Current and Potential Business Model

DISCUSS PROCEEDINGS

CHAPTER 5

BY JEANIE STAHL AND MARK PETERSON

OVERVIEW

As part of the DISCUSS project, two economic surveys were conducted by the Co-PIs and the Business Model Experts (Jacobsen, Stahl and Peterson, 2010) in order to quantify the current business model for GS theaters and film producers showing and producing classic films and to use that as the basis for developing future business models for a global network of DIGSS-compliant digital leasing theaters. One survey was sent to U.S. Giant Screen theaters showing STEM-related films. It had 24 respondents (May, 2010). The second survey was sent to film producers and distributors and had four respondents. The aggregate data and the range of data from these surveys was shared with those attending the June 2010 DISCUSS Colloquium, whose participants, among others, included theater managers, museum directors, film producers and distributors. Aggregate data from the surveys and a draft of the future business models were reviewed in breakout groups and the assumptions for the future business model were refined.

This chapter presents the results from the two surveys and develops a framework for a new business model for a DIGSS-compliant theater network that can support five new classic film releases per year (one film fewer than the yearly average number of six films released each year from 2005 through 2009. The assumption for the future is that five new films per year will meet the needs of GS Theaters showing STEM-related films, and the future business model calculates how many theaters are needed to support five films at varying production budget levels.

The surveys and business models focus on operations and film production and not on the capital costs for constructing new DIGSS theaters or converting existing theaters from analog to digital.

The authors and the DISCUSS project team would like to thank the theater representatives, filmmakers, and distributors who participated in the surveys and/or were participants at the June 2010 DISCUSS Colloquium. Their input was invaluable and without them this part of the project could not have been carried out.

CRITICAL CONSIDERATIONS FOR DEVELOPING A NEW BUSINESS MODEL

- Build on the current business model to define a future GS digital business model that works for all aspects of the Logic Rationale, which includes all sectors of the GS industry chain, from investors to theaters.

- Determine the key components of the business model necessary to sustain the whole economic ecosystem.
- Determine how many films per year are needed from the perspective of the theater operators.
- From the perspective of the filmmakers and distributors, determine how large the network of compatible digital GS theaters needs to be to support an average of five new classic film releases per year based on varying film budget levels.

SOURCES OF DATA INFORMING THE ANALYSIS

- DISCUSS Survey of U.S. Institutional Theaters (May 6 – 25, 2010) — 24 respondents, plus additional input from Colloquium attendees representing theaters in an institutional setting
- DISCUSS Film Producer/Distributor Survey (May 6 – 25, 2010)— four respondents, plus additional input from Colloquium attendees representing filmmakers and distributors
- Additional data collected from selected DISCUSS survey respondents via phone and email (May – June, 2010)
- Digital Immersive Giant Screen Specifications Front-end Survey (July, 2008)
- Giant Screen Cinema Association (GSCA) annual attendance data from their member survey *Theater Attendance Reporting* (TAR) (as of May 1, 2010).
- GSCA Specification Data for DISCUSS Respondents (as of May, 2010)
- *LF Examiner* Film and Theater Databases (as of May 1, 2010)
- White Oak Associates' Databases and Theater and Museum Studies (as of May 1, 2010)

SUMMARY FINDINGS: CURRENT BUSINESS MODEL

The summary findings are based primarily on the first two DISCUSS surveys listed above and conducted as part of the DISCUSS project, plus the GSCA's attendance data, the *LF Examiner's* databases and White Oak's databases on museum and theater operations. More detailed findings and tables are presented later in this chapter.

GS THEATERS SHOWING STEM-RELATED PROGRAMMING

The survey of U.S. institutional theaters was based on identifying theaters that show STEM-related films. There were 66 U.S. theaters that met the criteria [1]. Sixty-four DISCUSS surveys were sent to theater personnel by the GSCA and 24 completed or partially completed surveys were returned. Additional data were collected from five of the responding theaters to clarify responses or add missing data.

[1] The 66 U.S. theaters identified as showing STEM-related programming were identified by White Oak and *LF Examiner*, based on their knowledge of the theaters and their programming.

The inclusion of DMR films has a significant impact on a theater's operating numbers and, as a result, classic film data and DMR data were calculated separately. Based on screening hours per year, the theaters were divided into two groups: Those showing predominantly classic films and those showing predominantly DMR films.

Overall, based on the averages for the respondents showing predominantly classic films, classic film-only programming had 2,515 hours of screening time (assuming one hour per screening) and served 189,000 public and school visitors who collectively paid $1.0 million in gross admissions revenue, or $5.25 per individual served (the ATP). Another way to look at the data is per screening hour. Average data showed $403 of admissions revenue and 76 visitors per screening hour.

For theaters showing predominantly DMR films, the DMR film-only programming had average annual screening hours of 2,473 hours (assuming two hours per DMR screening), served an average of 151,000 visitors, who collectively paid $1.7 million in gross admissions revenue, or $11.33 per individual served. Per screening hour, the median data calculated to $637 in admissions revenue per hour and 99 visitors in seats.

Table 5.1 presents these summary findings and breaks out classic versus DMR data for each of the two theater groups. Based on averages, those showing predominantly classic films had lower annual attendance, admissions revenue, average ticket price and number of screenings. The average ticket price (ATP) for DMR showings was $11.33 for theaters showing predominantly DMR films, more than double that of their classic showings. On a per hour basis, the classic showings had a higher average ATP than DMR shows, although the median for one group was higher for DMR showings

Even with higher lease costs (DMR films do not have actual print costs, though they may have some "virtual" print costs), the admissions revenue net of lease and print costs for the DMR films was significantly higher than for the classic only showings. Yet annual admissions revenue per screen hour, net of print and lease costs, were higher for classic films. The costs do not take into account other expense categories for programming such as additional staff, 3D glass cleaning, cost of 3D glasses, advertising costs (generally higher for classic shows), maintenance, etc.

Of the respondents in both groups that show both classic and DMR, screening hours totaled more than 3,000 hours for seven of the eight theaters. For the six theaters showing classic only films, only two theaters had annual screening hours of 3,000 or higher. The range was 1,276 to 3,200.

