

# DigiTraining Plus: New Technologies for European Cinemas

Kuurne 31-3-2007

## **D-Cinema: answering the big question “WHEN?”**

A reliable forecast based on a mathematical model of prediction – PRINTED VERSION

# Outline

- Who I am
- D-Cinema: Pros & Cons
- It's not magic but commonsense and maths
- D-Cinema: 1999-2006, the sales history
- **The new forecast**
- How not contradicting yourself
- 2006 the year of the watershed
- US market is rolling out?
- Other scenarios
- To summarize

# What's D-Cinema?



*"D-Cinema is the biggest technological change in the field of cinema since the advent of sound"*

**SHORT TERM**

**LONG TERM**

## DISTRIBUTORS

## EXHIBITHORS

## AUDIENCE

### WHY ADOPTING

- › Duplication of movie copies will be reduce to zero
- › More flexible distribution strategies
- › Time to market reduction

- › Transportation costs reduced to 1/10
- › Diversified theatres offering
- › More flexibility in shows planning

- › More perceived value
- › Better vision quality

### WHY NOT ADOPTING

- › Content Right managment, piracy

- › Huge financial effort
- › Leaving a reliable technology (35mm)
- › Uncertain Standards

- › (none)

It's not magic, but....

## COMMONSENSE

### THINKING AS A CINEMA EXHIBITHOR DOES

- WHY SHOULD I PASS TO D-CINEMA? WHY NOT: **THE TUG-OF-WAR**
- **IMITATION**: THE MORE EXHIBITHORS OPT FOR D-CINEMA, THE LESS PSYCHOLOGICAL RESISTENCE THERE WILL BE AMONGST THE OTHERS

## MATHEMATIC

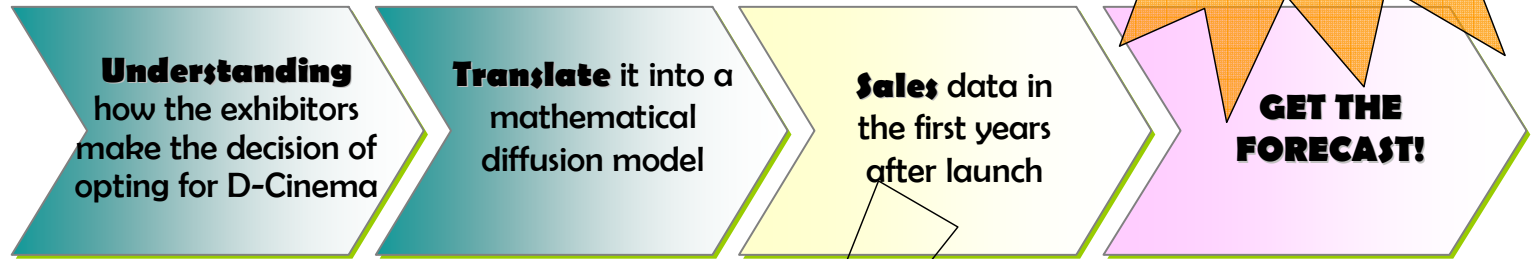
### FROM WORDS TO EQUATIONS

- **MATHS DIFFUSION MODELS**: IT'S NOTHINGELSE BUT A PORTRAIT OF HOW A MARKET WORKS
- THE EPIDEMIOLOGICAL AND PURE IMITATION MODEL

IT ONLY MAKE IT POSSIBLE TO INDICATE, ON THE BASIS OF FIGURES AND STRICTED MATHEMATICAL LOGIC, WHAT WILL HAPPEN IF THE MARKET CONTINUE TO GROW ACCORDING TO THE ASSUMED PATTERNS

