

HOW DTH WILL CHANGE THE MEDIA LANDSCAPE IN PAKISTAN

By Sheeraz Adil

The talk of the town these days in the global as well as the local media industry is the long awaited DTH project in Pakistan. In this article I will try to make it easier for a common man to understand what exactly this DTH is and what might be the outcome of the DTH in Pakistan.

Following are the few questions that are always in the mind of so many people and by the time we will end this article most of the readers will understand the basic concept and its significance for the people of Pakistan.

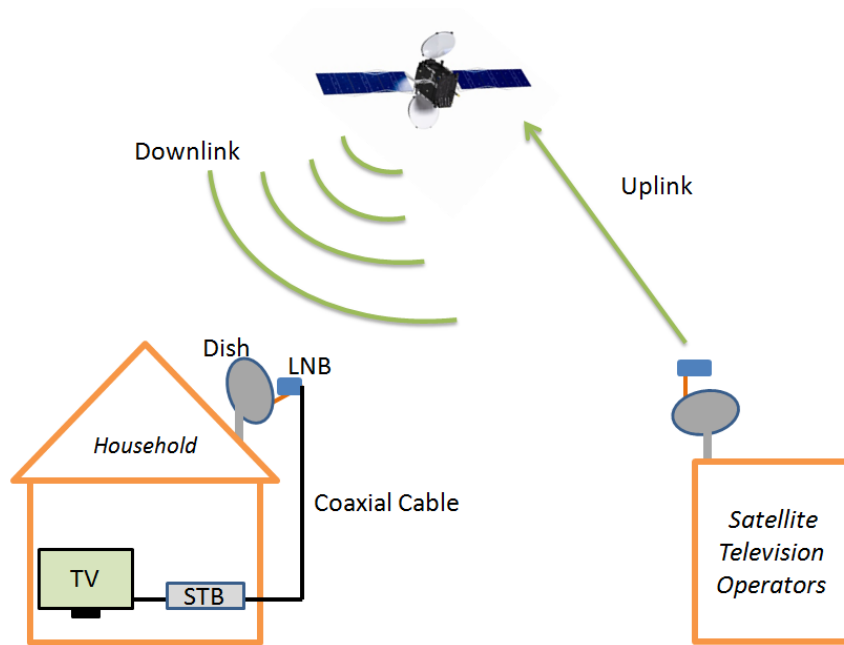
- What is a DTH, How does it work
- What is the technology behind this
- What will DTH bring to the common viewer of Pakistan
- How will it impact the industry and the people working in this industry
- Why is it so lucrative for businessmen
- What are the challenges

WHAT IS A DTH, HOW DOES IT WORK

BASICS OF DTH

DTH is the short form of Direct to Home. Direct to home means that the viewer can view the channels in his house directly from the satellite downlink without any middle man. So the basic question is how that work will. In the DTH setup the satellite signal is directly received in individual houses through a small dish antenna and then the signal is decoded through an STB- Set Top Box and is viewable on the screens of our television sets.

The below image is the simplest form of explanation of how DTH works.



BACKGROUND AND THE CURRENT STATUS

As we all know that PEMRA- Pakistan Electronic Media Regularity Authority is the body responsible to facilitate and regulate the private electronic media in Pakistan therefore the cable distribution and the DTH will come under PEMRA. The DTH project has been under discussion in PEMRA since a few years now however there wasn't any significant progress on it. Those of you who don't know, the two rival media giants of Pakistan had expressed the interest of DTH and there was some activity on this regard when the private media industry was launched, however the project was scrapped till recently in September when the PEMRA announced the expression of interest for the DTH license. The timelines were very tight however there was a lot of interest shown by the investors in this project. There were three licenses to be awarded to cater the total population of Pakistan. The bidding was to be on December 7th with the announcement of the licenses on the same date however it has been postponed and is expected to get back on track in early this year.

CURRENT DISTRIBUTION METHODS

Below are the few common distribution methods in Pakistan.