Summary Findings from DISCUSS Survey of GS Theaters (Averages)[2]

	Theaters Showing					
	Predominantly Classic			Predominantly DMR		
Categories Present Data Averages	Classic Only	DMR Only	AVG both Formats	Classic Only	DMR Only	AVG both Formats
Screen Hours per Year (DMR 2 hours)	2,515	632	2,768	1,144	2,473	3,617
% of Screenings Hours per Year	n/a	n/a		36%	64%	100%
Annual Theater Attendance	189,000	23,000	202,000	83,000	151,000	235,000
Visitors in Seats per Screen Hour	76	72	n/a	74	99	n/a
Annual Admissions Revenue	$1,021,000	$255,000	$1,170,000	$405,000	$1,714,000	$2,119,000
Average Ticket Price (ATP)	$5.25	$8.94	n/a	$5.13	$11.33	n/a
Less AVG Lease and Print Costs/Capita	$ 3.77	$ 4.52	n/a	$ 2.88	$ 4.68	n/a
Net ATP after Lease and Print costs	$1.48	$4.43	n/a	$2.25	$6.65	n/a
Admisssions Revenue/Screen Hour	$403	$222	n/a	$468	$637	n/a
Less Lease and Print Costs/Screen Hour	$108	$95	n/a	$191	$394	n/a
"Net" Admisssions Rev./Screen Hr.	$295	$127	n/a	$276	$243	n/a

Table 5.1
Source: DISCUSS Survey of U.S. GS Theaters and the White Oak Institute

Other findings from the research and analysis indicated:

- Declining attendance and revenue, at least for classic film programming.
- DMR films are helping institutional theaters (at least in the short run) but are not mission-related and have higher lease fees.
- Although average ticket prices are higher for DMR films, they run about two hours, compared to less than an hour for classic films. On a per-hour basis, classic film average ticket prices are higher than DMR average ticket prices for theaters showing both types of programming.
- Commercial multiplexes are competing with institutional theaters.
- IMAX theaters are no longer consistently the "cash cow" helping to support other museum programs, so the theaters may not be as valued by the institution as they were previously.
- There are not enough quality Classic films.
- On average, more DMR films are being released per year than STEM-related films.

Table 5.2 presents more detailed data for each category and includes average, median, maximum and minimum data. Overall, with a relatively small number of respondents, the average and median data do not reflect the large range of statistics for individual theaters, thus maximum and minimum data points are included in the table.

[2] The averages for all theaters showing predominantly DMR programming will total the sum of the classic only and DMR data. That will not be the case for the theaters showing predominantly classic programming because of theaters that have no DMR data.

That table also includes numbers for lease fees and media buys/media production costs. In addition to differences between the two groups cited above, there were also variances in annual lease fees, which are significantly higher for DMR films, as distributors of Hollywood films command much higher rates and include print costs and marketing.

Media buys and associated production materials are much less for those showing predominantly DMR since theaters doing day-and-date releases are supported by national advertising campaigns and thus require less direct advertising spending by the theaters. Five of the five theaters showing primarily DMR indicated that they were doing mostly day-and-date releases.

Findings from the DISCUSS Survey of U.S. Giant Screen Theaters

	Theaters Showing					
	Predominantly Classic			Predominantly DMR		
	Classic Only	DMR Only	AVG both Formats	Classic Only	DMR Only	AVG both Formats
# Respondents	*10-14*	*4-7*	*12-14*	*3-5*	*3-5*	*3-5*
AVG Annual SCREENING HOURS (DMR 2 hrs)	2,515	632	2,768	1,144	2,473	3,617
Median SCREENING HOURS (DMR 2 hours)	2,656	697	2,979	1,168	2,361	3,594
Maximum	3,210	1,080	3,590	1,501	2,954	3,823
Minimum	1,276	54	1,276	739	2,216	3,456
Average Annual ATTENDANCE	189,000	23,000	202,000	83,000	151,000	235,000
Median Annual ATTENDANCE	197,000	18,000	216,000	100,000	117,000	235,000
Maximum	334,000	48,000	334,000	119,000	311,000	411,000
Minimum	64,000	2,000	95,000	41,000	42,000	98,000
Average Annual ADMISSIONS Revenue	$1,021,000	$255,000	$1,170,000	$405,000	$1,714,000	$2,119,000
Median Annual ADMISSIONS Revenue	$1,109,000	$153,000	$1,259,000	$393,000	$1,626,000	$2,079,000
Maximum	$2,012,000	$678,000	$2,012,000	$574,000	$3,391,000	$3,965,000
Minimum	$300,000	$10,000	$450,000	$193,000	$472,000	$665,000
Average "AVERAGE TICKET PRICE"	$ 5.25	$ 8.94	$ 5.81	$ 5.13	$ 11.33	$9.81
Median "AVERAGE TICKET PRICE"	$ 5.01	$ 8.69	$ 5.22	$ 5.15	$ 11.22	$9.59
Average "AVERAGE TICKET PRICE" PER HOUR	$5.25	$ 4.47	n/a	$ 5.75	$ 5.66	n/a
Median "AVERAGE TICKET PRICE" PER HOUR	$5.01	$ 4.35	n/a	$ 4.47	$ 5.61	n/a
Maximum ATP per HOUR	$ 7.30	$ 7.32	n/a	$5.75	$ 6.19	n/a
Minimum ATP per HOUR	$ 3.39	$ 1.97	n/a	$4.47	$ 5.24	n/a
Average ANNUAL LEASE FEE	$203,000	$129,000	$273,000	$145,000	$1,145,000	$1,290,000
Median ANNUAL LEASE FEE	$213,000	$60,000	$260,000	$146,000	$1,084,000	$1,248,000
Maximum	$375,000	$390,000	$456,000	$206,000	$2,112,000	$2,281,000
Minimum	$58,000	$6,000	$75,000	$84,000	$301,000	$384,000
AVG MEDIA BUYS/PRODUCTION Costs/Visit	n/a	n/a	$ 0.63	n/a	n/a	$ 0.24
Median MEDIA BUYS/PRODUCTION Costs/Visit	n/a	n/a	$ 0.45	n/a	n/a	$ 0.20
Maximum	n/a	n/a	$ 1.63	n/a	n/a	$ 0.51
Minimum	n/a	n/a	$ 0.24	n/a	n/a	$ 0.09

Table 5.2
Source: DISCUSS Survey of U.S. GS Theaters and the White Oak Institute

FILMMAKERS AND DISTRIBUTORS

The DISCUSS team identified the STEM-related classic films released between January 1, 2005 and December 31, 2009 (5 years). A questionnaire was sent to the film producers regarding their film. The number of survey responses to the survey was low, with only four firms responding. However, two of the firms have produced and distributed many films and have years of experience in the industry. Follow-up discussion and clarification of data was conducted with some of the respondents. Additional input was received from filmmakers and distributors attending the DISCUSS Colloquium.