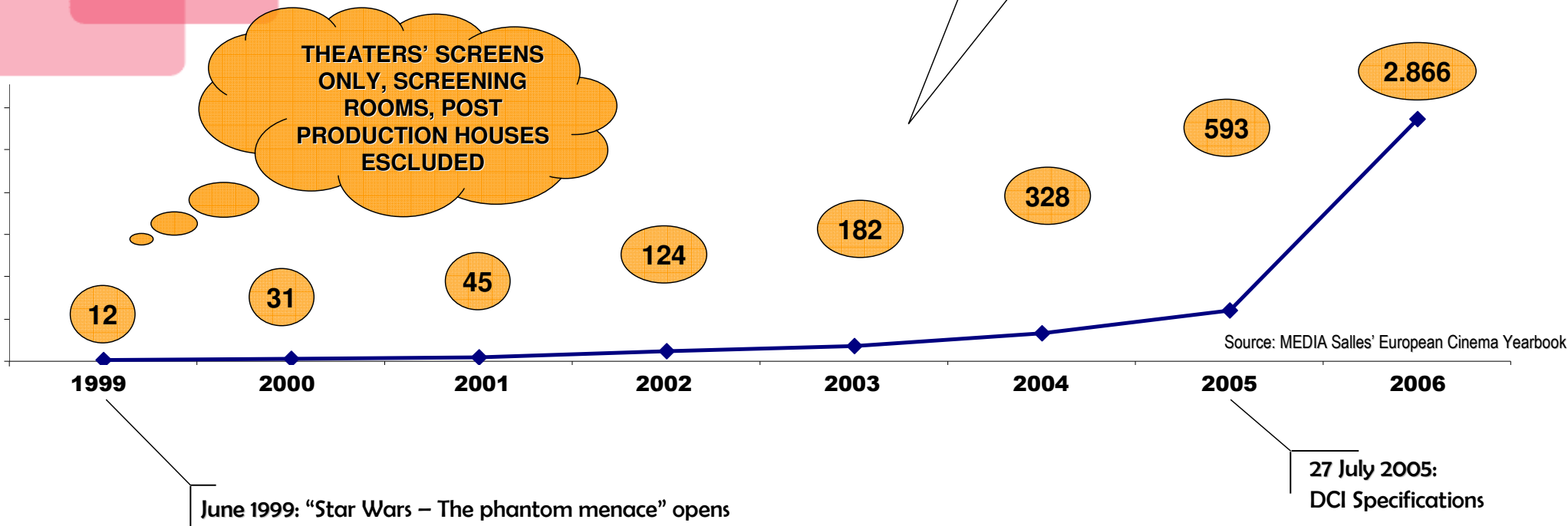
**THE FORECAST**

# 1999-2006 the sales history



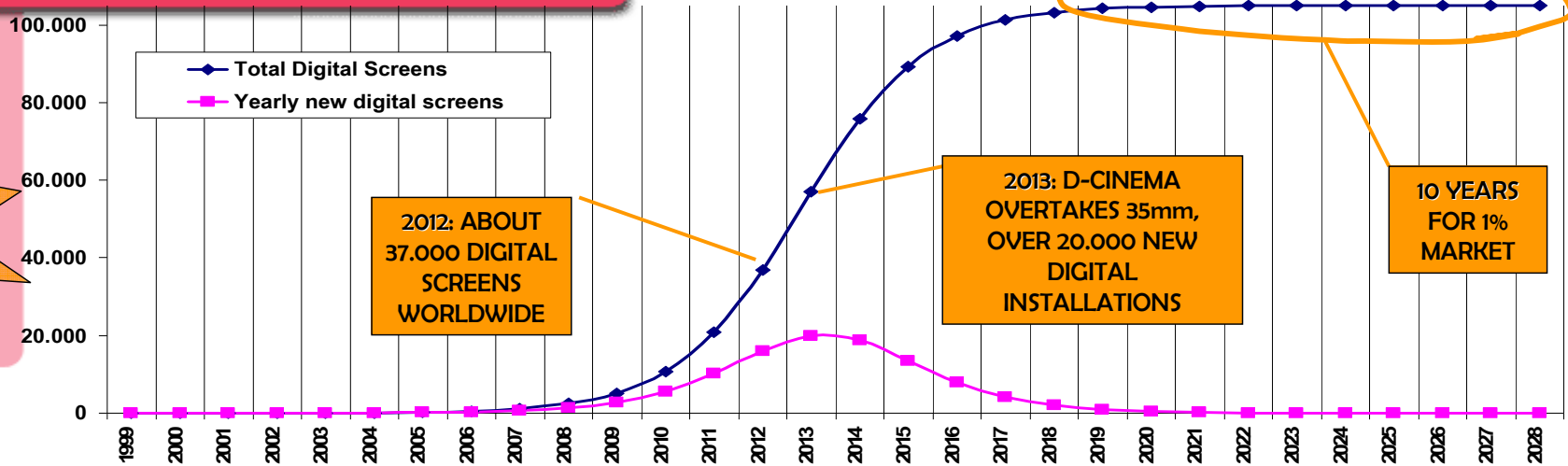
**TODAY DIGITAL SCREENS ARE ONLY 3% OF THE WORLD'S TOTAL**

**THEATERS' SCREENS ONLY, SCREENING ROOMS, POST PRODUCTION HOUSES ESCLUDED**

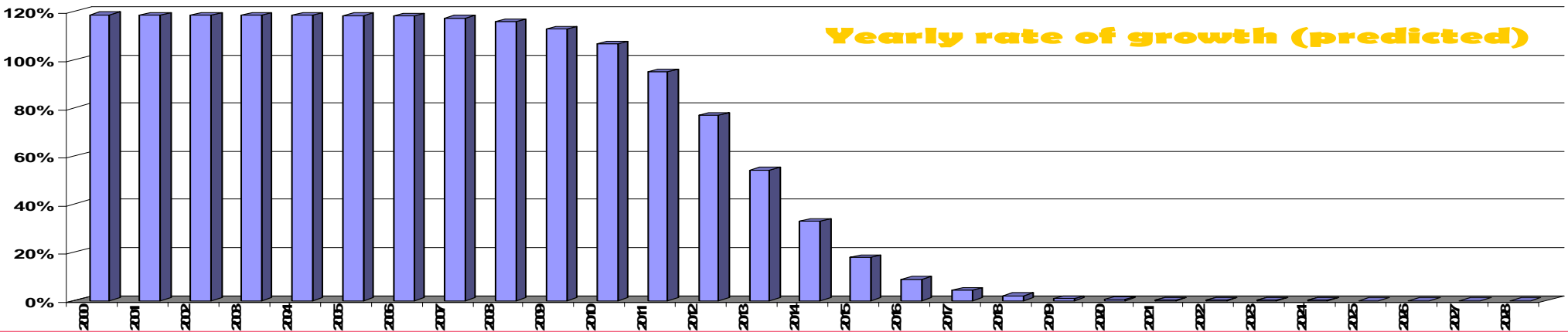


