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A STUDY OF CONSUMERS SATISFACTION AND PREFERENCE OF DTH (DIRECT-TO-HOME) INTEROPERABILITY IN PUNE CITY

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ABSTRACT

The arrival of Direct-to-Home (DTH) services in India has led to the emergence of many DTH service providers who are offering various value added services at competitive prices. As a consumer, one has to carefully select the service provider after considering the various factors such as transmission in inclement weather, picture quality, plans & packages, package pricing and other value added services. Drop in setup and service costs is making service delivery cheaper for the service provider and the drop in set-top box prices have made DTH viable to Indian users. With the mandated introduction of CAS (Conditional Access System) on cable networks in India, cable television services are becoming more expensive thus bringing the gap between overall cost of service down. This research paper studies the satisfaction of the consumer with respect to price, services, transmission, quality etc and perception of consumer with regard to interoperability. The researcher have applied the chi square test to find out the level of satisfaction of the consumer and to what extent they are satisfied with the existing DTH service provider. The paper also makes an attempt to study that in case if the interoperability services are provided then the consumers will prefer to switch i.e expected consumer movement to DTH service provider and type of interoperability preferred by consumer whether technical or commercial.

KEYWORDS

DTH Services, interoperability, satisfaction of DTH services, perception of DTH services.

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INTRODUCTION

Direct-to-Home (DTH) services in India have registered a very impressive growth since its inception in 2003. In DTH facility, TV channels are directly distributed via satellite to the subscribers' homes without the intervention of the cable operators. India's \$1.5 billion, 32.4 million subscriber (2012 figures as per Media Partners Asia) DTH industry is the second largest in the world. According to TRAI, there are an estimated 56.5 million DTH subscribers in India as of 31 March 2013, registered with six private DTH operators. However 25 - 30 % connections are inactive making the active connections to about 40-45 million. A report by Media Partners Asia, an independent provider of information services focusing on media, communications and entertainment industries projected that the Indian DTH industry will grow to \$3.9 billion and 63.8 million subscribers by 2017 and \$5 billion and 76.6 million subscribers by 2020. A total of 74% FDI is permitted in DTH services with 49% on automatic route.

There are six private DTH operators in India. The seventh operator DD Direct Plus is an FTA platform operated by Prasar Bharti, the Public Service Broadcaster and not counted amongst the DTH operators.

1. **Dish TV:** It is a division of Zee Network Enterprise (Essel Group Venture). Launched in October 2003, It is the largest player in India having a 28% share of India's \$1.5 billion DTH industry.
2. **Tata Sky:** Tata Sky is a joint venture between the Tata Group and Rupert Murdoch's STAR. Currently, Tata Sons owns 60 per cent, while STAR owns a 30 per cent stake.
3. **Airtel Digital TV:** Airtel Digital TV is a DTH service provider owned and operated by Bharti Airtel, a telecom company having mobile and wired telephone service and broadband provider. Its satellite service was launched in 2008.
4. **Reliance BIG TV:** Launched on 19 August 2008, Reliance digital TV limited is a part of Reliance Communications Ltd., a subsidiary of Reliance Anil Dhirubhai Ambani Group owned by Anil Ambani. BIG TV started operations from 19 August 2008 with the slogan "TV ho Toh BIG Ho".
5. **Videocon d2h:** Videocon d2h is the DTH service provided by the Videocon Group, an industrial conglomerate with interests all over the world, and is an Indian multinational company. The group has 17 manufacturing sites in India and plants in China, Poland, Italy and Mexico.

INTEROPERABILITY

Interoperability may be defined as "the ability to exchange information and mutually use the information which has been exchanged."

In today's information society, most, if not all, commonly used information technology products must be able to communicate, or interoperate, in networks with other IT products. There is often confusion over the meaning of interoperability in today's information technology markets, and over the relationship between interoperability and competition. Telecom Regulatory Authority of India (TRAI) is building consensus among operators on the commercial and technical feasibility of making set top boxes portable similar to mobile number portability in the telecom space. In set top interoperability, a DTH customer can retain the box and switch to the operator of his choice that suits his pocket and satisfactory delivery of service. There is a hitch in technical interoperability as different DTH brands are airing their signals in different broadcast technology formats like MPEG2 and MPEG4 making seamless adaptability of the boxes impossible in the interoperability regime. If consensus is build and set top portability is made possible by finding a solution to the technological conundrum then DTH market would witness a fresh lease of provider competitiveness where subscribers would make a beeline to an operator offering best possible deal in the market. TRAI has also mandated commercial interoperability which gives the subscriber an option to take the STB on rent or hire purchase basis giving him enough flexibility to be able to switchover from one operator to another at least cost.

