Europa Cinemas: Proposal for a Digital Cinema business-model

Presentation of the first results for
Europa Cinemas Conference 2006

rmc rinke medien consult GmbH

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Europa Cinemas

Ladies and gentlemen,

First of all we would like to thank Europa Cinemas for authorizing us to develop the implementation of digital cinemas based on a european business model.

Today we would like to present you the results of the past half year, in which we concerned ourselves intensely with the current business model but also mainly with the model, we developed. In our opinion, this business model owns a lot of new aspects and shows the chances of a fair model, which includes all market partners in almost all countries.

I would like to give you a short overview of our presentation:

Business Modell for Digital Cinema

- Types of attitudes towards Digital Cinemas
- Why taking everybody along?
- Why this study, what are the motives and objectives?
- General assumptions and basic figures
- Explanation of the „flexible print fee-model"
- Description of the national funds
- Economy for the fund
- Economy for the cinemas
- Economy for the distributors
- Conclusion

At first, I would describe the two different attitudes towards cinema and try to answer the question, why an solidaric approach is necessary. Then I

like to tell you something about the background, the motives and the target of our study.

In a second step I will present you general assumptions and basic figures, which influenced our calculations.

The main idea of our model is based on a kind of fund, and its construction is similar in all countries.

Our calculations will illustrate the economy for the fund, the cinemas and the film distributor.

Concerning the discussions about implementation of digital cinema, it is traceable, that it is a delicate issue, to create a model, which is accepted by all market participants in all countries. Not only the complexity of the topic, but also the different interests cause often dislike for those who recommend such a business model.

Anyway, today, we try to present you a perspective with

What do you think about D-Cinema?

The pessimist has fears and anxities

- What does the equipment cost?
- Who is going to pay for it?
- Will there be guarantees?
- Less diversity in several respects.
- Will we loose independence on programming?
- Will my investment be safe for a long term (Various technical standards)?
- Will I be able to survive in future or will I be crowed out of the market?

The optimist expects more revenues and increasing business

- Cost reduction on film releases
- Improvement of film delivery and more diversity.
- Modern image and higher ticket prices.
- New content (other digital stuff) in high quality, so new business.
- Increasing revenues from the advertising market through cost reduction and more flexibility
- Reduction of administration costs through the use of a play-out center (network operation center).

We already introduced our topic yesterday with the questions, what pessimists and optimists expect from digital cinema?

I think most of the exhibitors see more questions and problems, but few see chances, which are the following.

How to change the situation?

- Knowledge.
- Transparency.
- Concrete answers to the basic economic questions.

Different ways and strategies towards „digital“

- Concepts, that are based on market-power only.
  - ➢ Do not take care about the „smaller“ ones.
  - ➢ Contracts are made by the big players.
- Concepts, that are based on solidarity and „political“ targets.
  - ➢ Tries to find a way, that enables to take use of the advantages through all participants.

W believe that there are only 2 strategies, which can be described either markedpower, the darwinistic way, or the solidarnocz-way.

Why does it make sense to search for a way for (nearly) all?

- We would see a significant damage in the image of the film industry, if we would accept a development, where perhaps a quarter or a third of all screens are crowed out by something, that is called an innovation.
- As a result of such a development the industry is likely to loose a lot of political good-will. The economic damage could be tremendous.

Potential economic damage through VAT-privileges

	Box Office 2005	VAT reduced	VAT normal	difference
Germany	744.989.000	7,0%	19,0%	**70.210.225**
Spain	634.951.000	7,0%	16,0%	**46.040.598**
France	1.024.139.000	5,5%	19,6%	**114.444.356**
Italy	588.963.000	10,0%	20,0%	**44.618.409**

The economic damage can be easily seen in terms of political motivated advantages in the VAT-Taxes. In almost every country film and cinema benefit from reduced vat. If the filmindustry is leveled up on the regular rate, you can see how big this damage is in these countries. This indirect subsidy is endangered when small an arthouse-cinemas were displaced by the rollout of digital cinema. The difference between reduced and regular rate is even higher than the cost of prints in total.