There was a broad range in the answers from the respondents in all categories including film budget and funding sources. The responses informed the ranges used in the future business models. An analysis of the survey responses indicated the following:

- Many classic films require "free money" as part of the production budget. Free money includes funds from grants, sponsors, and other partners who are not equity participants. Without these funds, film production budgets most likely would need to be lower to mitigate risk for investors, and lower budgets could jeopardize the quality of films.
- Based on a film budget of $6.5 million, and the assumptions in the last table in this chapter, the industry network currently can support only 4.77[3] new films annually, yet the actual number produced per year has been higher in recent years.
- In the current economy debt financing is very difficult.
- Current estimated classic film production costs for both "bare bones" and optimal budgets
  - 2D films: $2 to $5 million for a "bare bones" budget
    $2 to $8 million for an optimal budget.
  - 3D films: $3 to $6 million for a "bare bones" budget
    $4 to $12 million for an optimal budget.
- The distributor's share of box office income is in the range of 20–25%, though the percentage can be higher.
- Marketing and print costs are generally not included in classic leases but are included in DMR leases.
- Estimated distribution costs from start-up through opening day range from a bare-bones budget of $150,000 for a 2D film to $1.5 million for 2D and 3D films.
- With the network supporting only a small number of films per year, theaters need to limit the number of films that they show annually so that the filmmakers and distributors have the ability to recoup their and their partners' investments. Otherwise there will be little incentive to produce new films.

GLOBAL FILM RELEASES

Between 2005 and 2009 the number of new releases for STEM-based films declined while the number of DMR films released increased.

[3] Input from DISCUSS advisors, as of November 2010, indicates that this number may now be closer to 3.5-4 films annually due to continual loss of screen time.

Global Film Releases 2005–2009

	All	STEM	DMR
Number of Films Released over 5 Years	83	30	34
Calculated Average Number of Films Released per Year	16.6	6.0	6.8
Number of Films Released in 2009	19	5.0	11

Table 5.5
Source: Derived by White Oak from the *LF Examiner* databases, Number of STEM Classic films based on White Oak's and *LF Examiner*'s knowledge of the films.

395 Global Theaters That Have Leased Classic Films, by Type of Theater

Type	Number	% of Total
Institutional	176	45%
Multiplex	161	41%
Stand Alone	49	12%
Theme Park	9	2%
Total	395	100%
Less multiplex not regularly leasing classic films	(161)	
Less others currently inactive lessees	(41)	
Total Actively Leasing Classic Films	**193**	

Table 5.6
Source: *LF Examiner* Database of Theaters (as of May 1, 2010)

The 161 multiplex theaters in Table 5.6 do not regularly lease classic films and 41 other theaters are currently inactive lessees of films, (Hyder, 2010).

SUMMARY FINDINGS: FUTURE BUSINESS MODEL

As of May 2010, the number of theaters actively showing classic films was 193 worldwide. Based on an analysis of the survey findings, and assumptions detailed at the end of this chapter, that network of theaters appears to support 4.77 classic film releases annually, though, on average, six were produced, from 2005-2009. With an average film production budget of $6.5 million, the current model relies on non-equity funding from sources such as sponsors and grants.

Three future business models were developed based on three different film budgets, each of which has two funding options, resulting in six scenarios. The differences in the funding options have to do with the amount of non-equity funds (sponsors, grants, etc.) supporting the film production budget. The two funding scenarios were 35% non-equity funding or 0% non-equity funding. The film production budgets for the three models were $9 million (assuming a 3D film), $6 million and $3.6 million.

Currently the business model for film production does not work without non-equity funding. The debt financing market has also been very tight in recent years, making it more difficult to borrow funds for new films. The number of theaters showing primarily

STEM-related films is declining and the expected convergence, after their conversion to digital, with fulldomes is currently viewed as limited, though with technical advances over time that could change. Showing 3D films on GS domes has been problematic, though recently a few theaters have installed 3D in their dome theaters, projecting films on only part of the screen.

A key assumption driving the model is that five film releases per year are needed to sustain the global network and the programming needs of the theaters and that is based on the assumption that the number of theaters showing STEM-related programming will not grow. The six scenarios show that a network of as few as 144 global theaters to as many as 323 are needed to support five films, depending on the funding options and film budget assumptions. With the assumption of relatively small growth in the global market of GS theaters showing STEM-related films, it is difficult to see how a steady stream of high- budget, high-quality films can be sustained without continued non-equity funding. If the 193 current GS theaters showing STEM programming (as of May, 2010) all converted to digital, that would support only three of the scenarios – the two with the $3 million film production budget and one with 35% non-equity funding for a $6 million film. Even if the digital network of GS theaters showing STEM-related films grows there may be increased competition for screen time with the capability of new types of presentations – live simulcasts, astronomy shows, live internet feeds and lectures, competitions and more.

Table 5.7 presents the results of the future business model and its six scenarios. The assumptions behind the models appear at the end of this chapter.