# The FORECAST!

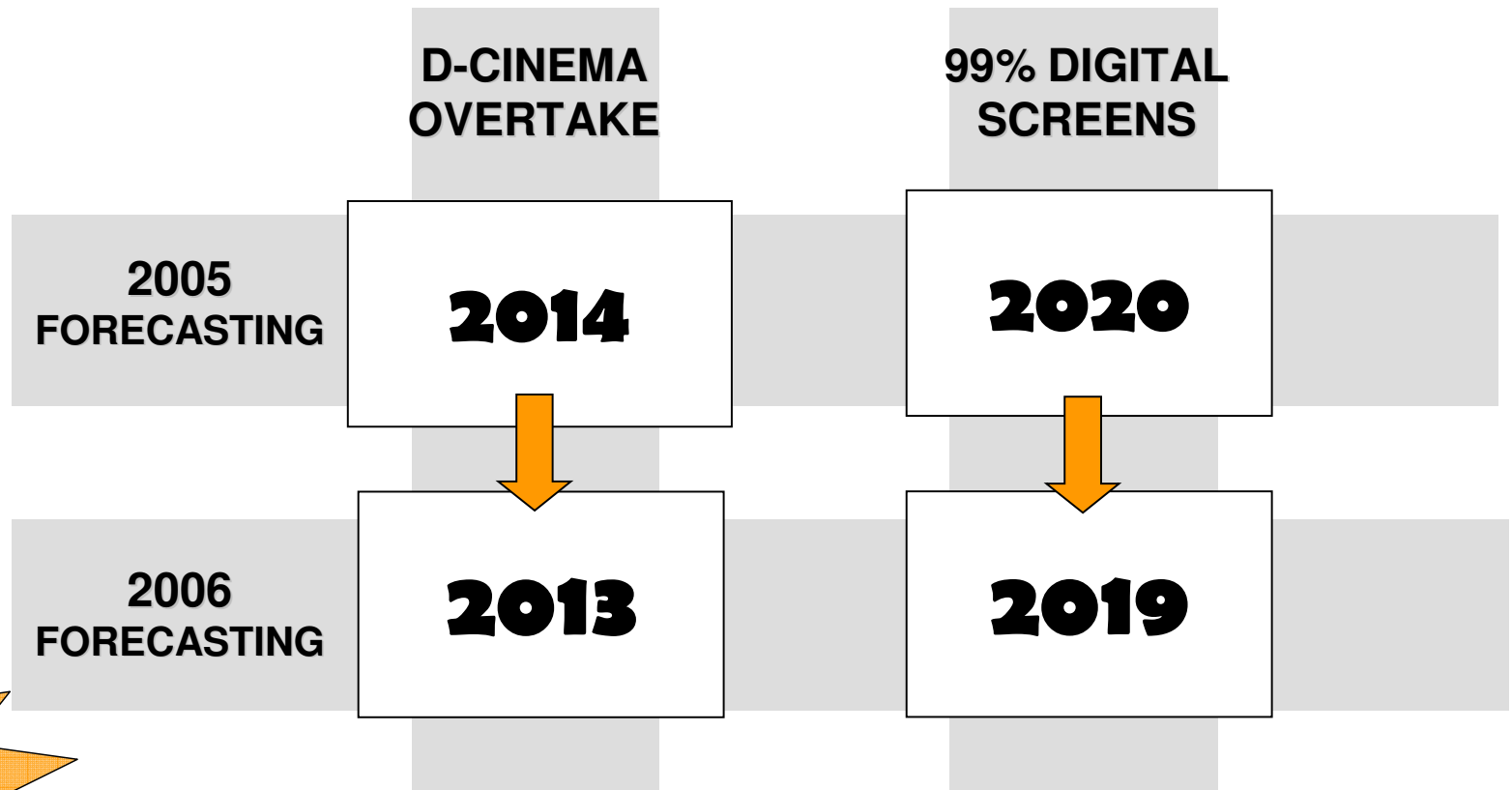
**D-CINEMA MARKET IS A 8 BILLIONS EUROS MARKET!**



- **IT'S NOT SCIENCE FICTION: ONLY 6 YEARS LEFT TO GO!**
- **THE FINAL 1%: LAGGARDS OR *CINEPHILES*?**
- **A RELIABLE MODEL: NO ESPONENTIAL GROWTH FOR EVER**



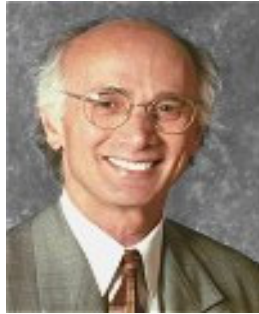
