

THE SPREAD OF D-CINEMA: 2006 YEAR OF THE WATERSHED

In view of the increased speed at which D-Cinema spread last year, there follows the new forecast using our mathematical models: it is estimated that 35mm will be overtaken earlier now, in 2013. Six years left to go!

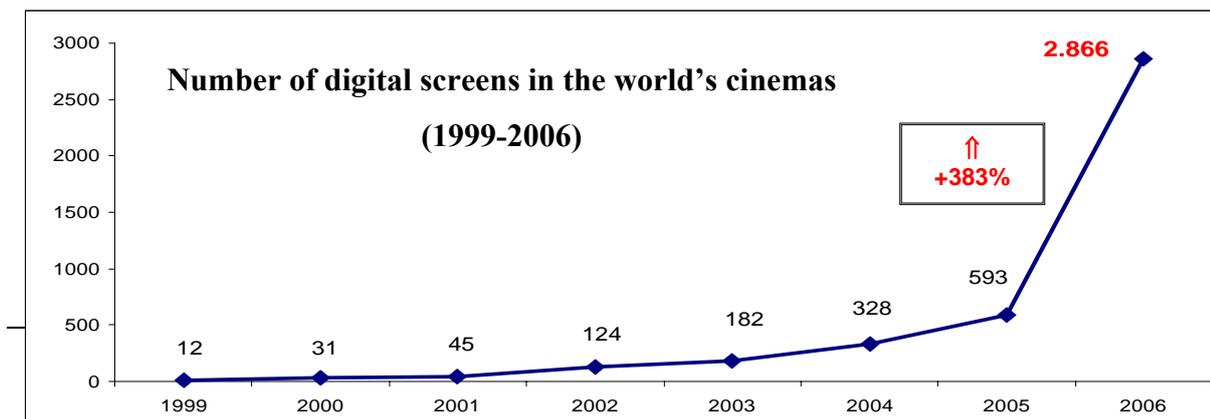
2006 was the year of watersheds.

This is the mood of those keeping a close watch on the spread of D-Cinema internationally, a revolution that begins as purely technological but which is destined to produce effects, especially of a commercial nature, on the business of cinema exhibition, transforming it into something different from what we know today.

We can even speak of surprise. After the increase in the number of screens adopting digital projection technology in 2005 (+81%), the idea circulating in the sector was that 2006 would be slower, “a transition year, with a more moderate growth rate compared to the previous year”. In fact, many people believed that the market was in the position of having to “*cross the chasm*” of the drop in sales that is sometimes to be seen after the launch of a new product: when purchases by innovators and early adopters are no longer present and a way has not yet been found of getting through to the late majority¹.

Instead, what has happened? In February 2007, as every year, MEDIA Salles published the figures on the number of digital screens worldwide² and there was confirmation of the new development that had already been glimpsed in the first half of 2006: on 31st December 2006 the number of digital screens had risen to 2,866, with a 383% increase compared to the previous year! An exceptional growth rate compared to the past, as shown in the following graph.

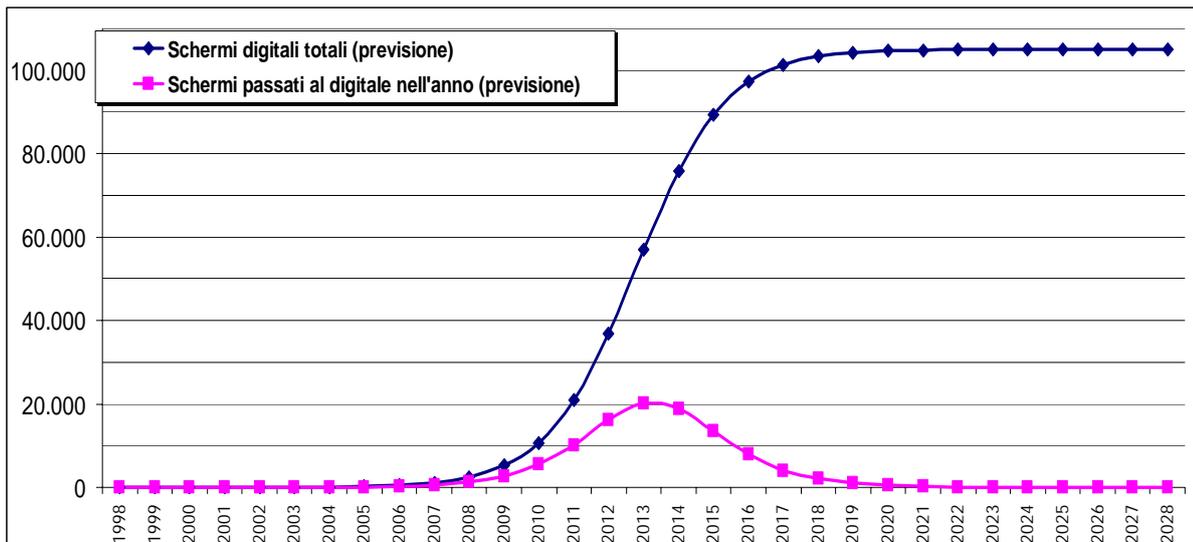
The enormous growth (the highest ever recorded since the introduction of D-Cinema in 1999) is an average of very different rates. Asia and Europe continued to grow as in the past, respectively +70% e +168%), whilst it was North America that took a stride forward with a growth of 1,031%. What were the reasons? First of all it should not be forgotten that until last year the USA was still a few steps behind in the process of introducing D-Cinema: in Europe, for example, there were more



