

# IS A RATING STILL A RATING?

## HOW CHANGING BEHAVIOUR ALTERS DEFINITIONS IN THE DIGITAL AGE

*Bas de Vos  
Marion Appel*

### SUMMARY

Channels, programme makers, advertisers and their agencies are aware of current and impending changes in viewing behaviour. Interactive, on-line TV viewing, PVR and video on demand have increased the options available for viewing TV content for every individual in the Netherlands.

Because the main goal of The Dutch TAM, SKO to measure as accurately as possible *all* viewing of TV content it became necessary to solve the problem of Time Shift Viewing (TSV). In Holland, the rollout of PVRs is going strong and the same goes for Video-on demand services offered by the distributors. In response, a new measurement technique was recently introduced. The question then became how to integrate these new data with our existing currency.

Introducing time shift viewing in the daily reporting of SKO has caused a major shift in the thinking about viewing data, which until now have been linear and exclusive for any point in time. Adding time shift requires decisions to be made concerning the channel identification, the calculation and reporting rules. This process is currently under way in the Netherlands; it will lead to new reporting conventions as of January 1, 2008.

### 1. INTRODUCTION

For the past year, the TV Audience Measurement conducted by SKO has reported on the use of the HD recorder, integrated in the ratings reporting. However, it has not been possible to identify the programmes watched as a recording or time shifting. Section 2 examines the grow-

ing penetration of non-traditional TV equipment and its likely effect on viewing patterns following the “take-off” of the digital age in the Netherlands.

Section 3 presents the effects on viewing. The new measurement technology enabling the reporting of time shift viewing is discussed. CTC, the Common Technology Centre shared by TNS and Intomart GfK, now has operational an additional channel identification technique that completes the current generation of meters, the TARIS 5000. Enhanced Audio Matching (EAM) allows searching for viewing statements in the reference database of the preceding seven days, as required by SKO. The module has been incorporated in the TARIS 5000 meter in PVR households since the start of 2007.

Section 4 discusses the way TSV is changing the TAM currency. SKO aims at reporting live and time shift viewing as an integrated rating currency from January 2008, allowing the analysis of programme viewing behaviour in total. A series of discussions concerning the handling of the time shift viewing data and application of rules to new currency preceded this decision.

The changes in the TAM and the TAM data resulting from the introduction of TSV as an integrated part of the Currency are examined in greater depth in Section 5. New possibilities for analysis will also be discussed.

The relevance of this specific information for TAM-related researchers wishing to introduce TSV in their ratings is discussed in Section 6. Section 7 explains the basic steps that need to be completed

PART 9 / TELEVISION

for a successful introduction of TSV to the television market.

In conclusion, Paragraph 8 discusses further development of SKO needed to keep pace with developments in the digital age.

**2. CHANGING BEHAVIOUR IN THE DIGITAL AGE**

The Netherlands has been slow in adopting new techniques of TV viewing: a tradition of cable distribution (97% penetration since 1999), offering on average 30 stations covering a broad range of programming, has prevented a sufficiently interesting business model for new digital providers entering the market. In the last few years, this situation appears to be changing a result of aggressive marketing of digital decoders by cable providers, as well as by *telcos* offering DTT as an alternative to cable. (See figure 1.)

As a result of these activities, the Dutch media landscape has been altered in the course of just one or two years. Even though there are signs that the pace of the development is slowing down, the mass is now

