# Trends in Television

#### 1. Introduction

There have been a lot of significant changes in the television industry over the last decade due to a number of technological and economic factors [7]. In this short paper we discuss and evaluate some of the emerging trends in television which are set to take over the next few (3-5) years.

This is indeed a very exciting time for TV industry; the year 2010 has being declared to be the year of 3D at home TV [1]. The advent of 3D along with recent advances in LCD,LED and Plasma represent few of the many improvements made in the hardware of traditional TV that have been going in the market over the last few years. On the other hand, the landscape of how the TV content is produced and consumed has evolved from traditional cable TV to the internet (cheap video subscriptions and free video sites) and internet enabled devices (Xbox, iPad etc.)[2]. All this changes the role of the traditional TV cable companies and enables new competitors to enter the market. In order to analyse the current trends we have organized the paper in following sections: in section 2 we list out what we believe are the 5 major trends that are shaping in the industry now and give a brief overview of each segment; in section 3 we try to identify a new interesting segment that will emerge in TV space over the next few years and finally in section 4 we will conclude with some discussions for the future.

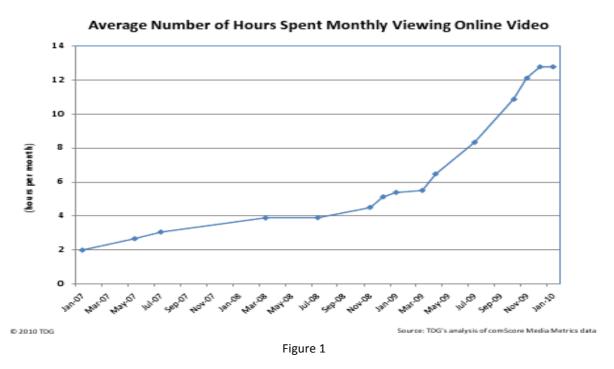
### 2. TV Trends

In order to classify the different trends in TV we focused on hardware and software platform as well as the distribution of the TV content on those platforms. Based on these considerations, for the purposes of this paper, we have divided the TV space in the following segments. Please note that we classify 3D separately due to its relative importance this year [1] and also interest from many major players like Samsung, LG etc. to bring out 3DTV sets to market.

- a) TV Content on Internet (Subscription based and free)
- b) 3D TV and 3D Content at Home
- c) HDTV, LED, Plasma and other Hardware Improvements in Traditional TV
- d) TV Content on Other devices (like iPad, iPhone etc.)
- e) Internet on TV (via Windows Media Centre etc.)

### TV Content on Internet (Subscription based and free)

There has been a constant increase in the user generated video content on the internet in the last few years, the most popular video website being You Tube which was bought by Google in 2006[3]. Most of the content produced on You Tube is free and of amateur quality created usually by individuals. But the popularity of online video sites has prompted many TV broadcasters and traditional TV Content media companies to offer their shows online for free or as cheap rate video subscriptions. One of the most popular website which is currently available is hulu.com, offers TV shows and movies from ABC, NBC and Fox Networks [4]. Hulu reported revenue of 100 million last year and is expected to go for an IPO this year [5]. Hulu is currently available only in US and similar websites are expected to grow in other regions of the world based on partnership between traditional TV Networks.



As the shown in Figure 1 the average number of hours spent monthly viewing online video has been on a constant rise touching 12 hours per month in January, 2010[6]. This number includes the time taken to view non TV content as well (You Tube Videos); nevertheless it represents a growing demand for video consumption over the internet. In fact the over the next ten years the internet video is set to overtake TV viewing [6] as can be evident from Figure 2. This has interesting implications for major TV Networks since they need to invest in online infrastructure to distribute their TV content on internet. This also changes the way consumers pay for watching TV shows from a flat monthly fee to a pay per show (or view) model [6] (Appendix). The TV Content owners and broadcasters need to adjust to this new revenue model. It is already being shown by others (iTunes, Hulu etc.) that it is possible to make money via this kind of model. With the commercial success of Hulu, in this space and the current predictions in the future, we can expect to see more and more traditional TV content being available online.