# How not contradicting yourself



**A CONSISTENT PREDICTION IS A GOOD PREDICTION!**

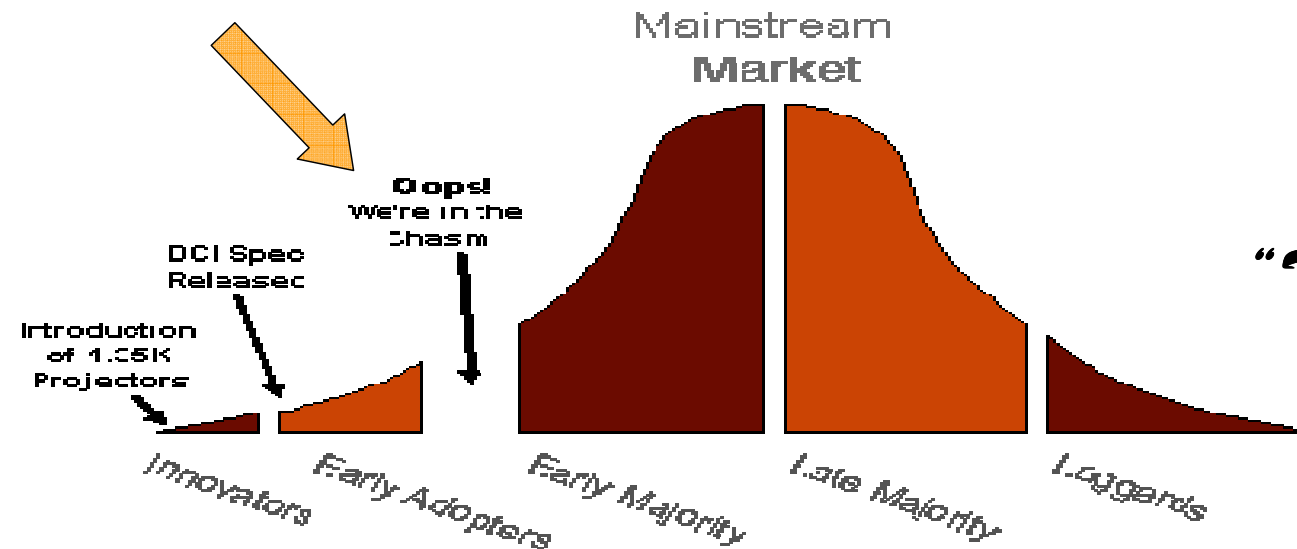
## 2006: year of the watershed

D-Cinema installations in 2005: **+81%**



*"I expect we'll experience a slow-down in adoption rate in the near term until more comfort is gained with interoperability, specification and cost issues"*