Current and Future Business Models

	Analog Current Scenario	Digital - Future Scenarios					
		1	2	3	4	5	6
ASSUMPTIONS (in 2010 Dollars)	35% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds
Average number of films per year	4.77	5.00	5.00	5.00	5.00	5.00	5.00
Film Productions Costs	$6,500,000	$9,000,000	$9,000,000	$6,000,000	$6,000,000	$3,600,000	$3,600,000
RESULTING MODELS BASED ON THE ASSUMPTIONS							
Summary of Goal for Return on Investment and Start-up Distribution Costs							
Start-up Distribution Costs per Film	$850,000	$850,000	$850,000	$850,000	$850,000	$850,000	$850,000
Debt Repayment - Principle and Interest	$747,500	$1,035,000	$1,035,000	$690,000	$690,000	$414,000	$414,000
Equity Funds to pay back	$3,575,000	$4,950,000	$8,100,000	$3,300,000	$5,400,000	$1,980,000	$3,240,000
Return on Equity to pay back investors	$1,358,500	$1,881,000	$3,078,000	$1,254,000	$2,052,000	$752,400	$1,231,200
Total Minimum Needed for Net Revenue per Film	$6,531,000	$8,716,000	$13,063,000	$6,094,000	$8,992,000	$3,996,400	$5,735,200
Calculated Annual Lease Fees and Producer's Net Revenue							
Current Model Based on Total 193 Theaters in Network Showing Classic Films on a Regular Basis							
Future Model Based on Assumption of # of Thtrs in Network, 5 Films / Year and Revenue Goal per Film							
Total U.S. annual lease payments for all Classic Films per Year	$15,671,600	$20,170,080	$30,161,740	$14,128,800	$20,787,200	$9,938,880	$13,251,840
Total International annual lease payments for all Classic Films per Year	$22,096,956	$28,439,813	$42,528,053	$19,921,608	$29,309,952	$14,013,821	$18,685,094
Total Global Annual lease payments for all Classic Films per Year	$37,768,556	$48,609,893	$72,689,793	$34,050,408	$50,097,152	$23,952,701	$31,936,934
Plus Ancillary Revenue	$3,776,856	$9,721,979	$14,537,959	$6,810,082	$10,019,430	$4,790,540	$6,387,387
Total Revenue to Distributor	$41,545,412	$58,331,871	$87,227,752	$40,860,490	$60,116,582	$28,743,241	$38,324,321
Less Distributor's share (exclusive of start-up distribution costs) 25%	$10,386,353	$14,582,968	$21,806,938	$10,215,122	$15,029,146	$8,622,972	$9,581,080
Producer's Net Revenue and Pre-Distribution Start-Up Costs	$31,159,059	$43,748,904	$65,420,814	$30,645,367	$45,087,437	$20,120,269	$28,743,241
Producer's Net Revenue and Start-up Distribution Costs per Film	$6,531,000	$8,749,781	$13,084,163	$6,129,073	$9,017,487	$4,024,054	$5,748,648
Goal for Producer's Net Revenue and Start-up Distribution Costs per Film	$6,531,000	$8,716,000	$13,063,000	$6,094,000	$8,992,000	$3,996,400	$5,735,200
Variance	$0	$33,781	$21,163	$35,073	$25,487	$27,654	$13,448
Annual # Films supported by the network	4.77						
Goal of Annual # Films Supported by the Network	n/ap	5.02	5.01	5.03	5.01	5.03	5.01
Number of Theaters Needed to Support 5 Films	n/ap	216	323	174	256	144	192
Calculated Total Network Annual Attendance	36,477,000	n/av	n/av	n/av	n/av	n/av	n/av
"Free Money" Needed / Yr (grants, sponsors, etc.) (free $ x films / yr)	$10,853,906	n/av	n/av	n/av	n/av	n/av	n/av
Cost of Impact / Visitor (free $ / total attendance)	$0.30	n/av	n/av	n/av	n/av	n/av	n/av

Table 5.7

Source: DISCUSS Survey of U.S. GS Theaters and White Oak Institute

DETAILED FINDINGS: SURVEY OF U.S. INSTITUTIONAL GS THEATERS

Twenty-four completed or partially completed surveys were received from the 64 surveys sent out by the GSCA. Additional data were collected from five of the responding theaters to clarify responses or add missing data. Four of the 24 U.S. theaters who responded to the survey were excluded from the group data calculations: two because they were closed for part of the year, one because they are a destination attraction showing predominantly one film, and the fourth because they are primarily a planetarium. In some instances individual theaters were excluded from a particular calculation because of significant anomalies in the data or apparent errors in the way the data was reported. Respondent data were for 2009 or 2010. Of the 20 theaters included in the calculations, twelve show both classic and DMR films and eight show only classic films. Two of the respondent museums have two IMAX theaters each. It is important to remember that the survey of theaters was for only one year of data, though 13 of the 20 respondents included in the calculations indicated that it was a "typical" year. Several theaters stated that in the 12-month period for which they were reporting, they added more DMR® programming (Hollywood feature films enhanced by IMAX) than usual with the intent to counter the economic downturn. Several reported that popular DMR films helped boost attendance in the reporting year. The inclusion of DMR films has a significant impact on a theater's operating numbers and, as a result, classic film data and DMR data were calculated separately. Based on screening hours per year, the theaters were divided into two groups: Those showing predominantly classic films and those showing predominantly DMR films.

COMMENTS REGARDING THE SURVEY DATA AND RESPONDING THEATERS

- Some respondents had conflicting data regarding expenses for lease fees. In some cases it was unclear whether the amounts included print costs or not.
- Multi-year trend data for attendance were derived from GSCA member surveys.
- The DISCUSS survey covers only one year, which may not represent a typical operating year for each theater, though 14 of the 24 respondents stated it was a "typical" year and 10 stated it was "not a typical year." Anomalies included:
  - Several popular DMR films.
  - Two venues partially closed for renovation (and removed from calculations for average and median data).
  - Some theaters added more DMR films than usual with the intent to counter the economic downturn.
  - One theater is located at a major national destination attraction, and its data, especially attendance, was excluded from many of the calculations for average and median data.

Abbreviations used throughout this chapter are as follows:

- STEM = U.S. Institutional Theaters that show STEM-related (science, technology, engineering and math) programming
- GLOBAL = 395 Global Theaters leasing classic films (from the *LF Examiner* Database)
- DISC = DISCUSS Survey Respondents
- ATTD = Attendance
- ADMISS = Admissions

CHARACTERISTICS OF DISCUSS SURVEY THEATER RESPONDENTS COMPARED TO OTHER GS THEATERS

The following two tables compare the characteristics of the 20 DISCUSS survey respondents, for which data were analyzed, to the 66 theaters showing STEM-related programming and the estimated global network of 395[4] giant-screen theaters that have ever shown one or more classic films.

Compared to the group of 395 global theaters, the DISCUSS survey respondents had a much higher percentage of dome theaters and a higher percentage of 2D theaters. The DISCUSS respondents also had a higher percentage of 15/70 theaters and did not have any 10/70 or digital theaters.