- **Terrestrial:** The terrestrial TV is at the moment analogue in Pakistan and only the state owned channels are being distributed through this method. The digitization is in process however unless the private channels are being distributed through the terrestrial, it will remain unpopular.
- **Cable:** Cable TV is by far the most popular distribution method in Pakistan. There are about 1500 cable operators in Pakistan covering more than 10 million subscribers. The cable operators have their head-end in their premises where they downlink the channels and then modulate it through the cable to each house hold. Most of the cable operators are analogue at the moment therefore the number of channels at one

point of time are restricted and the major flaw in this system is the quality, the viewer's get a very ordinary audio and video quality irrespective of their fully featured fancy Television screens. Another big challenge in this form of distribution whether it's analogue or digital is the physically making the cable available in households which is very difficult in the remote areas. Some of the cable operators have realized the future of media distribution in Pakistan and they are planning to digitize their systems thus trying to overcome the basic flaws of the analogue cable distribution.

- IPTV: IPTV is actually advanced form of distribution in developed countries however this has not been very popular due to the infrastructure and technical issues. It required a significant internet bandwidth in all houses which is yet a challenge in Pakistan.
- Illegal and Pirated Distribution : This has now become very popular in Pakistan, mainly the DTH distribution from the neighboring country is also available in Pakistan and Government has started to crack down the illegal DTH distribution, if this doesn't end then it can be very challenging for the DTH operators of Pakistan. There is an estimated figure that there is more than a million illegal DTH distribution in Pakistan which proves that a very heavy amount is being earned through the illegal means. Just to give you an idea if we assume that there are 2 million illegal subscribers paying a monthly fees of 1000 Pakistan rupees (about 10 USD), then the total revenue per year is about **PKR 2000,000,000/20 Billion (USD 20,000,000/twenty million dollars)**. This revenue can straight away come to Pakistan instead of going abroad. Once the DTH licenses are given and with the serious crack down from Government, we can imagine the business model of DTH and its huge revenue generation.

Another form is the pirated boxes being used to decode the channels without paying anything significant, therefore Government needs to create awareness about this illegal activity so that people stop doing this activity and find a legal way to watch high quality content. At the moment since the DTH isn't there in Pakistan legally therefore if an individual has to watch good quality foreign content, then he has no choice except to have any of the above two setups.

WHAT IS THE TECHNOLOGY BEHIND THIS

MAIN COMPONENTS

There are many different components required in the DTH setup however we will discuss only the basics of main components below

OPERATOR'S END

HEAD-END

The head end is the setup in which the operator will have the facility of downlink different channels and then combine them using the multiplexer before it goes to the uplink. The downlink is done using dish antennas and the IRDs (commonly known as Receivers, in extreme easy terminology- professional STBs) and then the downlinked channels are encoded and multiplexed (combined) and finally uplinked. The head-end is a part of Central Apparatus Room (CAR) which besides the above mentioned activities can also be

used for managing live programming, IPTV, local play-out and servers for other components of the eco system.

CONDITIONAL ACCESS

This is the most important part as the conditional access talks to all other major components of the DTH setup. This is basically the encryption done on the operators end and the channels are decrypted at the subscriber's end. In the lay man's language the card that is physically inserted in the setup box required to view the channels, the more sophisticated and latest method is the software base encryption. The conditional access talks to the multiplexer, billing system at the head-end and the setup box at the subscriber end, which is why it is considered to be the core of the DTH setup. Which channels to be offered to a particular subscriber, which channel to block, blocking the service due to nonpayment many other activities like these are handled by the conditional access systems.

SATELLITE BANDWIDTH

First the DTH operator should select a satellite whose foot print (coverage) is available in all the locations where the DTH is to be distributed. All the DTH operators have to get the satellite bandwidth in order to uplink the channels. The bandwidth is a recurring cost for the operator. The satellite bandwidth should be enough so that the quality of the video is not compromised.

PLAY-OUT FACILITY

Most of the DTH operators will have their own facility of play out for their own channels though it can be outsourced as well. The play out facility will be the MCR- Master Control room for the operator's own channels.

BILLING SYSTEM

The billing system is also very important and it needs to be integrated well with the conditional access and the other components. It helps the operator manage its subscription base and offer flexibility to subscribers in making the payments or subscribe to any particular event for a desired time period.

SUBSCRIBER'S END

STB AND THE DISH ANTENNA

STB is the short form of Set Top Box, the STB and the antenna has to be installed at the subscriber's facility. The antenna is used to download the signals and is connected to the set top box. The set top box is then connected to the TV sets mainly through the HDMI port hence making it possible for the subscriber to watch good quality transmission. The software running on the STB is known as Middle ware, it is basically the user interface having the direct interaction with the viewer.