Dish TV, in its early days, had introduced a similar offering but it failed to light up the DTH market. Videocon had introduced the idea of TVs without set-top boxes. The idea, however, failed to garner interest.

This pivotal study examines the consumer preference about DTH interoperability if such a facility is provided to the consumers.

NEED OF THE STUDY

Researcher want to find out whether the consumer are satisfied with the present DTH service provider. Given an opportunity for portability will they shift from one DTH service provider to another. This research will provide insight to the service provider that if consumer is given an opportunity to switch then they will prefer which service provider. They can tap the potential customers and frame strategies accordingly.

¹ INTEROPERABILITY AND COMPETITION LAW, European Committee for Interoperable Systems (ECIS), available at <http://www.ecis.eu/interoperability-competition-law/> last visited on June 13, 2012
Definition of interoperability, available at <http://www.merriam-webster.com/dictionary/interoperability> June 13, 2012

LITERATURE REVIEW

¹Dhinakaran Samson Joe (2012) study identifies the various factors that determine the preference of DTH service with reference to brand loyalty. DTH Services are in a nascent stage in our country. However, there is a stiff competition among the present 6 Service providers. Most of the people are confused with which Service connection can be obtained. Moreover, DTH Service providers are also perplexed with what channel should be given free of cost and what channel should be offered at a price. This study aims at with these.

²Jayashree J., Sivakumar A. (2013) study reveals that the majority of the respondents prefer to buy sun direct because of its best picture quality, reasonable price, various kinds of packages and more channels. So the DTH service providers must pay attention on Customer Service, picture quality, reasonable price rather than other factors to make their business more successful and satisfy the consumers. In the buyer's market today, business concerns have to make a lot of efforts to sell their product and establish their survival. It may be basically due to changes in attitude of consumers towards buying products and changing business world. Every human being is changing time to time according to the changing trends in every day's life. The biggest changes occurred in consumer products, new and innovative technology has used to satisfy the consumers. In this content, the study is taken up with the various DTH services, which have considerable share in the market. This paper reveals the customer perception towards DTH services in Coimbatore city and it also helps to analyze the competition exist in the market regarding DTH services. The study is focused on the four kinds of DTH services namely, Sun direct, TATA sky, Dish TV, Big TV. The task of the study is to know the preference of the users in Coimbatore city among these various services. Various tools used to analyse the data.

³Jotheshwari P., Gunasekaran T., Lakshmana B. C. and Chandra Mohan A. (2014), paper explains about list of players in the broadcasting industry as on 2013 and also comparative performance of DTH vs Cable DTH is the acronym for Direct-To-Home television services. DTH service is the reception of satellite, programmed with a personal dish in every individual home. It is basically a satellite service that would provide the subscribers to view the television services through satellite transmission anywhere in the country. DTH provides uninterrupted signal reception with reduced amount of service breakdowns. DTH offers high picture fineness and sound quality. A customer's behavior is influenced by the perception and beliefs that he holds of issues and events. This study has attempted to study the perception and beliefs of the customers about the DTH brands and services provided. From the analysis and interpretations it is very clear that as far as the awareness, perception, belief and acceptance is concerned DTH has won an Oscar, but with certain areas of concerns and improvements such as., Packages, choice of channels and charges, Prompt information about the services, High quality signal, Continuity of service etc., DTH offers highly customized packages and add-ons of channels. DTH is a direct competitor of the cable TV since it puts the broadcaster directly in touch with the consumers. This paper also analyses the awareness about DTH services in Kanchipuram city and DTH brands and services provided in this regard.

⁴Prajapati Sandip, Rathod Khuman (2013) objective of the study is to know the preference and satisfaction level of consumers regarding DTH services and find out the reasons behind the success of DTH Industry in major city. DTH is one of the fastest growing industries in today's era. There are various big players already in the DTH industry like Reliance Digital TV, Sun Network, TATA SKY, Airtel Digital etc. Here researcher collect primary data of users of DTH services at different cities of Gujarat through surveys where both open & close ended questionnaire where used. Some of the key findings are Picture quality and Network consistency are extremely important parameters while Monthly charges, Channel packages offered and customer care services are less important in the mind of consumers. Majority of the respondents would like to recommended others regarding DTH services which is considerably one of the major key success factor for DTH industry.