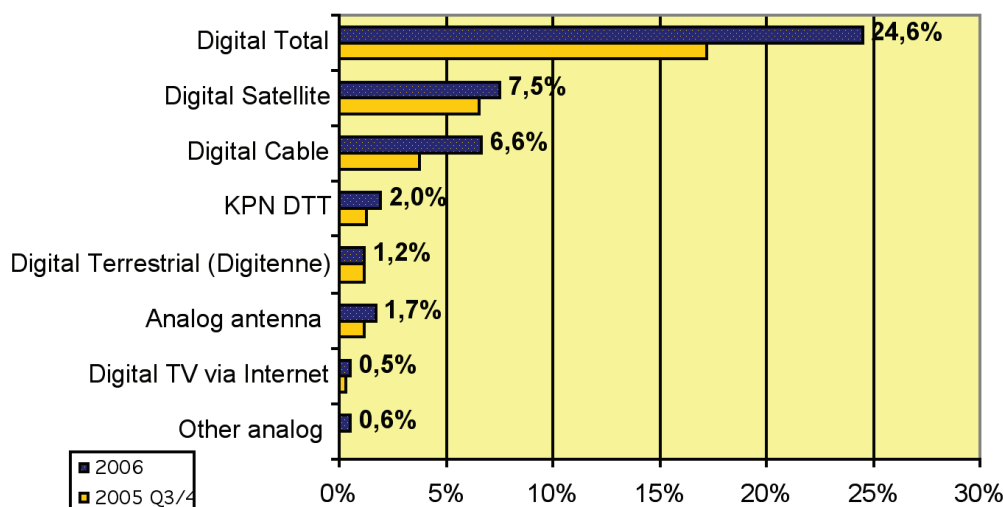
sufficient to influence the viewing patterns measured within the SKO currency.

Of great interest is the development of the profile of digital households: digital take-up is especially high in high social class, light TV viewers and employed households with children. These demographics enable channels to reach traditionally difficult target groups with new offers.

A second development increasingly affecting TV viewing behaviour is the use of digital PVRs. As quick as the up-take of DVD players has been in the Netherlands, the sales of DVD- and HD recorders have been much slower. (See figure 2.)

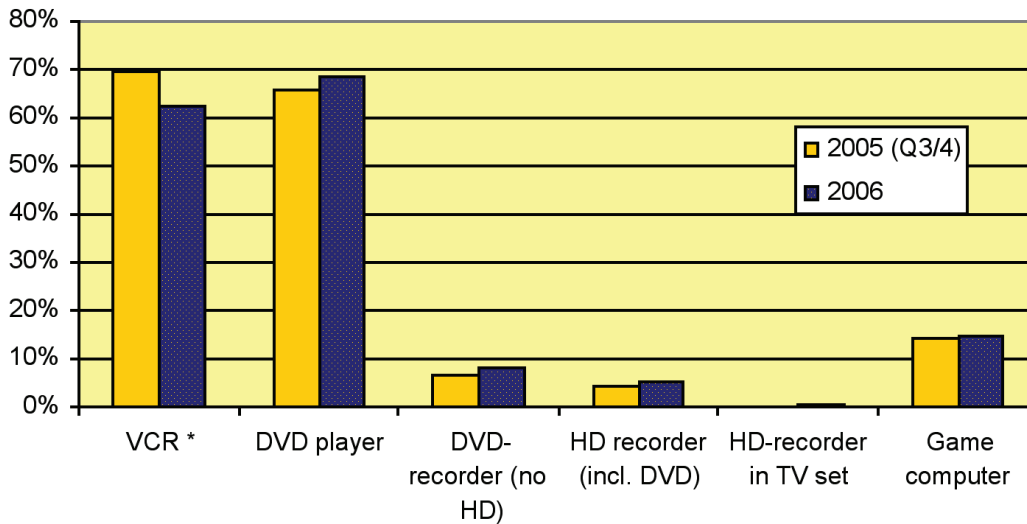
By the end of 2006, some 15% of households were capable of digitally recording TV programmes or time-shifting their viewing. This is now becoming a substantial proportion that needs to be taken into account for the correct measurement. From qualitative research, we are aware that only a small proportion of PVR owners actually use the time-shift functionality and prefer to programme their PVR as if it were a conventional VCR.

**FIGURE 1**  
**SOURCE OF TV SIGNAL**



Source: ES SKO 2005/2006, n=3.381/6.252 households

FIGURE 2  
PERIPHERAL EQUIPMENT TO TV SET



Source: ES SKO 2005/2006, n=3.381/6.252 households

Finally, equipment other than the TV set is entering the field. TV viewing via the PC, watching programmes via streaming video on websites of the Dutch TV channels, shows considerable growth. (See figures 3 and 4.)