Motives and objectives of the study

- Open access for all market participants (distributors and exhibitors of all size) in all countries
- Fair cost-benefit structures from the perspective of investors and users of a D-cinema-system
- Scalability of the model in the course of introduction
- Transferability to different states and regions
- Acceptance by all participants
  - **Avoidance of crowding out effects, both for distributors and exhibitors.**
  - **Assurance of a true and fair competition.**

The fact, that Europa Cinemas asked us to develop a business model doesn´t mean, that just cinemas which are members of Europa Cinemas with emphasis on european or art films are considered. The european community asked Europa Cinemas for the development of a business model regarding the implementation of digital cinema. The background of these interests lead to the following targets of the study:

Open access for all market participants in all countries

Fair cost-benefit structures from the perspective of investors and users of a D-cinema-system

Scalability of the model in the course of introduction

Transferability to different states and regions

Acceptance by all participants

Avoidance of crowding out effects, both for distributors and exhibitors.

Assurance of a true and fair competition

Recapitulating, we can say, that just a democratic and free business model can keep the european film and the variety of cinemas.

General assumptions

- Technical acceptance of DCI and 2K-standard by all participants. Interoperabilty and all other technical questions are solved.
- Open access for all participants
- The questions of the key-management and playout-rights are checked between distributors and exhibitors
- Producers are responsible for the costs of the digital master
- Conversion of the whole market
- Producers must be part of the all-industry-agreement
- **Unless these points are not satisfactorily negotiated or answered, there is no possibility for a fair and broadly based roll-out.**

Regarding this topic, here are some general assumptions, partly problems which are likewise difficult as the development of a business model itself. Anyway – at least concerning the german market- a solution for these aspects is absolutely necessary.

Technical acceptance of DCI and 2K-standard by all participants must be guaranteed.

Questions regarding interoperability, compression-standards, security technology and others must be solved.

Further open access for all participants must be secured.

One of the main problems is the question of key-management and playout-rights: The predominant part of german exhibitors won´t accept that just the distributors decide, when which film on which screen is played. Here a compromise which saves both sides of interest should be found.

The supply of digital content must be secured on the long run. The producer are responsible for the delivery of the digital master. Especially concerning films with few prints, to include the master costs would lead to a big deformation. The market launch should consider national common markets. The consideration of all participants should be planned from the beginning.

At present Discussions about the financial distribution of cost and benefit are mainly concentrated on distributors and exhibitors. Producers must be part of all-industry-agreements. Questions regarding competition law must be clarified.

Unless these points are not satisfactorily negotiated or answered, there is no possibility for a fair and broadly based roll-out. Island-solutions concerning single markets or companies are contrary to a broad roll-out. Insofar, the politic should make use of time, as long as the roll-out didn´t start yet.

Basic Figures

- Costs of the equipment
- Films and prints per country
- Screenings per cinema/screen
- Lifetime of the system
- Costs of a print
- Costs of a digital cinema package (DCP)

Basic figures are the costs of the digital equipment, costs of a 35-mm-copy, the costs of a DCP as well as the endurance of the technique. Besides these costs, on the other side, the status quo in Europe was designed, on the basis of five reference markets, which are for example the number of copies, number of screenings per cinema as well as other market figures.

Analysis of programme schedules

Analysis of programm schedules	Average	Example 1	Example 2	Example 3	Example 4
Screens	4	10	5	5	1
Type of programm	*Various*	*Mainstream*	*Arthouse*	*Arthouse*	*Arthouse*
Total No. of Screenings	5.178	16.081	8.360	7.680	1.007
Total No. Of films shown	175	195	227	73	164
Screenings per Screen	1.376	1.608	1.672	1.536	1.007

Initially, we analysed 60 cinemas of each important european country, concerning their type of film program. Point of interests were especially the number of different films with their respective number of screenings as well as the respective visitors.

Here are some examples. You can see that the average of screenings lies at about 1.370 screenings per screen, actual numbers vary between 800 and 1.700. The number of films which were shown differs a lot, as you can see in example 3 and 4. The single-arthouse in example 4 showed 164 films on one screen whereas the arthouse-center in example 3 with 5 screens showed just 73 films. These big differences must have been considered in the business model.