⁵Sutha Irni, Jayanthi L (2013) paper compares the various kinds of services that are offered by the DTH service providers to the customers in order to find the reach of the DTH and also to understand the customer preference and extent of satisfaction. The research design used for the study is descriptive research. The study is conducted among both the users & non-users, with the help of structured interview schedules using questionnaire. Initially, a pilot study was conducted among few respondents and changes were brought in the questionnaire. Analysis and Interpretation is done using Chi-square method & ANOVA. It was found out that people prefer a DTH service to Cable operations due to various factors such as Quality of both Video & Audio, Quality of service etc. Based on the findings, appropriate suggestions have been made for increasing the number of users.

⁶Tiwari Shrish Kumar research paper studies the comparative and analytical study of the sales promotion strategies of D.T.H service providers. D.T.H. stands for Direct-To-Home television. DTH helps in keeping broadcasters in direct touch with consumers thus, eliminating the need of local cable operators. Since the DTH TV industry is currently in its growth phase, it is expected to attract a large number of subscribers in near future and so becomes an area of concern for service providers on which study has been conducted.

⁷Kumar Dilip, Yamuna S M research study is focused on business concerns have to make a lot of efforts to sell their product and establish their survival. It may be basically due to changes in attitude of consumers towards buying products and changing business world. Every human being is changing time to time according to the changing trends in every day's life. The biggest changes occurred in consumer products, new and innovative technology has used to satisfy the consumers. In this content the study is taken up with the various DTH services which have considerable share in the market. This paper reveals the customer perception towards DTH services in Coimbatore city and it also helps to analyze the competition exist in the market regarding DTH services. The study is focused on the Six kinds of DTH services namely, Sun Direct, TATA sky, Dish TV, Big TV. Videocon, Airtel. The task of the study is to know the preference of the users in Coimbatore city among these various services. Various tools used to analyses the data. The present study reveals that the majority of the respondents are using Sun Direct because of its best picture quality, reasonable price, various kinds of packages and more channels. So the DTH service providers must pay attention on Customer Service, picture quality, reasonable price rather than other factors to make their business more successful and satisfy the consumers

RESEARCH OBJECTIVES

1. To examine consumer level of satisfaction towards DTH services.
2. To find out whether the consumer will opt for DTH portability.
3. To find out customer loyalty among DTH service providers.

HYPOTHESIS

Ho – Customers are highly satisfied with DTH service provider.

H₁: Customers are satisfied to some extent with DTH service provider.

RESEARCH METHODOLOGY**Sources of Data Collection**

Questionnaire was developed.

Reports and Research papers were referred

Thus, combination of data collected from primary as well as secondary sources.

- Sample Design: Stratified random sampling
- Sample Size: 93 respondents.

DATA ANALYSIS AND INTERPRETATION

The researcher had considered the major DTH service providers viz., Airtel digital, DishTV, Reliance Digital, Tata Sky and VideoconD2h. The table-1 shows the usage of DTH facility by the respondent from various service providers. Videocon d2h shows average number of years of usage is 7.42 compared to other service providers. Lowest average is Tata Sky in terms of usage.

The average number of connections a customer possesses is 5.42 in case of Tata sky compared to other is between 0.08 to 1.83. But the average monthly expenditure is highest of Videocon d2h.

TABLE 1: MEAN

Service Provider	Usage of DTH (number of years)	TV Connections (Number)	Monthly Expenditure (in Rs.)
Airtel Digital	4.46	1.25	325.00
Dish TV	4.88	1.83	331.25
Reliance Big TV	5.00	0.08	250.00
Tata Sky	4.37	5.42	396.81
Videocon d2h	7.42	1.42	416.67

The level of satisfaction is measured on Likert scale of 1 to 5. Where 1 denotes highly satisfied and 5 denotes highly dissatisfied. The table-2 shows that consumer level of satisfaction for DTH service provider. It reflects that customers are highly satisfied with audio-video quality, quality of High Defines channels and online recharge as compared to other indicators consumer is just satisfied. Chi square test has been applied to find out the difference between expected outcomes and actual outcomes. It is found that to some extent audio-visual quality and recording quality makes a significant difference to customers compared to other indicators. Thus, there is association between service provider and level of satisfaction in audio –visual and recording Facility. While other indicators have no association with service provider. Thus, we reject the null hypothesis and accept the alternate hypothesis.

TABLE 2: CONSUMER'S LEVEL OF SATISFACTION FOR DTH SERVICE PROVIDER

Indicators	Mean	SD	Coefficient of variation	Chi Square (p value)
Monthly Subscription	2.290	0.939	0.410	0.71
Price Range	2.441	0.972	0.398	0.10
Audio-Video Quality	1.753	0.816	0.466	0.009
After Sales Services	2.054	0.864	0.421	0.76
Transmission Quality	2.505	1.039	0.415	0.65
Quality of HD Channels	1.892	0.949	0.502	0.40
Movies on Demand	2.075	0.811	0.391	0.32
Recording Facility	2.075	0.726	0.350	0.05
Online recharge facility	1.688	0.608	0.360	0.91
Education Interactive Channels	2.011	0.699	0.348	0.90

Table-3: shows that if given a inter-portability facility the expected movement of consumers in DTH services. Airtel Digital, Dish TV, Tata Sky customers would be ready to switch user if provided inter-portability facility.