There is no doubt that the Dutch are getting the hang of watching TV in situations other than the conventional home situation and the fixed TV set. In particular, the websites of the major broadcasters provide programmes post-broadcast, enabling people to watch programs when they have missed the actual broadcast. Websites such as "Uitzendinggemist.nl" allow viewers to view a programme at the time they wish. For example, by the end of 2006, the number of viewings on the Dutch Public Broadcaster website had increased to about 10 million streams a month.

**3. INTRODUCING ENHANCED AUDIO MATCHING**

Although the take-up of digital equipment in the Netherlands has been slow, by now a considerable amount of viewing in the fixed meter panel is recorded or time-shifted. The meter system used by Intomart GfK for the SKO service is the Taris 5000 meter with a configuration of Picture Matching and VBI. In this setting,

all live viewing, independent of signal reception mode, and analogue VCR recorded viewing is detected and stations identified. Picture Matching functions even when digital broadcasts are watched, as the images sampled in the TV set can be perfectly matched with the reference samples of these stations.

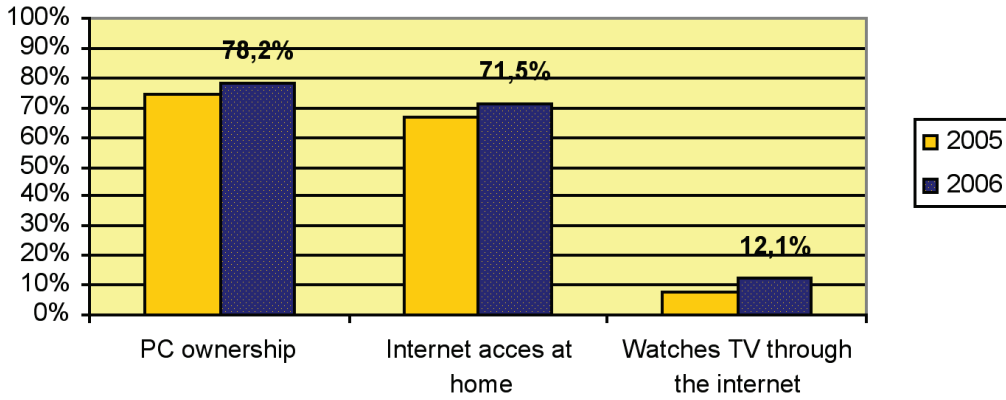
Some difficulties occur as a result of the proliferation of digital equipment that allows people to change the aspect ratio (e.g. 4:3 \_ wide screen), which then no longer matches the reference data. As with time shifted viewing via PVR, this equipment offered a challenge to the SKO measurement methodology.

Since 2006, the use of the PVR as such in SKO panel homes has been measured and reported. This includes non-identifiable viewing such as time shift viewing through the PVR tuner, as well as viewing of non-identified stations, or DVD-viewing using the PVR. (See table 1.)

Less than 1% of viewing remains unidentified as a result of HD usage, but in these households where the PVR is available, an estimated 7-10% of viewing is now done time-shifted.