Market Data 2005

Market Data 2005	France	Germany	England	Spain	Austria
Films released	684	394	472	417	272
Cinemas	5.300	4.889	3.357	4.375	552
No. of Prints	78.496	57.793	50.654	46.579	7.654
Total Costs Prints	**78.496.000**	**57.793.000**	**50.654.000**	**46.579.000**	**7.654.000**
Costs per Screen	14.811	11.821	15.089	10.647	13.866

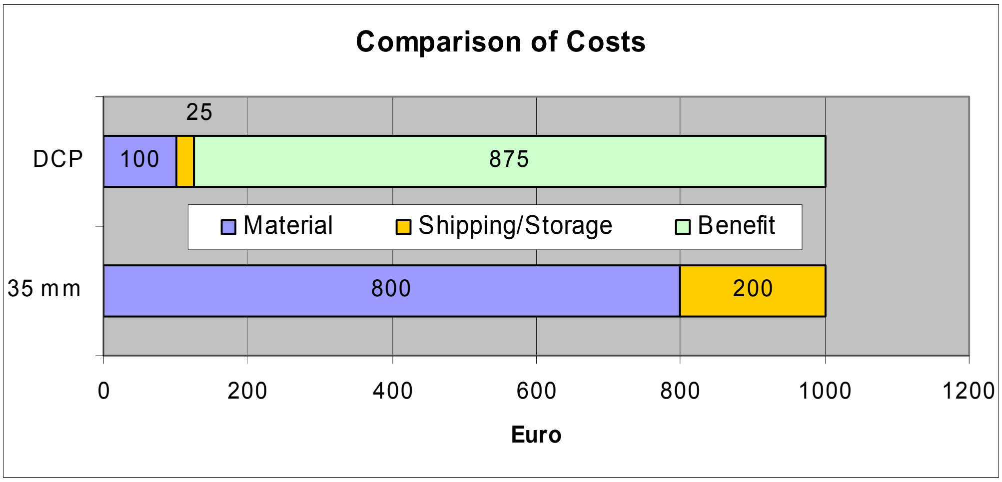
Very important was the number of films with their respective number of prints.

Using EDI Nielsen, we got the number of prints per film from the five markets you can see here and can also calculate the saving-potential in the respective countries by the loss of 35-mm-prints.

If you relate the costs to the number of screens, big differences are visible.

For example in England the costs per screen are 50% higher than in Spain. Also in France, the multiplicity of films leads to high costs of prints per screen.

D-Cinema Basic Effect



One of the main questions of the business model is the difference between the current and the future costs. Regarding the current costs of a 35-mm-print, they consist of costs from the processing laboratory, packaging, storage, shipment and destruction.

Almost all sources come from an average of around 1.000 € per print with a large dispersion regarding length, speech, subtitles and number of copy per film.

The future costs are conditioned by the making of DCP, say the hard disk with the compressed and encoded film as well as its´ shipment. These costs partly begin under 100 € per copy and go up to a maximum of 150 €.

The costs for the playout-center are discussed later.

The difference between the current and the future costs per copy show the savings on the side of production and distribution.

According to this, the next question should be, how much of this are the distributors willing to give for a refinance of the projection-systems. In our opinion the benefit stands at about 900 €. This amount is attested by technical service provider.

3 steps to our model „Flexible Print Fee“

- 1. Lifetime of the system
  - A defined and guarantied number of operating hours.
  - A D-cinema equipment is considered as a machine or a car.
  - A reasonably lifetime realistic should be up to 20.000 hours.
  - The lifetime of a D-cinema system with 2 screenings a day lasts two times longer than in a cinema with 4 screenings a day.
- 2. Payoff-period according to usefull life
  - If a technology is used for 4 years, the payoff-period is 4 years.
  - If a technology is used for 8 years, the payoff-period is 8 years.
- 3. Flexible print fee
  - Everyone who uses the technology pays for it (distributor, advertising and the cinema itself).
  - The fee is calculated to the costs per hour.
  - 3-4,50 € /hour is a easy calculated figure

Before we demonstrate the fond-model detailed, we want to discuss an important thought, that underlies the fond. All of you know the virtual print-fee-model, in which the exhibitor gets a part of the amount, the distributor could economize, to compensate the investment-costs. The problem of the virtual print-fee for second-run-theatres or circulating prints is evident. For this reason we developed a model of flexible print-fee, shortly described in the following. You can compare the flexible print-fee-model with a rent or car-sharing.