WHAT WILL DTH BRING TO THE COMMON VIEWER OF PAKISTAN

QUALITY

Most of the Pakistani TV viewers have been watching the channels through the analogue cable distribution platform which is way below than the normal quality broadcasted in other parts of the world. There are various signal losses in the analogue cable while reaching the households. Secondly the number of connections through the same cable

are increased by using a splitter thus the signal strength becomes very weak before it reaches to your TV. With DTH, the signal will be received directly at the household with an excellent quality. That connection will be dedicated for the subscriber thus giving the best output on the Television screens.

We normally talk a lot about HD TVs and invest on buying the latest HD TV set for our homes however they are useless with the analogue cable. At the moment there are very few HD channels in Pakistan however once the DTH is launched then more and more broadcasters/channels will upgrade their setups to HD thus giving the same HD quality to the viewers as well.

VALUE ADDED FEATURES

I will watch the drama when I want to watch rather than wait for it every day at 8 pm. Or what to do when your kid's favorite program comes when he is not at home. This problem can be solved with the value added features provided by the DTH operator. This is called PVR- Program video recording, you can save your favorite program on the hard drive of setup box and watch it later as per your convenience.

Another value added feature could be the VOD- video on demand. The operator will have a pool of movies, dramas, shows etc and viewer can watch that content using the remote of the set top box without getting the same from the nearby movie shop or from a friend.

There can be many other value added features and some of these are available in Pakistan in the IPTV platform.

REACH

For the cable and other distribution means you need to have a physical connection- a cable from the office of your cable operator to your home, with the DTH you have a wireless connection with the satellite thus the reach of the DTH is huge. The distribution can be reached easily in remote areas or even in the new/under developed areas which are in the outskirts of the cities.

NO DEPENDENCIES AND INTERRUPTIONS

Normally the viewers have their backup power in their houses in the form of UPS or generators but they become useless if you want to watch something important and there is a power break down in your area, which off course will shut down the setup of your cable operator leaving you helpless. With the DTH setup, you will have no dependency on your cable operator especially in the scenario of load shedding or power failure in a specific area.

In addition to this, historically we have seen that the cable operators are generally influenced by the local political parties and other forces in that particular area and the cable transmission is intentionally blocked in some areas leaving the viewers uninformed with what is going on in the country. With DTH this problem can be drastically minimized as there will no link between the viewer and any local force or operator.

HOW WILL IT IMPACT THE INDUSTRY AND THE PEOPLE WORKING IN THIS INDUSTRY

THERE WILL BE NO LIMITATION TO THE NUMBER OF CHANNELS

With the DTH setup, it will be technically possible to have more channels as there is a limitation for the number of channels being distributed through the cable. Theoretically hundreds of channels can be added in to the system thus giving more and more choice to the viewers. Due to this limitation the regularity authority is unable to give licenses to new channels however with the DTH this problem will be solved and we may see some healthy competition in between the broadcasters. This will also open new revenue opportunities for all the stake holders including the regularity authority, channel owners and the people working in the industry.

20 CHANNELS PER OPERATOR- JOBS CREATION

As per the license terms of the DTH, the DTH operator will be allowed to have twenty channels of its own. This will be one of the key success drivers for any DTH operator, the better content an operator would be able to provide the more subscribers it will attract.

Now also imagine that if there are 3 DTH licenses awarded then there will be an addition of 60 more channels , this will create significant job opportunities for the people who are affiliated with the technical, production, and so many other fields.

ACCURATE RATINGS

The ratings decides the commercial value of the TV channels, at the moment the sample size is few hundreds or may be couple of thousands which is analyzed in getting the TRPs of any channel. With the sophisticated set top boxes having an IP connection, the popularity of the channels can be easily determined with very less human intervention.

MARKETING AND ADVERTISING INDUSTRY WILL GROW

Since the number of channels will increase there will be more healthy competition in the industry and there will be more and quality marketing and advertising spent thus increasing the overall growth in this part of the industry.

ROYALTY TO BROADCASTERS

The DTH will also open the opportunities for the broadcasters/TV channels to charge royalty from the DTH operators as per their respective subscriber base like it is done in international markets so a totally new revenue stream can take place. For e.g. if the channel which is popular charges PKR 5 rupees from the DTH operator per month and assuming that there are about 1 million DTH customers in Pakistan, this will give an extra 5 million PKR per month to that particular TV channel.