TABLE 3: EXPECTED CONSUMER MOVEMENT IN DTH SERVICES

Service Provider	Airtel	Dish TV	Reliance Digital	Sun Direct	Tata Sky	Videocon d2h
Airtel Digital	X	X	X	X	2	2
Dish TV	1	X	1	X	5	6
Reliance	X	X	X	X	X	X
Tata Sky	2	X	X	1	X	6
Videocon d2h	X	X	1	X	1	X

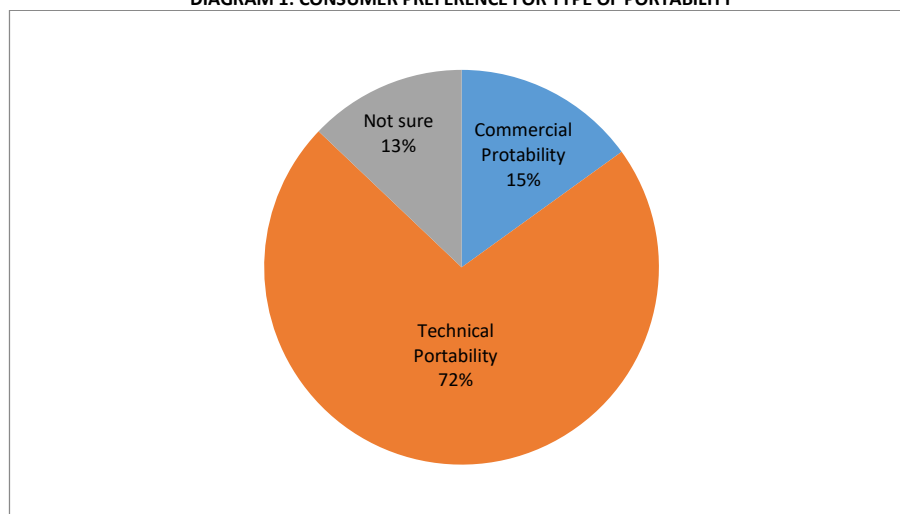
Table-4: explains customer loyalty among the DTH service providers. It is found that Customer Loyalty is highest in case of Videocon followed by DishTV and lowest in case of Tata Sky. As in case of Airtel Digital only 2 out of 15 customers are not ready to switch rest all are willing to switch. While dishTV only 3 out of 16 customers were not ready to switch and so on. Thus, higher the percentage more is the customer loyalty and less is the chances of portability.

TABLE 4: CUSTOMER LOYALTY AMONG VARIOUS DTH SERVICE PROVIDERS

Service Provider	Customer Loyalty	Percentage
Airtel Digital	02/15	13.33
Dish TV	03/16	18.75
Reliance Big TV	00	00
Tata Sky	05/47	10.68
Videocon d2h	3/15	20

Diagram -1: explains if the customer is given a chance to choose between technical or commercial portability then 72% customers prefers Technical portability compared to 15% prefers commercial portability.

DIAGRAM 1: CONSUMER PREFERENCE FOR TYPE OF PORTABILITY



FINDINGS

1. Customers of Videocon has maximum number of years of usage compared to other DTH services provider.
 2. Tata Sky customers have maximum TV connections while Videocon d2h average monthly expenditure is highest.
 3. Majority of customers are satisfied with the audio-visual and recording quality of DTH service providers.
 4. Airtel Digital, DishTV, Reliance Digital customers if given an option would opt for either Tata Sky or Videocon d2h.
 5. Customer loyalty is more in case of Videocon d2h compared to others.
 6. Customers would prefer Technical portability compared to commercial portability.
- Thus, this research will help the DTH service providers to frame the strategies and pricing as per the customer preference and tap the potential customers whether portability is implemented or not implemented in future.

CONCLUSION

Interoperability in the DTH market would also imply that manufacturers of the Set-top boxes, which are critical in receiving transmission, would be able to manufacture universal products without a specific company in mind, thereby opening up the market to other potential entries, a situation which is difficult at the moment as manufacturers are tied to a specific DTH service provider. If interoperability services are provided it will also create competition among the service provider to provide the best possible facilities with respect to pricing and quality of service.

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