**Michael Karogolian**, President of MKPE Consulting  
(California): 25 years of experience in cinema technology



*"The market is in the position of having to cross the chasm"*

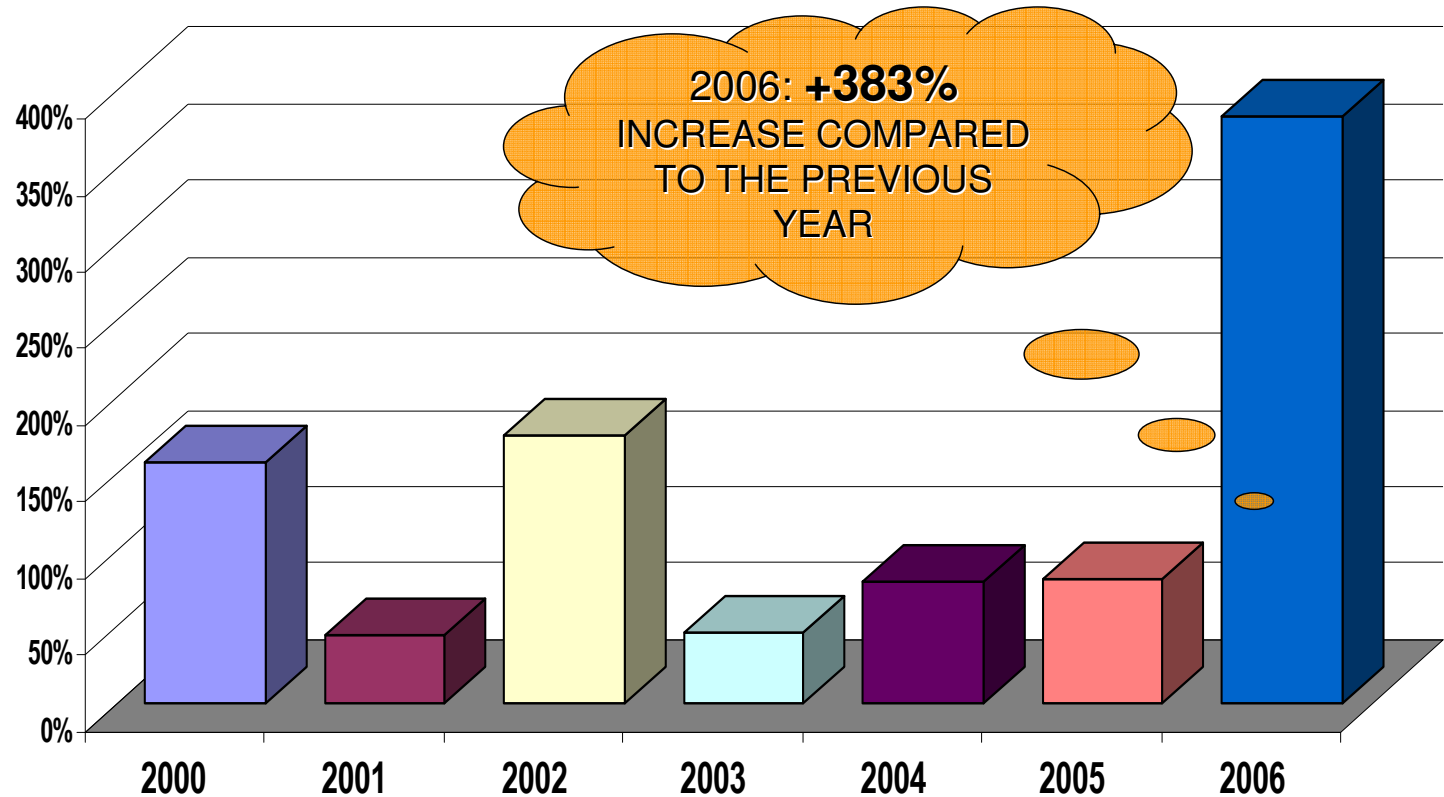


2006: year of the watershed

## Instead, what has happened?

The highest growth since the introduction of D-Cinema

D-CINEMA  
INSTALLATIONS:  
YEARLY GROWTH  
RATE



# What happened?

	2004/2005	2005/2006
NORTH AMERICA	<b>101%</b>	<b>+1031%</b>
EUROPE	<b>240%</b>	<b>+168%</b>
ASIA	<b>50%</b>	<b>+70%</b>
REST OF THE WORLD	<b>10%</b>	<b>+30%</b>

D-CINEMA  
INSTALLATIONS:  
YEARLY GROWTH  
RATE

## USA is rolling out?

For 6 years USA was behind in the process of introducing D- Cinema: until 2005 there were fewer screens than in Europe!

**UK INVESTED 17  
MILLIONS € IN  
D-CINEMA**

*"I don't think that the US market has really took off as only one player is actually moving i.e. Christie/Aix – by self-financing its deployment. The other players are still in transition to roll-out."*

**Glenn Wastyn, BARCO**

*These numbers are misleading. What you should be looking at is D-Cinema sales not installations. There are approximately 3.300 digital systems sold in the US today. Of these less than 1000 have been installed to date; the installation backing is so great that sales could come to a complete halt and the number of installation would continue to rise for another year or so"*

**Michael Karogesian**

**CHRISTIE/AIX  
PLAN TO REACH  
4000 SCREENS BY  
2007**

**....yes, but please don't underestimate the facts!**

## Other scenarios

**There's an important TRADE-OFF**

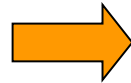


➤ Number of cinema screens worldwide varies



- LONGER PROCESS
