaKurup (2013). The other way to sustain in the DTH business are to maintain good picture quality, affordable price rather than other factors to make a successfulbusiness and satisfy the subscribers (Jayashree,J; Sivakumar.A (2013), Myilswamy. K(2013)).



IMPACT OF DIRECT-TO-HOME (DTH) ON INDIAN TELEVISION VIEWERS



Although the customer satisfaction remains the main factor influencing the customer loyalty, it is found that the switching cost plays a predominant role in customer loyalty. Switching cost (including procedure for fixing DTH services) makes it or contributes more for the DTH subscribes to be more loyal or satisfied with the existing DTH service provider.

In spite of the high switching costs involved, the alternate offers like more regional channels, discounts, free installation, one month subscription waiver etc. attracts more customers to change their existing DTH service provider. As, many of the DTH service providers are concentrating in the national level channels, DTH service providers who give importance to the regional language channels are being subscribed more. Though the switching cost is more, customer switch to new DTH service provider who has more of regional language channels as a combo with other national level channels.

While switching cost and satisfaction have a positive impact on customer loyalty whereas alternate offers has a negative impact on the customer loyalty.

 H_{01} : Customer satisfaction has a positive influence towards customer loyalty

 H_{02} : Switching costs are positively related to customer loyalty

 H_{03} : Alternate offers are negatively related to customer loyalty.

 H_{04} : Switching cost as a moderator between customer satisfaction and customer loyalty will have an inverse relationship.

i.e.,.more the switching costs, lesser will be the switching effect.

Data is analysed using partial least square SEMSmartPLS 3.0 as PLS can accommodate both the reflective and formative constructs compared with CB-SEM, the former method is selected for the analysis of the current study.

A preliminary data analysis is done cleaning of data set for monotones, normality and other biases to the collected data set to ensure there is no substantial noise/disturbances which may result in a bias final result. The next step is the 'two stage/step PLS' was chosen. The data set is tested first by the measurement model and then followed by stage II by the structural model (Anderson, et al, 1988), (Hair, 2014) after the measurement modeland assessment test found satisfactory.

IV. DATA ANALYSIS AND INTERPRETATION

Of the sample data collected, 61% of them were male, 48.8% of the sample were in the age group 30-40 years old, 47.7% of the respondents were neither working in government nor private, 68.3% of them were graduates, most of the respondents (59.7%) were in the income group of Rs3,00,000 to Rs10,00,000 per annum and 78.4% of the respondents have one DTH connection (Table 1).

Table 1

| | | Percentage | | | Percentage |
|----------------------------|--------------|------------|--------------------------|-------------|------------|
| | | (%) | | | (%) |
| Gender | Male | 61 | Occupation | Government | 13.4 |
| | Female | 39 | | Private | 38.9 |
| | | | | Others | 47.7 |
| Age(inyears) | less than 20 | 2.3 | Education | High school | 22.1 |
| | 20 - 30 | 37.5 | | Graduate | 68.3 |
| | 31 - 40 | 48.8 | | Others | 9.6 |
| | Above 40 | 11.4 | | | |
| | years | | | | |
| Income ('00000' per annum) | Less than 3 | 29.7 | Number of Connections | 1 | 78.4 |
| | 3 - 10 | 59.1 | | 2 | 20.4 |
| | Above 10 | 11.2 | | More than 2 | 1.2 |



| | Table 2 | | | |
|--|-----------------------|-------------------|----------------------------------|---|
| Construct / Items | | Factor Loading | Composite Reliability (CR) | Average Variance Extracted (AVE) |
| Customer satisfaction | | | 0.941 | 0.794 |
| 1. | I am fully satisfied | 0.711 | | |
| with my current DTH service provider | | | | |
| 2. | My current DTH | 0.823 | | |
| always fulfill my expectation | 0 11 DETT | 0.501 | | |
| 3. | Overall, my DTH | 0.781 | | |
| usage experience with current DTH service | provider is excellent | | | |
| Switching cost | | | 0.799 | 0.682 |
| Switching cost 1. | Switching to a | 0.840 | 0.199 | 0.062 |
| new DTH involves monetary costs | Switching to a | 0.040 | | |
| 2. | If I switch to new | 0.862 | | |
| DTH the service offered by the new DTH | | | | |
| expected | 8 | | | |
| 3. | The formalities | 0.850 | | |
| involved in switching to new DTH is more | | | | |
| | | | | |
| Alternate offers | | | 0.891 | 0.674 |
| 1. | If I need to change | 0.907 | | |
| my current DTH service provider, there a | re some good DTH | | | |
| service providers to choose from | C 1 14 | 0.024 | | |
| 2. the current DTH corries provider's plan | Compared with | 0.834 | | |
| the current DTH service provider's plan satisfied with the plan offered by other DTI | | | | |
| 3. | On comparing my | 0.889 | | |
| current DTH plan, switching to new DTH p | 1 0 | 0.007 | | |
| service providers is good | onered by other | | | |
| Customer loyalty | | | 0.891 | 0.674 |
| 1I intend to continue my subscription to the | current DTH service | 0.907 | | |
| provider in future as well | | | | |
| 2 Even if other DTH service providers offe | | 0.834 | | |
| still continue my subscription with the c | urrent DTH service | | | |
| provider | | | | |