Weekly Viewing of Live Broadband TV versus Internet Video, 2010 - 2022

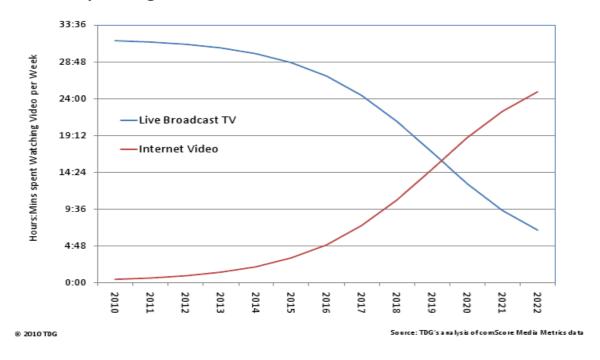


Figure 2

#### 3D TV and 3D Content at Home

The next segment we explore is the 3D TV at home. Sparked by the success of 3D film Avatar which created new blockbuster records on the box office; the interest in 3D TV has sky rocketed. Most TV manufactures including Samsung, Philips, Sony, and Panasonic have introduced 3D TV sets in the market and are planning to launch more models in the next few months. The availability of 3D content for TV has been limited but growing with Blu-Ray discs for major movies like Avatar, Ice Age 3 and many more coming in 3D and launch of new channels like ESPN 3D[8]. Major gaming consoles Nintendo and Sony PlayStation are also planning to add 3D capability to their games for TV. DirectTV has already promised to air 85 live sporting events in 3D this year [8]. The creation and availability of 3D content is on the increase and in the next few years this technology can become very popular.

One of the possible inhibitors for the adoption of current 3D TVs is the requirement of special glasses to view. This adds more costs as well as some people find it inconvenient to watch TV with glasses. Moreover the 3D glasses themselves are not compatible between the different manufacturers [8]. Many companies are currently working on new technology to enable one to see 3D TV without the need for glasses. The 3D home entertainment market may change and some other standards may evolve as preferred 3D technologies continue to rise and dominate.

### HDTV, LED, Plasma and other Hardware Improvements in Traditional TV

The hardware platform of the traditional TV has been undergoing constant improvements from LCD to LED-backlit LCDs to Plasma and HDTV. Most TV manufacturers have models that support this hardware currently in market. A full description of these technologies and their differences is beyond the scope of this paper. Needless to say these newer hardware enhance the TV viewing experience by providing better picture quality and video performance. They are responsible for the change in the form factor of TVs from big bulky sets to large slim screens. Since Plasma has been around in the market for some time now but never really picked up and LED has hit the market recently, in order to illustrate the growth of this segment we will use HDTV.

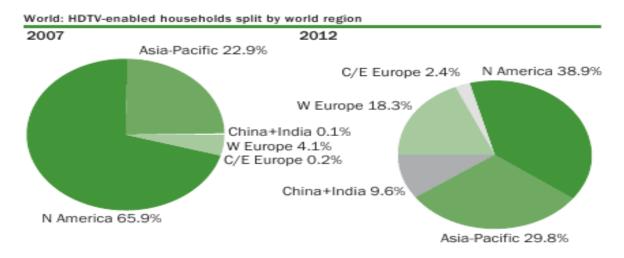


Figure 3

HDTV rollout reached critical mass in US in 2007[9] when most of the channels started to be broadcasted in HDTV and many TV sets stared coming with default HD tuners. This growth was slow to pick in Europe and Asia but according to the forecasts as shown in Figure 3 this is going to change in the next 2 years when the international versions of the US channels are launched in all the major markets of the world [9]. An interesting point to note here is that as in the case with 3D TV, the first adopters of HDTV were sports channels and live sporting events. HDTV is a technology which has already being widely adopted and is starting to dominate the market.