First step regards the lifetime of the system. The endurance of the system is really important for our calculations. As the cost of driven kilometres are geared to the average driving power of a car, we also calculate the costs of use of the system based on the lifetime of the projector. As the lifetime of projectors and servers is very different and technical news especially regard servers and software, we just take a look on the projector, concerning the lifetime of the system. As buying a projector means a long-term investment, a long-term assurance of use must be also guaranteed. The technical developer are reserved in giving information about the lifetime of their products at the moment. We think, there will only be space for a broad roll-out, if the technique bears up to a using-time of 7 years with an average using-time of 1.320 screening per year. That means, that cinemas with less screenings per year can use the technique for a longer time. An aspired lifetime, that should also be guaranteed from the technical companies should be at least 20.000 hours. Technical service provider evaluate this endurance as realistic.

Second step defines the payback on the same time, the projector should orderly be used. If the time of use is short because of more screenings, payback happens in the same time and vice versa.

Third step is the flexible print-fee, which must be paid by anybody who is using the projector. This charge is the result of the division of the yearly debt-service and the number of operating hours. Later we will show in detail, that the charge is located between 3 € and 4,80 € per hour.

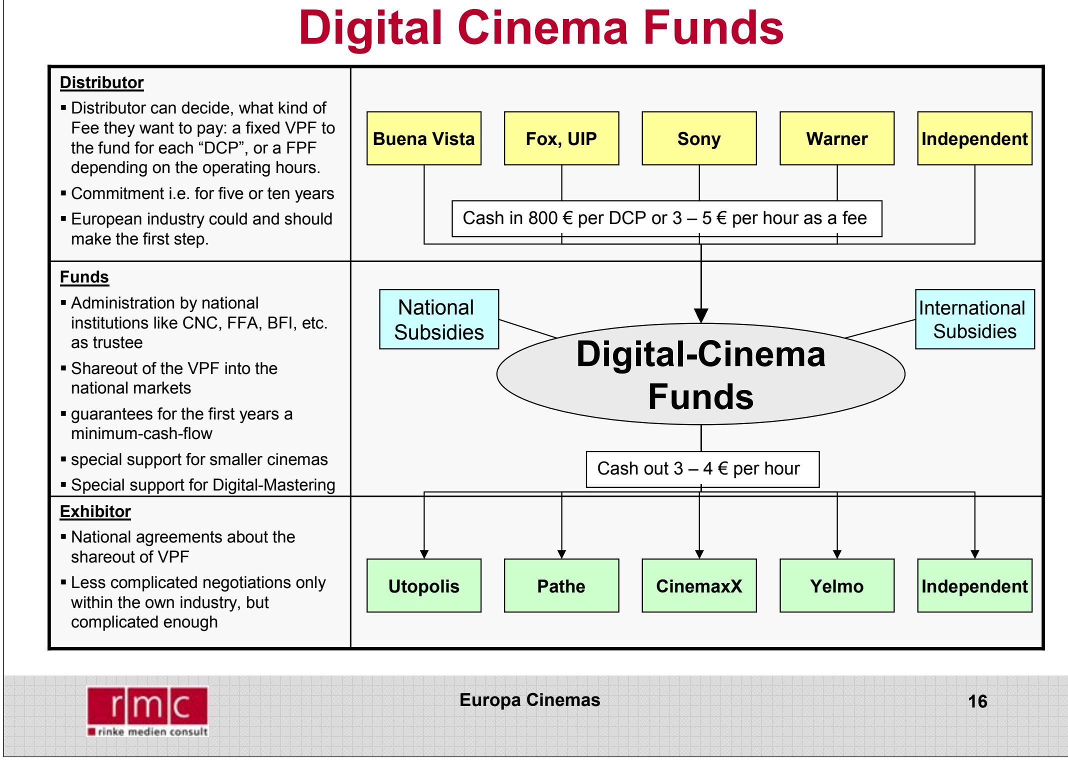
Evaluation of lifetime

Number of screenings/intensity	Average	Few	Many
Total amount of screenings	***1.320***	***842***	***1.684***
Screenings per week per screen	25	16	32
Duration screening in minutes	130	125	135
Operating hours per year	2.860	1.754	3.789
Estimated Lifetime D-Cinema	20.000	20.000	20.000
Operating Life-time in years	**7,0**	**11,4**	**5,3**

On this chart you can see the most important figures concerning the lifetime, again.

