Technology Adoption Panel
Executive Summary: Digital Television survey
Conducted January 24 – February 1, 2006

Many features and functionalities of digital TV are following external market conditions. Several governments including the United States have mandated an analog terrestrial broadcast cutoff date. In many geographical regions, analog reception, or free TV, is the most prevalent television access technology. Even in affluent nations, many consumers only receive regular television signals. As a result of the pending analog broadcast cut-off date, manufacturers are making digital televisions that have hybrid tuners in them. Using the United States as an example, televisions have analog NTSC tuners for analog standard definition television and ATSC tuners that process digital signaling

Digital televisions are incorporating input and output devices that leverage digital data. HDMI is outpacing DVI as a digital interface, and 1394 is an efficient point-to-point transfer technology. Digital televisions become a purposeful device in the home network as digital outputs facilitate Internet interaction, allow for playback from devices like digital camcorders, and enable the downloading of EPG. The 1394 input is useful for transfers of pictures or video files from the PC to the digital television.

However, there are several features that are not being integrated onto digital television sets. In-Stat sees a general pattern in the sound projection of LCD TV. For LCD TVs with 20" or less screen size, the internal speaker set up is two channels at three watts per channel. For screen sizes between 20"-35", the sound is sent out over two speakers at five watts of power. Generally any LCD TV with greater than 35" of screen size will have two speakers each powered by ten watts. The philosophy of the top LCD TV manufacturers is that additional sound projection should be adapted by receivers or maybe more simply, that sound is not an important differentiator in the digital TV.

The larger mega trends in television sets continue. Revenues from cathode-ray tube televisions (CRT) are diminishing and being chiefly replaced by LCD TV and also being outpaced by plasma displays. Of all of the major regional markets, North American consumers buy the televisions with the largest screen sizes. All forms of digital televisions are taking market share from analog CRT TV sets. The dynamic keeps the TV market competitive and consumers are willing to spend more for value. Combining the two ideas, even as televisions of similar size and technology come down in price from year-to-year, the ASP (average selling price) still goes up.

In January-February 2006, In-Stat conducted a survey among its Technology Adoption Panel on the topic of Digital Televisions (DTV), in which 1753 respondents participated. Before, we present deeper analysis of some of the conclusions reached by the DTV TAP survey, there is room for a constructive preface. There were 118 people who left additional comments (a fairly remarkable number considering their time investment in the panel). Many of the comments had to do with how to improve the survey (others had nice things to say about how the survey was laid out—either opinion was appreciated). Here are some of the general comments:

- The definition of regular TV's is satisfactory. I don't really pay that much attention to the TV picture. Most of the time that it's on I am looking at something else. It's just not that important.

- When color TVs came out the signal was designed so that black and white TV's could receive it. The digital signal should be designs so that an analog TV can receive it. This can be done.

- Vendors should consider linking in functionality already on my PC, via wireless LAN to the new home entertainment center – "i.e." one broadband access point for the house, and no duplication of CD and DVD drives.