- MORE YEARLY SALES

➤ Projectors price reductions



**FASTER PROCESS**

**PROJECTORS PRICE HAS FALLEN BY AN AVERAGE OF 16% EACH YEAR**

➤ Relevance of an external source of information (e.g. the *majors* definitely opt for D-Cinema)



**FASTER PROCESS**

➤ D-Cinema technology varies over time



???

**105.000 CINEMA SCREENS WORLDWIDE: +5% IN THE NEXT 5 YEARS**

## Other scenarios

- USA vs. the rest of the world: different countries, different cinema exhibition markets, **different forecasts!**

**REGAL CINEMAS  
OWNS AND  
OPERATE 6386  
SCREENS!**

Average number of  
screens per cinema

EUROPE

2,6

USA

6,1

When a (big) cinema chain decides to change to D-Cinema, this causes a sudden leap forward in the total of digital screens

In December 2005 *Chirstie's/Access IT* sold 2300 systems to the big chain *Carmike Theatres*, this is a very significant sale for them, as Access IT to date has sold only 3000 systems!

Average number of digital  
screens per cinema (world)

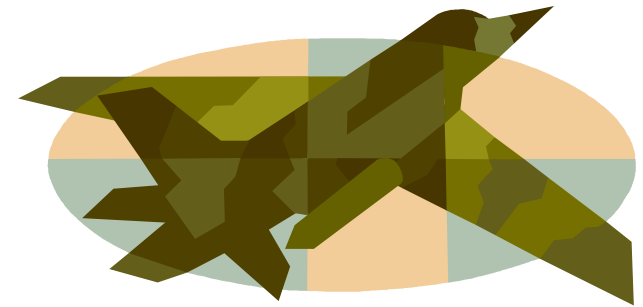
2005

1,3

2006

2,9

## The (real?) US rollout



### % Cinema screens using DLP™ technology

	EUROPE	ASIA	USA
today	2%	1%	5%
In 2011*	20%	10%	50%

\* Dodona Research forecasting 2006

## In conclusion

D-Cinema will be a wide-spread reality in few years



**BE PREPARED OR BE OVERWHELMED!**

D-Cinema began as a purely technological change, but is destined to transform the business of cinema exhibition into something different from what we know today

**NOW IT'S UP TO YOU, EXHIBITOR!!!**



**Grazie!**

- **MEDIA Salles**
- **Michael Karogosian**
- **Glenn Wastyn**
- **Charles Weinberg (Vancouver University)**
- **Piero Manfredi (Pisa University)**

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