digital screens than in the USA, thanks also to the incentive offered by public financing. Having said this, the acceleration in the spread of D-Cinema installations in North America is largely due to the effects of an aggressive promotional policy by AccessIT's Christie/AIX, the leading player in America's D-Cinema market. Although we are probably not witnessing the roll-out of digital cinema in the United States – the event that the whole sector is waiting for as the engine for worldwide diffusion of the new technology – the large growth recorded in the USA is visible to everyone and cannot be underestimated. It demonstrates the vitality and the unpredictable nature of a market that is increasingly difficult to reduce to a niche for the fanatics of new technology, and one that is capable of sudden leaps forward.

In this context it becomes more and more important to take a look at the near future of D-Cinema. As already outlined in the pages of MEDIA Salles' "DGT online informer"³, our proposal for an adequately reliable forecast of the spread of D-Cinema over the next few years is based on the use of a well-established forecasting tool, borrowed from scientific management and demographic research, which makes it possible, using quantitative data and strict mathematical logic, to show what will happen if the market continues to grow according to the criteria followed up to then. In particular, it is an "epidemiological" model⁴ which, in dealing with the adoption of new technology (D-Cinema), assumes that what is most relevant is the information circulating among potential users through direct contacts and/or as a result of the psychological or social pressure that an expanding market exerts on them. It is clear that the more exhibitors opt for D-Cinema, the less psychological resistance there will be amongst the others, thus reducing legitimate fears accompanying the change from a well-known and reliable technology (that of 35mm) to a new one to be tried out.

By using this model we have drawn up a new forecast which also takes into account the up-dated figures at the end of 2006. Despite the extraordinary growth recorded last year, the effects on our forecast are modest: an acceleration in the growth process of only one year, which confirms the reliable nature of the model used.



Note:

Translation of the two phrases in the box:

- *Total digital screens (forecast)*
- *Screens changing to digital in one year (forecast)*

In particular we forecast that, although 99% of the potential market (represented by the over 105 thousand screens in operation throughout the world) will not be saturated until 2019, the peak of adoptions will already have taken place at 2013 (with over 20 thousand new installations), a year in which technology based on 35mm film should be overtaken. It is interesting to note that the model foresees a particularly slow phase in the completion of market saturation: over 9 years for the final 1% of cinema screens to adopt D-Cinema. This forecast is coherent with a sentiment that is widespread in Europe, i.e. that a small number of cinemas will be more resistant to the changeover to digital, either because of being economic-commercial outsiders or because of an extra-rational choice which will lead them to continue using technology by then considered outdated, over the course of the next twenty years.

One closing remark must be made. Reality is obviously (by definition) more complex than the model proposed and, like any forecast, it must be taken with a pinch of salt. The accuracy of the model's forecasts could be improved by introducing further elements, making it more complex, such as the reduction in the price of digital projectors (an average of -16% each year since their introduction onto the market), the inclusion of an external source of communication (e.g. the decision by the majors to change to D-Cinema) or the varied nature of the potential users. What seems most important to us in the light of the new figures, however, (and what we are already working on) is the elaboration of two different forecasts: one for North America and one for the rest

of the world (including the EU). In the USA the world of cinema exhibition is characterised by greater concentration (the Regal cinema chain alone possesses as many as 6,386 screens), which means that when a chain decides to change to D-Cinema, this causes a sudden leap forward in the total of digital screens, according to a process of stochastic diffusion which is different to the more uniform (and thus more easily foreseeable) one followed by markets in Europe and Asia. As confirmation of this observation, the average number of digital screens for every cinema having at least one D-Cinema installation grew from 1.3 in 2005 to 2.9 in 2006, showing that it is mainly the multiplexes (generally part of large chains) that are choosing D-Cinema and no longer a few pioneer independent exhibitors.

Nevertheless, we believe that by using this analysis we can offer a useful element for the debate on D-Cinema, not so much by following the fashion for playing at future predictions (we do not have a crystal ball and neither does anyone else), as by offering a working hypothesis that is sufficiently well grounded as to encourage reflection and discussion amongst economic players internationally (from the small independent exhibitors to the companies offering technology and services) and policy-makers. The horizon as regards time is not short-term but time marches on: in 5 years D-Cinema could shift from being marginal (today it is used only for 3% of the world's screens) to one that is worth billions of euro, with important implications, not only in terms of business and technology, but also in socio-cultural and therefore political terms.

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Notes:

1. Cfr. Crossing the Chasm, G. A. Moore, ed. Collins, 1991.
2. MEDIA Salles, "European Cinema Yearbook – 2006 final edition".
3. MEDIA Salles, "DGT online informer" n. 12.
4. Cfr. Mansfield 1961, Mahajan 1993, Manfredi 1996.

Growth of D-Cinema (Dec. '05-Dec. '06):

▶ **Europe: +168%**

▶ **North America: +1,031%**