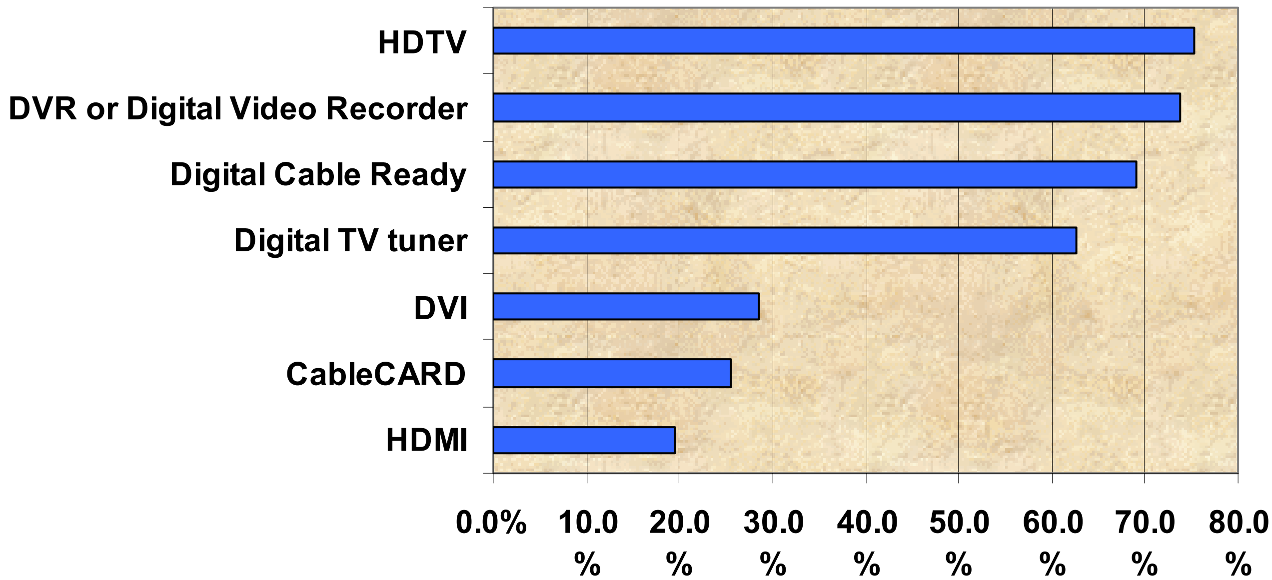
There were a few questions asked about consumers' attitudes toward digital terrestrial broadcasting. Between a Congressional mandate and the law signed by the President, all analog terrestrial broadcasting will cease as of February 17th, 2009. To receive television analog terrestrial broadcasts a consumer will either have to invest in a set top box, a converter box, or will have to upgrade to a digital television (it is possible that analog cable customers will continue as they do today). Here are some opinions expressed by members of the TAP panel.

- The 2009 cutoff date does not pressure me to replace the sets I have now, but it certainly makes buying a new set today a questionable investment seeing as how such potentially good features as the cable card were prematurely released (why in the world would they ship a one-way cable card???). New and more useful versions of today's technology will assuredly come to market before 2009. No logical reason to invest in transient technologies. Further, 1080i is old news... 1080p is this season's rage and who knows where we'll be in 2009. Pressured to buy now? Hardly.

- I understand the FCC's position for freeing the wide frequency spectrum currently used by the standard TV stations. However, many people will not want to purchase new TV's if their current TV operates.

- I DON'T LIKE THE IDEA THAT I HAVE TO GO TO THIS NEW FORMAT AND NEED TO DO SOMETHING WITH ALL MY TV'S.

In our January-February 2006 DTV Set Technology Adoption Panel survey, respondents were asked to rate their familiarity with several digital TV terms. The following chart shows the percentage of respondents who said they are extremely familiar or very familiar with several digital TV terms. 75% said they were familiar with the term HDTV. 63% of the respondents had familiarity with "digital tuners". While Digital Cable Ready was known by 69% of respondents, only 26% were familiar with the term CableCARD (although this up from 22% in the 2005 DTV TAP panel). See chart below.
Familiarity with Digital TV Terms



Source: In-Stat 02/06

Nearly 12% of all respondents plan to buy a DTV set within the next six months. 16% of respondents plan to buy in 6 to 12 months. 34% do not plan to buy a DTV set at all. The primary reason given by our respondents for not planning to buy a new TV set are that they do not need or want a new TV set. Only 14% said the primary reason was that the sets are too expensive. 19% said they already own one so do not plan to buy another.

The most often cited reason for buying a DTV set is the desire to watch HD broadcasts in the highest resolution (and this was chosen 42% of the time). Only 18% of purchasers cited the desire for a flat panel set as the main reason to buy a DTV set. Plans for a flat panel TV purchase were greater among younger respondents than older.

Pricing sensitivities were exhibited in our DTV TAP survey and were consistent with results seen in a 2005 DTV TAP survey. 27% of those who plan to buy in the next two years plan to spend less than $1,000. 41% plan to spend between $1,000 and $2,000 (the 2005 TAP Panel had a 36% response rate). It could be argued that consumers are expecting price declines in DTV sets and holding off on making purchases until feature sets match up with pricing. 56% of all consumers that intend to purchase within the next two years plan to buy a TV with a screen size of 40” or greater.