3. I would also encourage my friends and relatives to subscribe to my current DTH service provider

To check whether the customer loyalty (endogenous variable) can be predicted by the customer satisfaction, switching cost and alternate offers (exogenous variables), PLS was chosen. To address the basic issues a Herman's single factor score test was executed to check the presence of CMB (common method bias). The output of the test is shown in table 2. it is found that the maximum value among the construct correlation is 0.509. The single factor score reveals a result of 21.2%, which shows that the first level factors did not account for a majority amount if common method variance. The inter correlation values of the construct are much below (with highest value of 0.509) indicating the data not affected by the communality.

| Table 5 | | | | | |
|---------|---------|---------|---------|---------|--|
| | CS | SC | AO | CL | |
| CS | (0.872) | | | | |
| SC | 0.413 | (0.721) | | | |
| AO | -0.411 | -0.231 | (0.912) | | |
| CL | 0.509 | 0.398 | -0.407 | (0.891) | |

Notes: CS- customer satisfaction; CL – customer loyalty; SC - switching cost; AO - Alternate offers. Diagonals represents the square root of average variance extracted (AVE) off-diagonals represent the construct correlations.

V. MEASUREMENT MODEL ANALYSIS

The measurement model analysis uses the convergent validity, discriminate validity and reliability to assess the constructs. The result of the test is shown in the table 3. None of the constructs are below the minimum required value of 0.4 (Hair, et al, 2003). The average variance extracted (AVE) for the constructs are also above the cut off value of 0.5 (Fornell et al, 1981) indicating the level of convergent validity. The combined reliability of all the items (0.702) is also above the value suggested by (Hair et al, 2013). The square root of the constructs AVE is compared with the constructs correlations and it is found that the square root of



IMPACT OF DIRECT-TO-HOME (DTH) ON INDIAN TELEVISION VIEWERS

the AVE for each constructs in the table is higher. This shows that discriminate validity is proved.

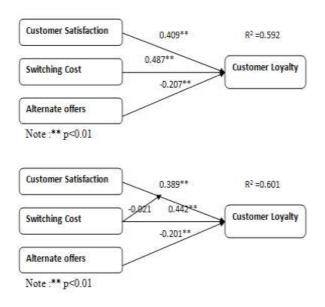
A collinearity test for the second level formative constructs was performed. The result is shown in table 4. The cut off value is 3.3 (Diamantopolus, 2006). It is observed that the variance inflation factor (VIF) values of the formative constructs are well below the prescribed value indicating the constructs are independent are assessed by repeated indicator approach method. To execute thisbootstrapping of 10000 samples was considered for each formative construct. The results of bootstrapping shows that the reflective constructs are significantly related to the corresponding formative constructs. (refer table 4).

Table 4

| First | Measure | Weigh | t- | VIF |
|-----------|----------|-------|------|------|
| level | | t | valu | |
| construct | | | e | |
| | | | | |
| Switchin | Formativ | 0.498 | 16.4 | 1.29 |
| g cost | e | | 2 | 0 |
| Alternate | Formativ | 0.421 | 19.1 | 1.58 |
| Offer | e | | 8 | 2 |

VI. HYPOTHESES TESTING & RESULTS

Customer satisfaction (Beta = 0.409, t= 8.890, p<0.01) and switching cost (Beta=0.487, t=7.743, p<0.01) influence the factor customer loyalty positively. Alternate offer (Beta=-0.207, t=8.412, p<0.01) influence the customer loyalty negatively. These results suggest that the hypotheses 1,2 and 3 are supported. The three exogenous constructs collectively represents 59.2% of the variance in the endogenous construct. To estimate the impact of these three constructs on the customer loyalty, effect size of the various endogenous constructs is tested (Hair et al, 2013). With customer satisfaction ($f^2 = 0.198$), switching cost ($f^2 = 0.221$) and alternate offers ($f^2 = 0.156$) had medium effects on customer loyalty (Cohen,1998). The moderation hypothesis was examined using the 2-stage approach (Henseler and Fassott, 2010). Moderation effect of switching cost on the relationship between the customer satisfaction and customer loyalty found to be not so significant (beta= -0.021; t=1.098; p < 0.01).