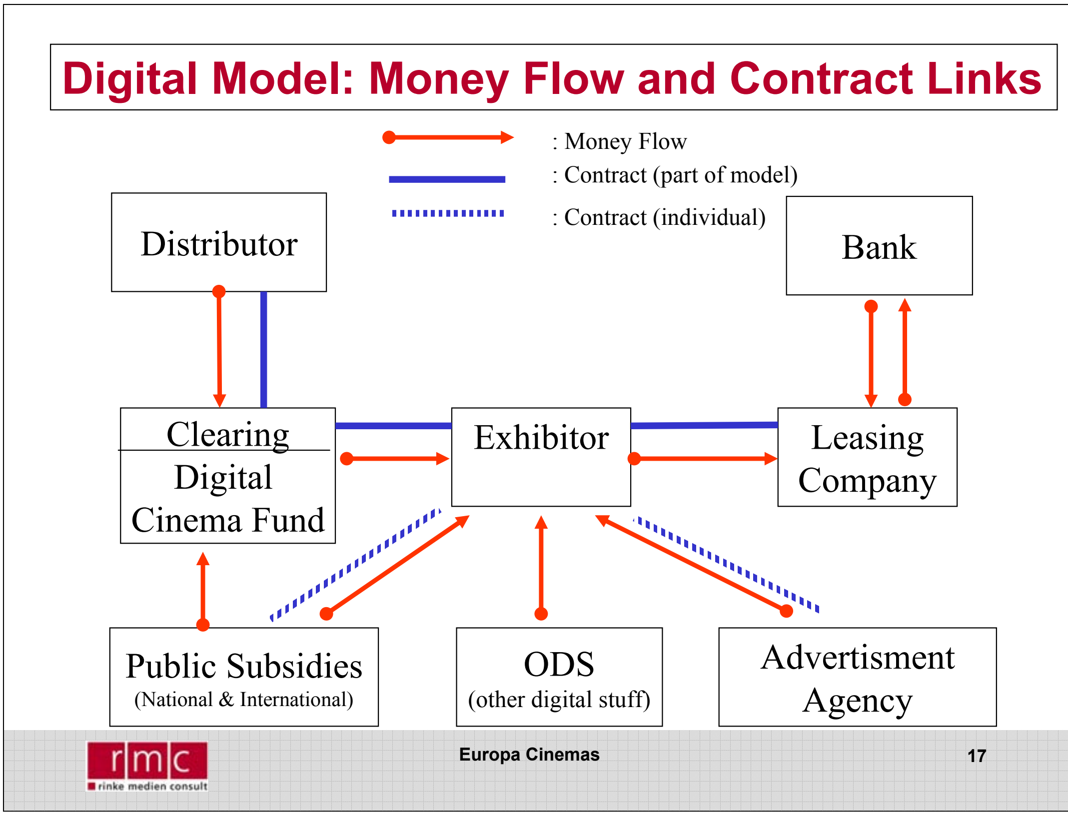
The three columns demonstrate those cinemas, which have an average, low or high number of screenings per year. The supposed lifetime lies between 125 to 135 minutes. The minutes for film with 110 and for trailer are the same, the minutes for the advertisements vary.

Provided that the lifetime amounts 20.000 hours, the outcome of this is a lifetime between five and eleven years with an average time of 7 years.



In this chart you can see, that the distributors pay in a fund, following a special system, which we will declare later on. The fund displaces the agreement between distributor and cinema. This fund gets help from national and european subsidies in the beginning and to back the smaller cinemas. The funds is caching out to the cinemas again, dependent on the lifetime. Regarding this fund, it makes sense to involve the national subsidies. Their subsidies concern not just the cinemas but also the distributors and producer. Please recognize, that the subsidies are not exclusive for cinema, but also for distribution and production.

The national funds should secure, that a commitment with the distributors guarantees a fast and complete supply with DCP.



The following chart reveals the network again. Distribution and fund conclude a commitment for payment, the exhibitors get their costs, depending on the operation hours. There will be a clearing point, that calculates the amount of inpayment and pay-off, depending on the height of investment and lifetime.

The exhibitor can either get the projector directly from the manufacturer and finances it in the traditional way by using capital resources and credit capital or he uses a leasing-company, which in turn finances itself with a bank. In this case, the leasing-company remains as the owner of the projector. In both cases, the contract between exhibitor and fund is the assurance.

To fill in the gap between costs and revenue of the fund, the exhibitor has to open up new resources. In case of smaller rural exhibitors or arthouse-cinemas, these resources could be national subsidies. Furthermore anyway they get revenue out of advertisement and ODS. There are manifold possibilities, which we don´t want to deepen now.