[4] As of May 1, 2010. Calculated from the *LF Examiner* database.

Theater Characteristics of DISCUSS Survey Respondents
(Note: One U.S. "STEM" theater and five global theaters have dual screens, dome and flat, which results in a count higher than the number of theaters indicated in the first row.)

	DISCUSS Survey GS Theaters		U.S. STEM GS Theaters		GLOBAL GS Theaters	
Number	*20*		*66*		*395*	
DOME	8	40%	33	50%	100	25%
Flat	12	60%	33	50%	300	75%
Imax	17	85%	53	80%	326	83%
Non-Max	3	15%	13	20%	69	17%
2D	9	45%	44	67%	152	38%
3D Capable	11	55%	22	33%	243	62%
1570	18	90%	56	85%	254	64%
870	2	10%	10	15%	50	13%
10/70	0		0		10	3%
Digital	0		0		81	20%
Total	20	100%	66	100%	395	100%

Table 5.8
Source: DISCUSS Survey of U.S. GS Theaters and the White Oak Institute

RESULTS OF QUALITATIVE SURVEY QUESTIONS

The White Oak Institute conducted a front-end survey in 2008 prior to the NSF award of the DISCUSS grant. The survey was sent to institutional theater managers, asking qualitative questions regarding conversion to digital and future brand preference. The same questions, also sent to institutional theaters, were asked as part of the DISCUSS survey.

Regarding theater conversion, the field thought that theater conversion from analog to digital was as many years off as they did two years before. The front-end survey had 40 respondents to this question versus 21 in the most recent survey.

- 52% of theater respondents thought they would convert to digital within 4–7 years, compared to 53% in the front-end survey.
- 22% believed they might convert within 0–3 years, compared to 18% in the front-end survey.

Regarding theater brand:

- 29%, or 7 of the 24 respondents, would like to be IMAX-branded, with projector ownership and no programming restrictions, versus 28%, or 12 of the 43 respondents in the front-end survey.

- 42%, of respondents in the recent DISCUSS survey said that brand did not matter, provided that:
  - It served their specific needs even if it limited the number of GS theaters with which they could share films (4 respondents)
  - The brand is like many other GS theaters (3 respondents)
  - Other comments (3 respondents)
    1. *Allows us the maximum number of giant-screen titles as well as flexibility to show other non-GS digital format material*
    2. *Prefer not IMAX branded and serves our needs but doesn't limit shared films with digital GS theaters*
    3. *It is important that content can be shared and run across all platforms*

The *LF Examiner* conducted a survey in the spring of 2011 using similar questions as the White Oak 2008 survey. There were 53 international respondents from commercial and institutional and standalone theaters. The survey results were published by the *LF Examiner* in its May 2011 issue (Vol. 14, No.5). Results indicated that larger percentages of respondents thought conversion to digital should happen as soon as possible and some theaters had already converted. A higher percentage of respondents felt that they would have to convert sooner than respondents in the 2008 survey. In the 2008 survey 40% of theater managers felt they should start the conversion process when Imax had a digital projector equivalent in image quality to 15/70 film and the *LF Examiner* survey indicated that only 26% felt that way. And in 2008, 42% wanted an IMAX branded theater (whether leased or owned) and in the 2011 survey only 21% indicated they wanted an IMAX. In 2008, 44% said they didn't care about brand and in 2011, 68% said brand was in unimportant to them.

ATTENDANCE

[INCLUDES DATA DERIVED FROM BOTH THE DISCUSS SURVEY, THE GSCA MEMBER SURVEYS AND WHITE OAK'S INTERNAL DATABASES.]

Multi-year attendance data were plotted for three groups: 1) 13 GS theaters that participated in the DISCUSS survey and shared attendance data for 2002 through 2008; 2) 17 GS theaters with data for 2002–2007 and; 3) 30 to 64 theaters reporting attendance to the GSCA. The theaters in the first two groups are not proportionately representative of the field, as they include higher percentages of flat screens and 3D theaters. All are 15/70 IMAX theaters. Two of the theaters are in Canada; the remainder are in the U.S.

- Between 2002 and 2008, *cumulative* attendance for 13 GS theaters in the DISCUSS survey declined by 26%.
- Between 2002 and 2008, *average annual* attendance for 13 GS theaters declined by 35%.

- Between 2002 and 2008, average annual attendance declined by 23% for 30 to 64 theaters reporting to the GSCA.

Attendance by Type of Programming for DISCUSS Survey Respondents

	Theaters Showing					
	Predominantly Classic			Predominantly DMR		
	Classic Only	DMR Only	AVG All Programming	Classic Only	DMR Only	AVG All Programming
# Respondents	*10-14*	*4-7*	*12-14*	*3-5*	*3-5*	*3-5*
Average Annual ATTENDANCE	189,000	23,000	202,000	83,000	151,000	235,000
Median Annual ATTENDANCE	197,000	18,000	216,000	100,000	117,000	235,000
Maximum	334,000	48,000	334,000	119,000	311,000	411,000
Minimum	64,000	2,000	95,000	41,000	42,000	98,000

Table 5.9
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

Cumulative Theater Attendance Trends
(Includes both Classic and DMR Programming)