### TV Content on Other devices (like iPad, iPhone etc.)

In this segment we classify devices which are not intended for TV viewing on their own but can also be used for as an ancillary use. This includes Smart Phones, Gaming Consoles, Touch Screen Pads, Portable Media Players, and Data Card etc. The important distinction to make here is that the consumer does not buy the device to watch TV but it is provided as an added feature. This is considered different from the TV on Internet segments as for many of these devices (like the iPhone or Tata Photon Data Card in India or Netflix with Xbox) you

may have to pay additional charges in order to access TV content, over and above your regular data charges to access internet. This segment is posed for a big growth in the coming years with increase in mobile broadband penetration and growth of the mobile consumer market [10]. Figure 4 illustrates the various devices and their total contribution to the TV platform growth. A detailed evaluation of each device market segment is beyond the scope of this paper.

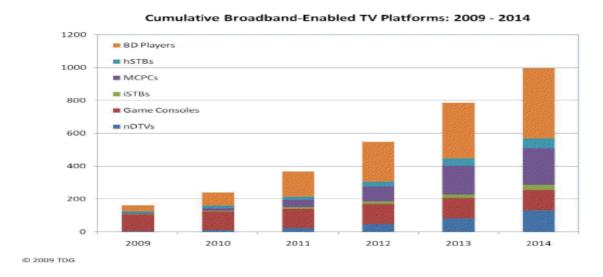


Figure 4

## Internet on TV (via Windows Media Centre etc.)

Online video viewing has started to threaten the traditional TV Cable Network [11]. The number of people subscribing to TV over cable declined for the first time in the last quarter (as shown in Figure 5). This coupled with the emergence of new devices on which you can watch TV is going to be a challenge for the TV Set Market. Looking from the other side, this opens up new innovation in TV Set itself by providing internet and internet based services along with TV, for enhancing the overall viewing experience of the viewer.

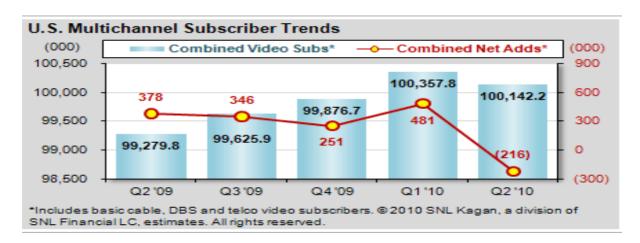


Figure 5

One of the early attempts at providing an internet enabled enriched TV experience has been the Windows Media Centre, which is a special edition of Windows which is customized and optimized for TV viewing and can be controlled using the regular remote. The idea is to make the users think of TV as more than a device for passive viewing by enabling active interactions in form of various internet enabled applications that allow you to view Photo, Videos etc. Software advances typically follow accelerated growths in hardware and in future we will see more use of software on traditional TVs; used in order to create better viewing experience or add more features.

With this we conclude the brief summary of the current trends in TV, the idea here was to give an overview of the various technology trends and not to get into too many details of the same. Now we analyse and discuss a new emerging segment in TV.

# 3. Internet Enabled Widgets on your TV – An Interesting Emerging Segment

In the previous section we hinted that Internet usage on TV will be a growing segment to look forward to. With the convergence of the TV and the Internet (Both by distribution of TV Content on Internet and vice versa) we predict the emergence of applications which can utilize these two different media to provide new and innovative user experience. We believe that Internet Enabled Widgets will enhance and increase the productivity of TV viewing experience be it online or on a traditional TV Set. To illustrate what we mean by internet widgets consider the following scenarios.

- Wikipedia in TV While watching Discovery Channel you need to look up for more information, you open up Wikipedia and get detailed information right on your TV Screen
- CricInfo on TV In the middle of a cricket match you want to check the statistics of a player
- Facebook on TV Want to hear comments about your favourite TV show from friends and post a short clip to your Newsfeed
- Twitter on TV Post updates to your twitter account from your TV

The above examples only show the use of an existing service to provide some additional functionality over TV but the possibilities are only limited by your imagination. Think about mashups using data and content from TV and internet to provide new experiences.

