

Digital Cinema Economics

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Analysis of the economic consequences of digitalisation by PriceWaterhouseCoopers

ordered by the Federal Film Board of Germany (FFA)

What are the costs of D-Cinema?

What are the changes and measures regarding revenues and expenses?

Is D-Cinema profitable?

Is it financially affordable across the country?

Conversion costs

App. 3.800 relevant screens

77.000 € Investment per System (incl. installation and infrastructure)
decreasing to 52.000 € during the 5 year conversion period.

Conversion	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Screens	747	747	747	747	747	3735
Equipment	56.025.000	44.820.000	41.234.400	39.172.680	37.214.046	218.466.126
Infrastructure	1.494.000	1.494.000	1.494.000	1.494.000	1.494.000	7.470.000
Total	57.519.000	46.314.000	42.728.400	40.666.680	38.708.046	225.936.126

Source: PwC Analysis

Financing

Financing period 8 years

Full dept financing with 6 % interest

Continues costs per month							
Acquisition in	year 1	year 2	year 3	year 4	year 5	average	
Equipment	1.012	815	752	715	681	795	

app. 9.500 € / year
per screen

Additional operating costs

Higher power consumption	65 €
Higher xenon bulb costs, lower lifetime	216 €
Higher service and maintenance costs	100 €

	381 € per month
	app. 4.500 € / year
	per screen

Savings

Average analog print costs: 1.000 € (incl. shipping, storage, disposal and all trailer costs)

Average digital print costs: 100 €

57.000 prints per year

Savings per year after full conversion: app. 50 Mio. € per year

Source: PwC Analysis

Assumptions:

- D-Cinema will not increase admissions.
- Rising ticket prices unlikely.
- Alternative content marginal.
- All positive effects of D-Cinema on theatre level result in a revenue increase equal to 2 % of the boxoffice.

Source: PwC Analysis

Suggestion for financing model

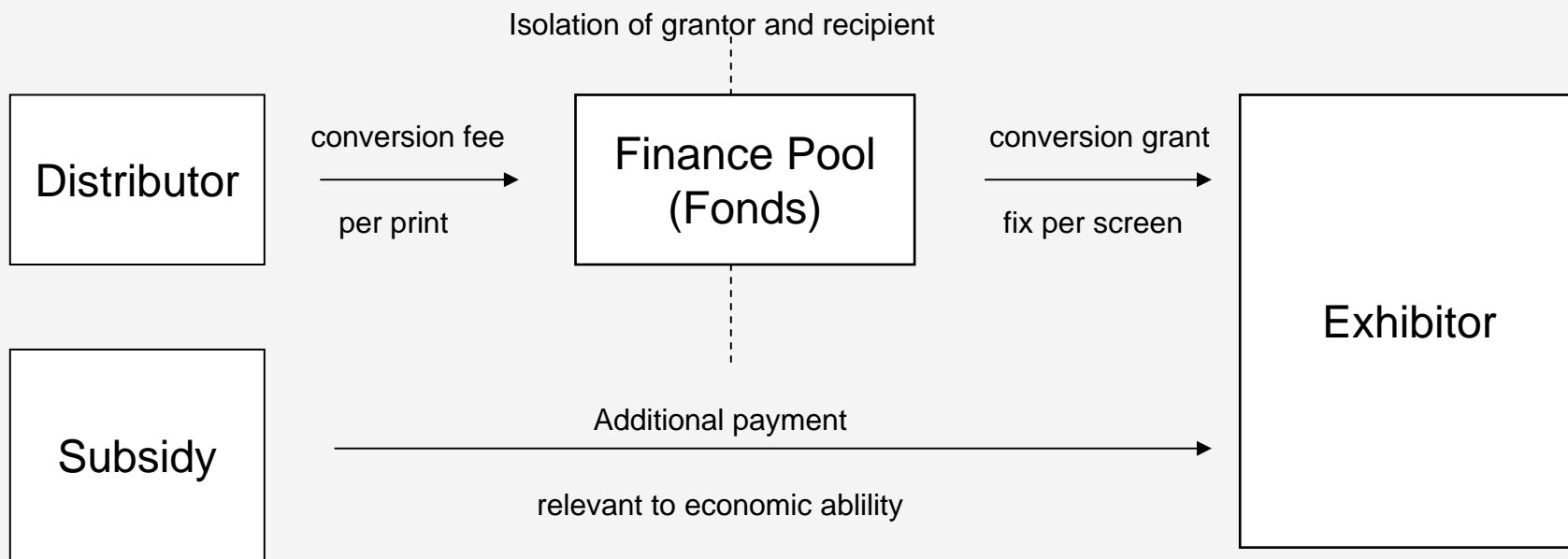
Based on the fact that not all of the exhibitors could finance the conversion on their own there could be a combined financing by exhibition, distribution and public subsidy:

- Exhibition contributes the gain in revenues with **2 % of the per screen turnover**.
- Distribution contributes **50 % of the total costs** (incl. additional operational costs)
- The remaining **gap is filled by state subsidy**.