Basic figures

Parameter CASH-in	number
Number of DC-Systems 1. year	500
DCP per screen (formerly prints)	14,5
VPF (fix per DCP)	800 €
FPF (flexible fee per hour)	4,80 €
Usage VPF	50%
Usage FPF	50%
DC-system is used 60% in year 1 up to 100% in year 3	
Average number of Screenings per DC-system	1.320
Parameter Capital-costs	**number**
Investment per system incl. installation	60.000 €
Estimated operating hours	20.000
Costs per operating hour (year 1 - 3)	4,80 € - 3,07 €

Our calculations for any country base on a premier installation of 500 systems. The number of delivered films per screen and year (DCP) is based on the figures from EDI. The number of DCPs are connected with the fee, here we chose 50% flexible or 50% fixed fee. The height of the fee is as chosen, that there´s a 10 % saving for the distributors from the beginning, when using the digital system. The willingness for chosing the flexible alternative could increase by initiating a maximum amount. One possibility would be, to cut the flexible fee at a maximum of for example 1000 €.

The intensity of use lies at 60% of the screenings during the first year and increases in the two following years to 20% more. The number of screenings is according to the average and consider three screenings during the week and four at the weekend.

Concerning the investment for the projector, costs for the installation are included. Costs for the modification are unaccounted, although there are some in important height. Realistic costs for the first installation lie at about 60.000. Further price-reductions are expected for the following years, when the second round is installed. The number of hours as well as the costs per hour are also declared.

This calculation does not include the investment for servers. All experts reckon that at least in the beginning the server must be up-graded regularly. Those costs are calculated separately on the level of the exhibitors. Same to additional service and repair-costs.

Additional figures exhibitor

Parameters for calculation	2007	2008	2009	2010 - 14	Average
Maintenance per month	*150*	*200*	*225*	*250*	*261*
Lease of server (upgrade, full-service)	*200*	*200*	*200*	*200*	*200*
Contribution Advertising per month	*200*	*200*	*200*	*200*	*200*
Additional Revenue feature Film	*113*	*150*	*188*	*938*	*173*
Additional Revenue per screen/month	*130*	*150*	*180*	*180*	*170*

To get a general view, the situation must be demonstrated for exhibitors purposes.

Besides the principal costs, the rent for the server and the higher service and repair-costs must be considered. We calculated the hiring of the server with about 200 € per month, according to current offers from XDC. Probably the service-costs increase with lifetime of the machine, the estimated average amount per month is 260 €. Further revenues are advertisement and others. As a contribution from the advertising economy, an amount of 200 € per month and screen is calculated.

Additional benefits of averaged 170 € per month are for example a higher number of visitors by showing original versions, and the same amount for alternative content b2b or b2c-business.

Total Balance Exhibitor

Total Balance Exhibitors	**2007**	**2008**	**2009**	**2010 - 14**	**Total**
CASH-In Fund	3.482.400	4.643.200	5.804.000	29.020.000	42.949.600
Contribution Advertising Industry	1.200.000	1.200.000	1.200.000	6.000.000	9.600.000
Additional Revenue Feature Film	675.000	900.000	1.125.000	5.625.000	8.325.000
Additional Revenue alternativ content	780.000	900.000	1.080.000	5.400.000	8.160.000
Total CASH-In	***6.137.400***	***7.643.200***	***9.209.000***	***46.045.000***	***69.034.600***
Capital costs D-Cinema systems	3.769.313	4.464.375	5.122.313	22.827.188	36.183.188
Lease for Server incl. Upgrade	1.200.000	1.200.000	1.200.000	6.000.000	9.600.000
Additional costs for maintenance	900.000	1.200.000	1.350.000	7.500.000	10.950.000
Total costs	**5.869.313**	**6.864.375**	**7.672.313**	**36.327.188**	**56.733.188**
Net Result	***268.088***	***778.825***	***1.536.688***	***9.717.813***	***12.301.413***
Net Result per screen/system	***536***	***1.558***	***3.073***	***19.436***	***24.603***

The total cash-in, running over eight years is about 69 mio. €.

Administration costs were neglected.

For exhibitors purposes, a profit of about 25.000 € can be realised. However here we speak about profits, which also can´t be reached by numerous cases.