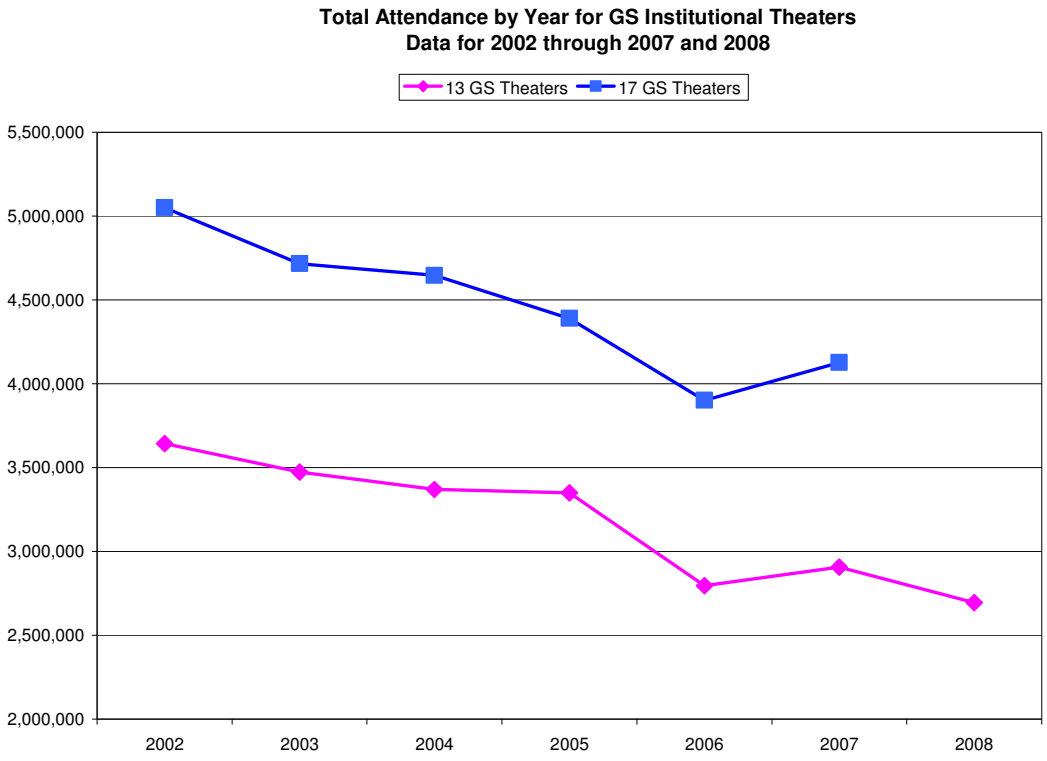

Chart 5.10
Source: GSCA Attendance Surveys and White Oak

Attendance Data presented in Chart 5.12 includes 30–64 institutional theaters. Data were derived from the GSCA Web site. The number of theaters reporting per year was as follows:

Number of Member Theaters Reporting Attendance Data to the GSCA

Year	Respondents
2000	40
2001	44
2002	51
2003	60
2004	63
2005	63
2006	62
2007	64
2008	45
2009	30

Table 5.11
Source: Giant Screen Cinema Association

Average Attendance Trends
(Number of Respondents Varies per Year)

Yearly Average Attendance for Institutional Theaters and GSCA Attendance Reporting Theaters
Source: GSCA and White Oak Associates

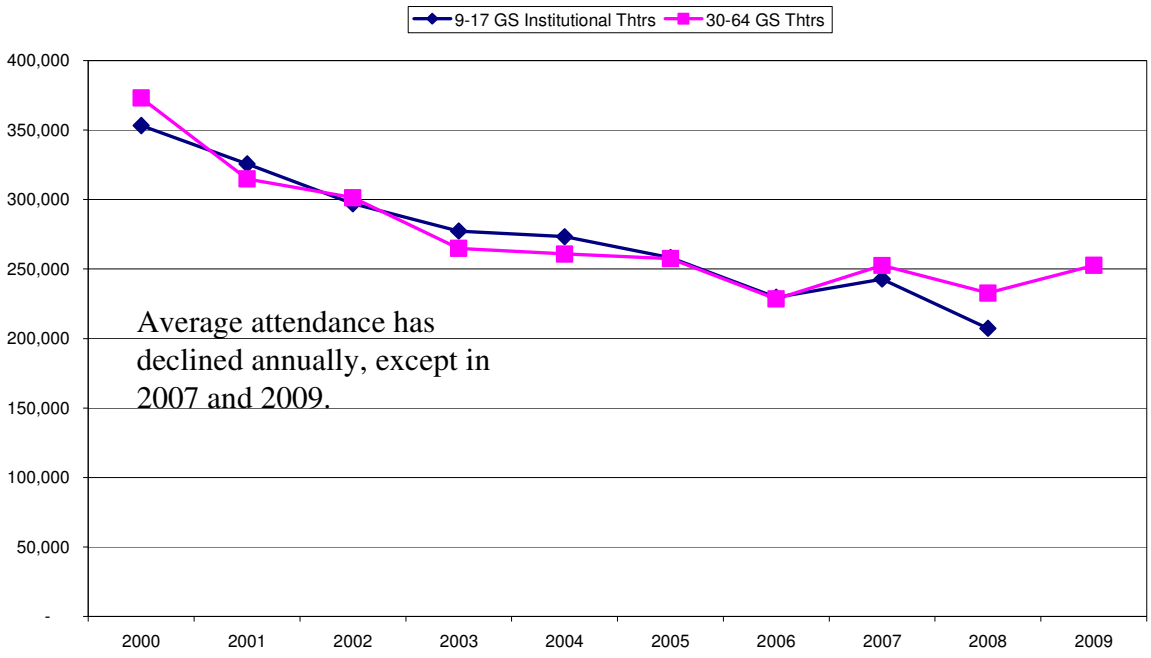

Chart 5.12
Source: GSCA Attendance Surveys and White Oak

Average Attendance 2D versus 3D Theaters
(Data for 10 Institutional Theaters from 2000–2009)

