



Second Part Of A Series:

HDTV — What Is It? What Are It's Implications?

HDTV — high definition television — is many things to the many different groups of people that are actively involved in defining this new medium. Obtaining a perspective on what HDTV is and its future as a medium can depend on whom you talk with you and their own particular perspective.

In this article I will deal with several of the issues that face the television industry as a whole as HDTV begins to impact on the industry.

The End Users

To pioneering production people like John Galt, formerly of Northernlight and Picture Corporation, Barry Rebo of Rebo High Definition Studios of New York, Zbigniew Rybczynski of ZBIGVISION, and David Niles of 1125 Productions, HDTV is a unique but as yet undefined medium.

To the current broadcasting organizations, HDTV is both a means of recapturing a shrinking audience share and a threat to their very survival.

Let's discuss the broadcasters first.

You might ask how can HDTV be so positive and so negative at the same time? The answer lies in the fact that HDTV is a unique set of standards that feature — as its prime attraction — a quality picture that has never before been seen on commercial television.

The HDTV picture features twice the resolution both horizontally and vertically, which gives you a resolution that is four times that currently available. In addition to the improvement in resolution, there is a concomitant increase in the ability of the system to resolve color detail, which is increased by roughly five times that presently available in NTSC. Combine that with the recording capability of multi-channel digital sound and you can see that current

television has a formidable opponent in HDTV.

The dramatic increase in picture resolution and color detail results in a picture that is breathtaking — provided that the subject matter is interesting. HDTV is no panacea for poor subject matter. No matter what the medium, poor subject matter is still poor subject matter even if it is highly detailed.

At the HDTV seminar in Ottawa a tape produced by NHK, the Japanese broadcaster was shown featuring, among other things, footage of the 1988 Seoul Olympics and Mardi Gras in Brazil. The color saturation was unlike any that I had ever seen before, and the resolution of fine detail in the costumes of the participants was remarkable.

This is the real hook of HDTV — the color and resolution combined are so good that you feel like you are there. This sensation of being a participant, albeit from a distance, has been one of the goals of those who seek to create a new exhibition format.

It also is hoped that high quality pictures — coupled with sound that sounds as realistic as being there — will stimulate a resurgence in television viewing and have the sidebar benefit of creating economies of scale.

For some time now the networks have been aware that their market share has been declining due to the fractionalization of the marketplace by the incursion of other media. For example pay TV and videocassettes have made significant gains due to the changes in society.

Our Changing Society

The dramatic increases in the cost of living, coupled with the high cost of housing, have forced families to become two income families. This often means that one, or both, of the parents don't get home until late. By the time dinner is finished it is time to

put the children to bed, leaving little time for the parents to relax and spend time with each other. Increasingly, the method increasing numbers of people chose to relax or to catch up with what is going on in the world is to sit down in front of the television.

But there is a new twist to the scenario. In the past people used to look in their television guide to see what was on. Sometimes, often in fact, there wasn't anything on of real interest, but people watched anyway. Times have changed, and now people have a number of choices. If they don't like what's on regular TV they can use their VCR to watch programs that they have time shifted by pre-recording them earlier. Or they can watch any number of recent theatrical movie releases they can rent from the corner video store.

Many broadcasters feel that if they could deliver a better product, such as HDTV, they might regain some of their lost market share. Whether this can be realized remains to be seen, as HDTV is still in its infancy.

One of the great hopes by those who saw HDTV as the medium of the future was that it wouldn't be degraded by partisan interests, as was the case when color was introduced to the NTSC system, leaving us with a broadcasting system inferior to other systems and not able to deliver all of the detail and resolution possible.

The current NTSC broadcasting system was designed on the basis that it not obsolesce the then common black-and-white television and the 6 Mhz per channel bandwidth. Engineers of the time solved the problem of adding color to a black-and-white signal by piggybacking the color signal onto the black-and-white signal. Black-and-white sets have no color detector so they are unaffected by the color signal. Color sets have a detector that triggers the color circuitry in the TV set to reproduce the three colors — red, blue and green —