• Shopping like never before - You are watching a TV Show and you really like the sandals of one of the characters on the screen, you crop the picture and using Like.com do a visual search for them right from your TV Set.

 Advertising like never before - Imagine in video tagging and advertising based on real products used by actors on TV shows. A real ad on TV can link to the product's website for more information and additional interaction.

We believe this gives a flavour of the kind of widgets that one can expect on TV. Widgets on TV will allow you to extend and customize the TV Experience like never before. One of the other reasons we believe this segment will emerge is because of changing consumer behaviour. In a world connected by internet, consumers are increasingly demanding more interactivity and extensibility their devices (iPhone iTunes App Store, Android App Market, Windows Mobile Marketplace etc.). This change or shift in consumer behaviour is bound to hit the television industry as well.

### 4. Conclusions

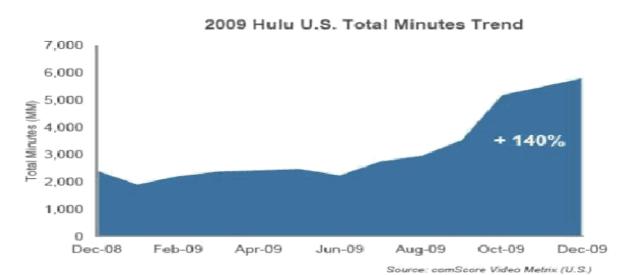
The TV industry has been pretty much the same for a really long time but in the last few years there have being some breakthroughs in the television industry. The emergence of new hardware and software systems has set up the path for a major TV revolution in near future. Riding on the back of improved technology, evolving consumer behaviour and large broadband penetration, the TV industry is now ready for a change. In this paper we discussed some of the major emerging trends which may affect the industry in the next 3-5 years. We also explored a new segment which may emerge in the television space. Whether or not the analysis done by us will stand the test of time, that is to be seen, but one thing is for sure - The future of TV is like never before.

#### 5. References

- [1] "2010 could be the year for 3D with 3-dimensional at-home TV", USA Today July 2010, (http://www.usatoday.com/tech/news/2010-01-05-3D-television\_N.htm)
- [2] "The Future of TV is Not on Cable", NewTeeVee Blog (GigaOM Network) Aug 23 2010, (http://newteevee.com/2010/08/23/the-future-of-tv-is-not-on-cable/)
- [3] Press Release, Google Oct 9 2006, (http://www.google.com/intl/en/press/pressrel/google\_youtube.htm)
- [4] "Hulu", Wikipedia, (http://en.wikipedia.org/wiki/Hulu)
- [5] "Video Site plans IPO", Reuters Aug 16 2010, (http://news.yahoo.com/s/nm/20100816/tc nm/us hulu ipo)
- [6] "The Economics of Over-the-Top TV Delivery How Television Networks can Shift to Online Content Delivery", TDG Broadband Media Report 2010

- [7] "Television and public policy: change and continuity in an era of global liberalization", edited David Ward, New York: Lawrence Erlbaum Associates c2008
- [8] "Buy a 3D TV Now or Wait", PC Magazine June 2010, (http://www.pcmag.com/article2/0,2817,2365010,00.asp)
- [9] "HDTV Roll Out Builds Momentum", Screen Digest July 2008
- [10] "Broadband Enabled TV: Evolution of OTT Platforms", TDG Broadband Media Report
- [11] "New Numbers Reveal: Chord Cutting is Real, NewTeeVee Blog (GigaOM Network) Aug 23 2010, (http://newteevee.com/2010/08/23/new-numbers-reveal-cord-cutting-is-real/)

# 6. Appendix



PayTV Over-the-Top Hypothetical Revenue Mix for the Outdoor Channel Revenue % of Total Revenue % of Total (millions \$US) (millions \$US) Revenue Revenue Subscription/affiliate fees \$17.70 32.6% \$17.52 32.3% \$0.00 17.4% Pay-per-View 0.0% \$9.46 Ads \$36.56 67.4% \$27.33 50.3% Total \$54.26 100.0% \$54.32 100.0%

#### Global HD households forecast