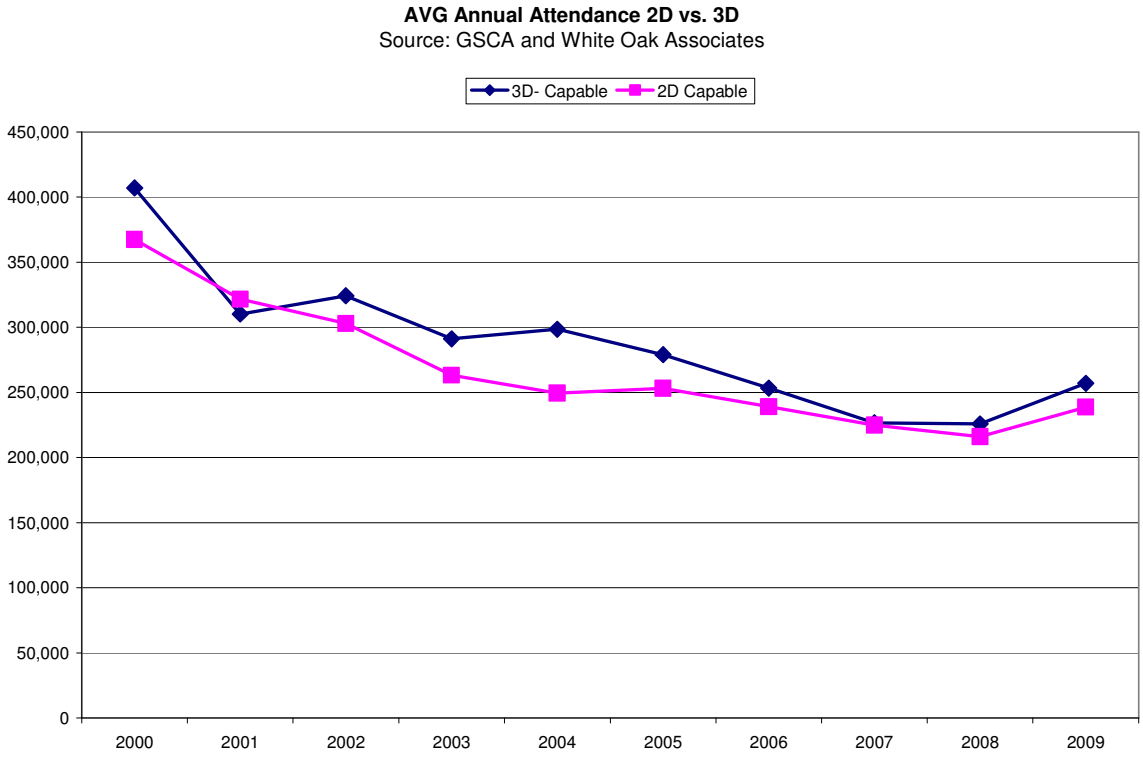

Chart 5.13
Source: GSCA Attendance Surveys and White Oak; includes two Canadian theaters

ADMISSIONS REVENUE AND AVERAGE TICKET PRICE (ATP)

- GS theater admissions revenue is still an important contributor to earned revenue, contributing on average 45% (median 42%) to overall museum admissions.
- The ATP for DMR films is almost twice that of classic films, but that is over a two-hour time frame, compared to the shorter classic films. On a per-hour basis, the average ATP for classic films is higher, though the median for classic films was lower in the group of theaters showing predominantly DMR films.
- Average annual admissions revenue for theaters showing predominantly DMR ($2.1 million) was higher than for theaters showing predominantly classic films ($1.2 million). Three theaters had DMR admissions revenue of over $2 million, which represented 85%–86% of their annual giant-screen admissions revenue.

Admissions Revenue and Average Ticket Prices

	Theaters Showing					
	Predominantly Classic			Predominantly DMR		
	Classic Only	DMR Only	AVG All Programming	Classic Only	DMR Only	AVG All Programming
# Respondents	*10-14*	*4-7*	*12-14*	*3-5*	*3-5*	*3-5*
Average Annual ADMISSIONS Revenue	$1,021,000	$255,000	$1,170,000	$405,000	$1,714,000	$2,119,000
Median Annual ADMISSIONS Revenue	$1,109,000	$153,000	$1,259,000	$393,000	$1,626,000	$2,079,000
Maximum	$2,012,000	$678,000	$2,012,000	$574,000	$3,391,000	$3,965,000
Minimum	$300,000	$10,000	$450,000	$193,000	$472,000	$665,000
Average "AVERAGE TICKET PRICE"	$ 5.25	$ 8.94	$ 5.81	$ 5.13	$ 11.33	$9.81
Median "AVERAGE TICKET PRICE"	$ 5.01	$ 8.69	$ 5.22	$ 5.15	$ 11.22	$9.59
Average "AVERAGE TICKET PRICE" PER HOUR	$5.25	$ 4.47	n/a	$ 5.75	$ 5.66	n/a
Median "AVERAGE TICKET PRICE" PER HOUR	$5.01	$ 4.35	n/a	$ 4.47	$ 5.61	n/a
Maximum ATP per HOUR	$ 7.30	$ 7.32	n/a	$5.75	$ 6.19	n/a
Minimum ATP per HOUR	$ 3.39	$ 1.97	n/a	$4.47	$ 5.24	n/a

Table 5.14
Source: WOI: DISCUSS Survey of Theaters and Producers/Distributors

SCREEN TIME BY CATEGORY AND NUMBER OF FILMS SHOWN PER YEAR

The DISCUSS survey asked questions regarding the number of screenings for the reporting year, the number of screenings for Classic and DMR films, and for those showing DMR, whether the DMR releases opened day-and-date or were delayed. Delayed release means that the first showings occurred after the DMR film was released nationally, usually because of the presence of another theater in the same market with exclusive rights to day-and-date releases. The majority of those showing DMR films indicated that they did mostly day-and-date releases; only five of the 14 respondents who show DMR films said they did only delayed release.

DISCUSS Survey Respondents — DMR Release Schedule
(14 of the 22 respondents show DMR films)

# Respondents	14	14
Mostly Day and Date	8	57%
Only Delayed Release	5	36%
Some Day and Date	1	7%
Total	14	100%

Table 5.15
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

In the following two tables showing screening hours, the assumption was made that each Classic screen showing is one hour, and that, on average, DMR films are two

hours. On average those showing predominantly DMR films had more screening hours per year.

Show Schedule — Hours per Year For Theaters Showing Both Classic and DMR Films
(DMR screening number doubled to reflect 2-hour running time)

	Theaters Showing					
	Predominantly Classic			Predominantly DMR		
Categories Present Data Averages	Classic Only	DMR Only	AVG All Thtrs	Classic Only	DMR Only	AVG All Thtrs
Screen Hours per Year (DMR 2 hours)	2,515	632	2,768	1,144	2,473	3,617
% of Screenings Hours per Year	n/a	n/a		36%	64%	100%

Table 5.16
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

DISCUSS Survey Findings: Annual Data for Theaters Screening both Classic and DMR Films
(Screening hours assume one hour for classic and two hours on average for DMR.)