Total Balance Distributor

Total Balance Distributor	**2007**	**2008**	**2009**	**2010 - 14**	**Total**
Share of additional revenues	675.000	900.000	1.125.000	5.625.000	8.325.000
Cost savings 35mm-prints	4.350.000	5.800.000	7.250.000	36.250.000	53.650.000
Payments to the Fund	-3.482.400	-4.643.200	-5.804.000	-29.020.000	-42.949.600
Costs for DCP (125 € each)	-543.750	-725.000	-906.250	-4.531.250	-6.706.250
Net result	***998.850***	***1.331.800***	***1.664.750***	***8.323.750***	***12.319.150***
Net result per screen	***1.998***	***2.664***	***3.330***	***16.648***	***24.638***
Overall cost per DCP	***770***	***770***	***770***	***770***	***770***

For the distributors there is a positive balance, consisting of the calculated cost-savings of the same amount per screen and year by releasing films. This profit must be used for financing and supporting the playout-center.

IF you divide this amount by the number of DCPs the result is 770 € per DCP (or formerly print) which is an overall benefit in contrast to 35mm of 230€ or 23%.

Individual Profit-Loss-Account

- So fare, we got a feeling, what the result could be for an „average" exhibitor or screen. In reality, there will be no average result, but differences, that are depending on the individual circumstances.
- We simulated the cash-out of the funds and the individual parameters for a sample of typical exhibitors:
- Multiplex, 7 Screens, high level of admissions and box-office
- Traditional Center with 3 Screens and admissions below average.
- Arthouse Center with 5 Screens and average admissions
- Single Screen Arthouse

Variation of parameters

- There are at least 10 serious parameters, that can vary from one case to another.
- For us, it is likely to expect following structural differences:
  - Contribution of the advertising industry depends on the attractiveness of the exhibitors, thus will be different to a high extend.
  - Cost for investments, maintenance and lease for the server will –at least partly – depend on the economic power.
  - Additional revenues for Feature Film and new content will not be the same.

Results for single cases

Cash-IN & Total Balance 3rd Year	Multiplex	Center	Arthouse Center	Arthouse Single
Basic Fee	2.902	2.902	2.902	2.902
Cash-out per operating hour	8.706	7.123	10.421	5.936
Contribution Advertising Industry	3.600	1.800	2.400	1.200
Additional Revenue Feature Film	1.725	1.150	518	1.294
Additional Revenue alternativ content	2.400	1.200	1.800	1.200
Total CASH-In	**19.333**	**14.175**	**18.040**	**12.532**
Capital costs D-Cinema systems	9.391	10.058	13.072	9.066
Lease for Server incl. Upgrade	1.800	2.400	2.100	3.000
Additional costs for maintenance	2.700	2.100	3.300	1.800
Total Costs	**13.891**	**14.558**	**18.472**	**13.866**
Profit/Loss per Screen	**5.442**	**-383**	**-432**	**-1.335**

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The abstract shows: The multiplexes get best results. All other types of cinemas rest in deficit, even if you calculate additional profits. Concerning, that additional calculated profits are just speculative and not yet approved, results a chance-risk-situation with few advantage for the exhibitors.

I won´t go into details for the calculations. Anyway, you can see, that although the model is working all in all, imbalance is expected for single cases, depending on the type of cinema and emphasizing the need for subsidies.

Conclusion

- Digital Cinema Business Model is based on four claims
  - Distributors have to pay a fee of 800 € print or 4,80 €/hour.
  - Manufacturer of projectors have to guarantee a lifetime of at least 20.000 hrs.
  - Cinemas are responsible for maintenance and server lease but gain advertisers contribution, additional revenues from different sources and national or local subsidy.
  - Subsidy has to help smaller and arthouse cinemas according to national habits.

Outlook

- Serious negociations between distributors, exhibitors, producers and rights owners, public institutions, manufacturers and service providers with political assistance and impact. (Round table)
- Detailed plan for a roll-out, nation by nation. It should be recognized, that any public subsidy is a not a subsidy just for the exhibitors, but for the overall industry (value chain).
- Financial support by the European Commission and feasable solutions to finance the investment.

The main question is now: how is it going on?

We think, that politics has to create round tables and influence the negociations between distributors, exhibitors, producers and rights owners, public institutions, manufacturers and service providers with political assistance and impact.

2nd step ist the developement of an precise masterplan for a roll-out, nation by nation. It should be recognized, that any public subsidy is a not a subsidy just for the exhibitors, but for the overall industry (value chain).

At last Financial support by the European Commission and feasable solutions to finance the investment is needed.

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