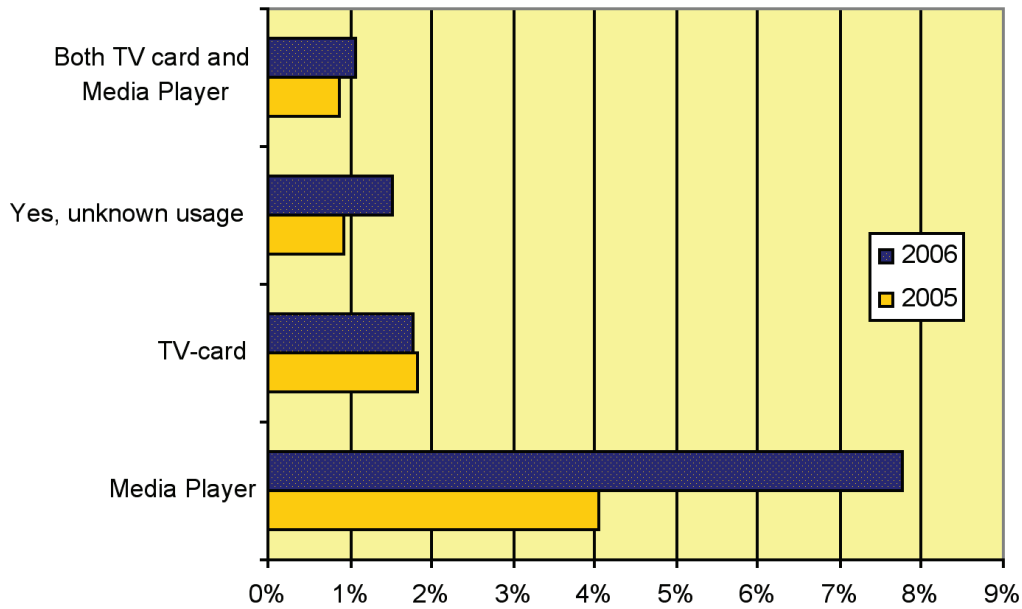
PART 9 / TELEVISION

FIGURE 3  
PC OWNERSHIP AND TV USAGE



Source: ES SKO 2005/2006, n=6.258/6.252 households

FIGURE 4  
TV VIEWING VIA PC



Source: ES SKO 2005/2006, n=6.258/6.252 households

**TABLE 1**  
VIEWING TIME IN MINUTES PER DAY AND MARKET SHARE, BY EQUIPMENT IN HOUSEHOLD

		Min.	Min.	Min.	Min.	Min.
Target	Sample size	Total	Live	Video	DVD	HD
3+	2816	200,7	187,0	3,2	9,0	1,4
3+ Analog only	2510	201,9	188,9	3,5	9,3	0,2
3+ DVD rec. no HD	86	212,8	197,2	0,1	15,5	0,0
3+ HD recorder	220	180,8	159,5	1,0	2,6	17,7
		Share	Share	Share	Share	Share
		Total	Live	Video	DVD	HD
3+		100,0%	93,2%	1,6%	4,5%	0,7%
3+ Analog only		100,0%	93,6%	1,7%	4,6%	0,1%
3+ DVD rec. no HD		100,0%	92,7%	0,0%	7,3%	0,0%
3+ HD recorder		100,0%	88,2%	0,6%	1,4%	9,8%

Source SKO 2007, week 6

The growth of this figure (in minutes viewed) is shown in figure 5.

In April 2007, a new measurement technique, Enhanced Audio Matching (EAM), was introduced in the measurement in households where a PVR was in use. This technique is necessary to reduce the increasing amount of unidentifiable viewing in these households.

EAM is an audio-based technique that functions similar to Picture Matching (PM). As with PM, EAM can function without the participation of the stations. The research company is responsible for referencing the audio data and ensuring the continuity of the measurement. EAM is designed to be used in situations in which PM cannot function, specifically time shift viewing using digital recorders and when images are “distorted” as a result of a change of aspect ratio or the use of customised images. EAM allows non-invasive installation in homes where normal installation is not possible or not allowed by the panel member.

EAM takes signatures of the audio for channel identification, as in normal audio matching systems. In addition,

with EAM, the meter installed in the home can determine the actual use of peripheral equipment (Set top box, DVD player, PVR, etc.) and whether the TV set is switched on. This allows the system to draw the audio signal internally from the source in use. (See figure 6.)

At the centre the signatures are then matched to the reference material from all relevant stations measured in SKO. In addition to live matching, sophisticated database search algorithms make it practical to search material from hundreds of channels over a full week of broadcasting.

#### 4. NEW VIEWING BEHAVIOUR; INTRODUCING TIME SHIFT VIEWING IN THE COMMON CURRENCY

By introducing the EAM technique in the TAM, we are now able to measure the viewing behaviour of panel members using their PVR or DVD-recorder to watch television content at a later point in the week. In addition, the viewing of VOD previously broadcasted in the same week can now be measured. This is ‘new viewing’ to take into consideration. As previously stated, we