Source: PwC Analysis

Financing components

- ✓ „Conversion fee“ per digital print payed into finance pool.
- ✓ „Conversion grant“ per digital system payed to exhibitor.
- ✓ Additional subsidy payment to exhibitor if necessary.



Financing model Germany

Three elements: Revenue increase, conversion grant and subsidy

Turnover (T€)	Screens	turnover per screen (calc.)	yearly charge for investment per screen	cinema contributi on 2 % of boxoffice	funding gap	conversion grant	funding gap	subsidy
< 50.000	550	40.000	14.111	840	13.271	7.000	6.271	6.500
50.000 - 100.000	932	75.000	14.111	1.700	12.411	7.000	5.411	5.500
100.000 - 150.000	628	125.000	14.111	2.700	11.411	7.000	4.411	4.500
150.000 - 250.000	869	200.000	14.111	4.500	9.611	7.000	2.611	2.500
250.000 - 500.000	583	375.000	14.111	8.000	6.111	7.000	0	0
> 500.000	172	700.000	14.111	14.111	0	7.000	0	0
Total	3734	744.825.000	52.689.120	14.743.530	37.945.590	26.138.000	26.138.000	13.699.500



= 500 € per print

Source: PwC Analysis

Some Reactions

„The underlying figures are not correct.“

„Distribution will not finance operation costs.“

„The savings for distribution will be considerably smaller.“

„There will be no gain in revenues for the theatres“

„The necessary subsidy is not available for the time being“

Suggestion for alternative split

year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	year 11	year 12
total investment (Mio. €)											
58	46	43	41	39							
yearly investment costs (Mio. €)											
9	16	23	30	36	36	36	36	27	19	13	6
add. operating costs (Mio. €)											
3	7	10	14	17	17	17	17	17	17	17	17

⇒ Theatre share: additional operating costs = 170 Mio. €

no. or digital prints												
11.400	22.800	34.200	45.600	57.000	57.000	57.000	57.000	57.000	57.000	57.000	57.000	57.000
savings												
10	21	31	41	51	51	51	51	51	51	51	51	51

⇒ Distributor Share: 287 Mio. investment costs = app. 500 € per print
vs. 554 Mio. savings = total savings 224 Mio. €

Model not accepted

New Suggestion: The 50 Cent Model

Investment

4200 screens to convert over 5 years

840 screens per year

70 screens per month

77 T€ equipment cost

= 5,4 Mio. € investment per month

Funding

132 Mio. tickets per year

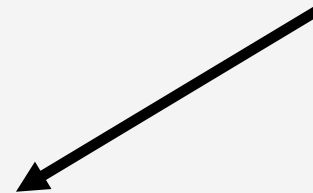
11 Mio. per month

0,50 € per ticket extra DC levy

= 5,5 Mio. € per month



5,4 Mio.



5,5 Mio.

No financing costs!

Distributors share

No filmrental on the 50 Cent.

At 44 % average filmrental
= 29 Mio. € contribution per year

or 145 Mio. € in 5 years

Savings from digital prints

From 11 Mio. in year 1

to 53 Mio. in year 5

= 159 Mio. € during Roll-Out

Exhibitors share

66 Mio. extra DC levy (132 Mio. x 0,5 €)
./. savings from waived filmrentals

= 37 Mio. € contribution per year

or 185 Mio. in 5 years

Higher operating costs

(power consumption, xenon bulb costs, lower lifetime, service and maintenance)

of 4500 € per screen / year

= 57 Mio. € during Roll-Out

Impact on theatre operating results

Boxoffice	792 Mio. €
./.. Exhibitors share of extra DC levy	37 Mio. €

Decline in ticket sales earnings: 4,6 %

What to do?

50 Cent DC levy

792 Mio. Boxoffice

792 Mio. Boxoffice

./ 66 Mio. DC levy

Distributor share

348 Mio.

Distributor share

319 Mio.

Exhibitor share

444 Mio.

Exhibitor share

407 Mio.

Raise the ticket price by 50 Cent !

858 Mio. Boxoffice

./ 66 Mio. DC levy

Distributor share

348 Mio.

Exhibitor share

444 Mio.

After the Roll-Out

During Roll-Out

858 Mio. Boxoffice
./. 66 Mio. DC levy

After Roll-Out

858 Mio. Boxoffice

Distributor share
348 Mio.

Distributor share
377 Mio.

+ print cost savings
of 52 Mio. per year = 429 Mio. (+ 23%)

Exhibitor share
444 Mio.

Exhibitor share
481 Mio.

- higher operational costs
of 19 Mio. per year = 462 Mio. (+ 4%)

A solution of striking simplicity

But a lot of questions unanswered.

What if there will be no general solution?

⇒ New or additional business models necessary

How do we enhance the business model for cinemas?

- Alternative content
- New ways of programming / Extending the choices
- Utilizing Web 2.0 technology and concepts
- Opening up the Long Tail economy for movie theatres

Thank you for your attention