From the study, though it is observed that the customer satisfaction has a positive influence on the customer loyalty, the factor switching cost has much stronger positive influence on the customer loyalty. This can be explained by the huge switching cost involved in changing the service provider involving, like the dish antenna and setup box (signal receiving device). As almost all the service providers relay majority of the channels, there is a small difference in number of favorite channels. Also, it is observed that the constructs customer loyalty and switching costs has a positive influence and the construct alternate offer has negative influence on the customer loyalty.

VII. CONCLUSION

The study on users perception of DTH service providers in India was analysed using the factors customer satisfaction, alternate offer and switching cost impact on customer loyalty. Switching cost involved in changing the service provider is a biggest hurdle which makes the customer loyal. The customer satisfaction which has a positive influence on the customer loyalty is due the fact that irrespective of the service provider, their responsiveness towards customer calls and complains are not addressed to the expected level.

REFERENCES

- Capt, G.P. and Bhasin, K.C., "Direct-To-Home TV: Transmission and Reception", Electronics ForYou, August, 2003.
- 2 DheerajGandla(2013), Study Of Recent Developments In DTH (Direct-To-Home) TechnologyInternational Journal of Engineering Research and Applications, Vol. 3, Issue 5, Sep-Oct 2013, pp.628-635.
- 3 FORNELL.C; DAVID F. LARCKER (1981), EVALUATING STRUCTURAL EQUATION MODELS WITH UNOBSERVABLE VARIABLES AND MEASUREMENT ERROR, JOURNAL OF MARKETING RESEARCH, VOL. 18, No. 1 (Feb., 1981), pp. 39-50
- 4 MuleyKrutika, "DTH TV Its usage, benefits and limitations", Mass Communicator, Vol.3, No.4,
- 5 Daljeet S Kohli, "Indian DTH Industry", Sector Report, March 4, 2011, p. 4.
- 6 DheerajGirhotra, "Indian DTH Industry: A Strategic Analysis", International Journal of Marketing, Financial Services and Management Research, Vol.1, No.3, March, 2012, pp. 38-52.
- 7 Diamantopoulos, Adamantios. (2006), The Error Term in Formative Measurement Models: Interpretation and Modeling Implications, Journal of Modelling in Management. Vol 1,Pp7-17.
- 8 Sharika Khan, LekhRaj;(2013), A study on DTH to home service quality with special reference to mandi district of HP', International journal of education and management studies, Vol 3 No 4, Pp 431 - 436
- 9 Senthil Kumar and Nagarajan, "Subscriber's Attitude towards DTH Services", International Journal Research in Commerce, IT and Management, Vol.2, No.12, December, 2012, pp. 69-72.
- 10 DeepaKurup, "DTH Operators Eye the Pie in the Sky", The Hindu, March 27, 2013.
- 11 Irinsutha, Jayanthi (2013), A comparative study on the various Direct-to-homes (DTH)



- 12 Service providers in Chennai, Indian Journal of Applied Research, Vol 3,Issue 7, Pp 146 148.
- 13 Jayashree, J; Sivakumar. A (2013), A Study on Customer Perception towards DTH Services in Coimbatore City, IOSR Journal of Business and Management, Volume 8, Issue 1, Pp 10-14.
- 14 Myilswamy.K (2013), A Study On Consumer Brand Preference Towards Using Dth Service Providers In Coimbatore City, IOSR Journal of Business and Management, Volume 8, Issue 5, Pp 46-49

APPENDIX

Customer satisfaction

- 1) I am fully satisfied with my current DTH service provider
 - 2) My current DTH always fulfill my expectation
- 3) Overall, my DTH usage experience with current DTH service provider is excellent.

Switching cost

- 1) Switching to a new DTH involves monetary costs
- 2) If I switch to new DTH the service offered by the new DTH might not work as expected
- 3) The formalities involved in switching to new DTH is more

Alternate offers

- 1) If I need to change my current DTH service provider, there are some good DTH service providers to choose from
- 2) Compared with the current DTH service provider's plan, I might be more satisfied with the plan offered by other DTH providers
- 3) On comparing my current DTH plan, switching to new DTH plan offered by other service providers is good

Customer loyalty

- 1) I intend to continue my subscription to the current DTH service provider in future as well
- 2) Even if other DTH service providers offer cheaper plan, I will still continue my subscription with the current DTH service provider

I would also encourage my friends and relatives to subscribe to my current DTH service provider