ATTRACTION FOR TELCO AND BANKING SECTOR

We are talking about millions of transactions per month in the form of subscription fees therefore it will open a new field for banking and Telco industries, they would be interested in providing the payment platforms to the DTH operators, particularly prepayment , scratch card, mobile and online payment methods.

WHY IS IT SO LUCRATIVE FOR BUSINESSMEN

VOLUME BUSINESS

So far we have seen great interest in this business and it has attracted very big groups of the country. Pakistan is a country of huge population. According to estimated figures, there are about 10 to 12 million cable subscribers in the country. The target in the first few years for the DTH operators is to convert at least 10 -20 percent of the cable subscribers to the DTH subscribers. Now if the DTH subscription is priced at 800 Pakistani Rupees, and assuming there will be 15 percent market penetration of DTH (1.8 million), the monthly revenue could be **PKR 1440000000. (14.4 million USD)** and multiply it be twelve to get even bigger number for the annual revenue from this project.

CONTROL OVER DISTRIBUTION

Another interest of the big groups participating in this project is to get control over media distribution in Pakistan. Media is one of the important pillars of any country and controlling and distributing the media is a very important element.

WHAT ARE THE CHALLENGES

So far we have only seen the attraction in the DTH business but we must keep in mind the difficulties and challenges that the operators have to face. I have highlighted some key challenges to be taken care of by the operators.

ACQUISITION OF LICENSE AND INITIAL INVESTMENT

The first step as we all know is to get the license. The process of the bidding of the license has been slightly delayed but by the time the readers will read this article, the awarding of license date will be back on track. There are many steps involved in getting the license , the most important of which is the license fees which has to be a sealed bid envelope and the base price is PKR 20 crores (USD 2 million). It is expected that it might go beyond 10 million USD!

SOLID PLAN TO CONVINCING THE VIEWER TO SWITCH OVER

It will not be easy to convince the common cable subscriber who is paying PKR 300 per month (USD 3) to pay PKR 800(estimated), plus the operator needs to come up with a plan of subsidizing the initial cost of Dish antenna and setup box. In addition to this the marketing plan has to be solid to be able to shift the mindset of the cable viewer to the DTH. As discussed above the quality, value added features and the content of the operator's own channels will play a key role in this regard.

HIGH COST OF INSTALLATION FOR THE SUBSCRIBER

We touched base this in the above challenge, the initial cost would be around PKR 5000-7000 , no matter how good is your quality and what value will the operator give to its subscriber , it will be most daunting task to convince the subscriber to pay for this cost. The best solution is to subsidize this or waive this cost to penetrate in to the market.

This will also be a big challenge for the operator as this requires heavy investment, a good solution to overcome this problem could be to adapt the good distribution strategy with minimum direct investment from the DTH operator.

MULTIPLE CONNECTIONS

We all have more than one TV set in our house, and it is really easy to connect more TV sets from the cable provided by the cable operator. This will be a challenge as each TV set will require a set top box to be connected to it. This will again be an additional cost that needs to be taken care of by the DTH operator.

PHYSICAL INSTALLATION AND DISTRIBUTION

Though we discussed that the reach would be easier due to the direct satellite connectivity this means that a dish antenna and a setup box has to be installed in each and every house. This will be also a big challenge as it will consume significant resource in terms of time and money.

TECHNICAL SUPPORT

The DTH operator has to come up with an excellent customer service setup. After paying double amount of the subscription the customer would expect the problems to be solved immediately. To minimize this, the first step for the operator would be to select the most reliable technical solution so that the downtime can be curtailed. In addition to this a call center setup and friendly on field staff needs to be hired by the DTH operator.

CONCLUSION

I have tried my best to explain the concept of DTH and how will it impact the media industry in Pakistan. For those who are affiliated with the cable industry the cable will not finish with the launch of DTH in fact it will open an opportunity for the cable operators to digitize their setups and compete with DTH operators. All in all, we should realize that we are quite late in launching the DTH as compared to other countries. There are challenges like any other big projects however this will result in the betterment of the media industry in Pakistan.

There is a lot more to discuss about this project however the aim of this document was to create awareness and give an idea of what is DTH and what is it going to bring to the stake holders.

This article is written by Sheeraz Adil who is currently working as the Sales Director, SEA region at Irdeto. Any feedback or questions will be welcomed at sheerazadil@gmail.com