	Screening Hours		Admissions Revenue		Attendance	
Tthr	Classic	DMR	Classic	DMR	Classic	DMR
Showing Predominantly DMR						
1	36%	64%	37%	63%	57%	43%
2	39%	61%	32%	68%	50%	50%
3			15%	85%	31%	69%
4	31%	69%	29%	71%	41%	59%
5			14%	86%		
6	20%	80%	14%	86%	24%	76%
Showing Predominantly Classic						
7	63%	37%	61%	39%	64%	36%
8			53%	47%	80%	20%
9			31%	69%	60%	40%
10			99%	1%	99%	1%
11	98%	2%	99%	1%	98%	2%
12	77%	23%	93%	7%	96%	4%
13	82%	18%	88%	12%	93%	7%

Table5.17
Source: DISCUSS Survey of U.S. GS Theaters and the White Oak Institute

Number of Classic Films Shown 2005–2009

THEATER	# FILMS SHOWN	CALCULATED PER YEAR
1	16	3.2
2	25	5.0
3	17	3.4
4	10	2.0
5	13	2.6
6	13	2.6
7	21	4.2
8	6	1.2
9	44	8.8
10	15	3.0
11	16	3.2
12	12	2.4
13	19	3.8
14	26	5.2
15	11	2.2
16	16	3.2
Average	19	3.8
Median	17	3.4

Table 5.18
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

SELECT THEATER OPERATING COSTS

The following three tables present findings from the DISCUSS survey in regard to lease fees, media buys and print costs.

Lease fees for DMR films are considerably higher than for Classic films

Classic vs. DMR Annual Film Lease Fees

	Theaters Showing					
	Predominantly Classic			Predominantly DMR		
Average ANNUAL LEASE FEE	$203,000	$129,000	$273,000	$145,000	$1,145,000	$1,290,000
Median ANNUAL LEASE FEE	$213,000	$60,000	$260,000	$146,000	$1,084,000	$1,248,000
Maximum	$375,000	$390,000	$456,000	$206,000	$2,112,000	$2,281,000
Minimum	$58,000	$6,000	$75,000	$84,000	$301,000	$384,000
AVG MEDIA BUYS/PRODUCTION Costs/Visit	n/a	n/a	$ 0.63	n/a	n/a	$ 0.24
Median MEDIA BUYS/PRODUCTION Costs/Visit	n/a	n/a	$ 0.45	n/a	n/a	$ 0.20
Maximum	n/a	n/a	$ 1.63	n/a	n/a	$ 0.51
Minimum	n/a	n/a	$ 0.24	n/a	n/a	$ 0.09

Table 5.19
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

Annual Print Costs for Classic Films

	All Theaters	Thtrs Showing Mostly Classic	Thtrs Showing Mostly DMR
# Respondents	15	12	4
Average Print Costs	$63,000	$58,000	$63,000
Median Print Costs	$55,000	$55,000	$53,000

Table 5.20
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

Annual funds spent on marketing and advertising (media buys and production of materials) averaged $134,000 for the group showing predominantly classic films and $42,000 for the other group. The average spending per capita was $ 0.63 for the group showing predominantly classic films and $.24 for the predominantly DMR group $0.29.

Only five theaters spent more than $100,000 on media buys and production materials, and three theaters spent less than $25,000. Note that the majority of advertising for DMR films released on a day-and-date basis is paid for by the studios as part of their national campaign.

Annual Costs For Media Buys and Production of Materials

	Theaters Showing			
	Predominantly Classic	Predominantly DMR		
	Classic Only	Classic Only	DMR Only	Combined
# Respondents	*11*	*5*	*5*	*5*
Average Media Buys/Production Costs per Capita				
Average Costs per Capita	$ 0.63	n./av	n/av	$ 0.24
Median Costs per Capita	$ 0.45	n/av	n/av	$ 0.20
Maximum	$ 1.63	n./av	n/av	$ 0.51
Minimum	$ 0.24	n./av	n/av	$ 0.09
Annual $ Media Buys/Production				
Average Annual	$134,000	n./av	n/av	$42,000
Median Annual	$80,000	n/av	n/av	$48,000
Maximum	$440,000	n./av	n/av	$60,000
Minimum	$45,000	n./av	n/av	$25,000

Table 5.21
Source: WOI: DISCUSS Survey of U.S. Institutional Theaters

BRANDING AND CONVERSION TO DIGITAL

Several qualitative questions in the DISCUSS 2010 survey were about attitudes toward converting to digital and manufacturer brand preference. A similar survey was

conducted by the White Oak Institute two years prior, in 2008. In both surveys, the majority of managers believed they had more than four years before the lack of analog films would make it necessary to convert to digital.

Opinions on When Conversion to Digital Will Need to Happen
2008: Front-end Survey Pre-Grant Award; 2010: DISCUSS Survey

	2008	2010	2008	2010
# Respondents	40	22	40	22
0–3 Years	7	4	18%	18%
4–7 Years	21	12	53%	55%
8–12 Years	10	3	25%	14%
12+ Years	2	1	5%	5%
Not Sure		1	0%	5%
Never		1	0%	5%
			100%	100%

Table 5.22
Source: WOI: DISCUSS Survey of Theaters and Producers/Distributors

Future Theater Brand Preference
2008 Front-end Survey Pre-Grant Award; 2010 DISCUSS Survey

	2008	2010	2008	2010
Total # Respondents	43	22	43	22
Owned IMAX: no programming restrictions	12	7	28%	32%
IMAX-similar business model to now	6	1	14%	5%
Combination of above	18	8	42%	36%
Not Sure	6	5	14%	23%
Don't Care as Long As…	19	9	44%	41%
			100%	100%

Table 5.23
Source: WOI: DISCUSS Survey of Theaters and Producers/Distributors
Columns may not total 100% because of rounding.

Other qualitative comments from DISCUSS survey respondents include:

- *3D definitely has an impact on sales. Anytime we can show a 3D film we see a 6–8% increase in sales.*
- *Theater audiences, including school groups, increasingly expect 3D. IMAX 3D film is a better visual experience than standard digital 3D and helps to differentiate our theater from these others.*
- *I believe it could be helpful to show commercially appealing films as an incremental line of business during evening hours. But I believe the core business of Classic/STEM films during the day should be preserved to work with the museum's mission as well as work best within the type of visit time frame and expectations of the museum visitor.*

CURRENT AND FUTURE BUSINESS MODEL SCENARIOS

CAVEAT AND NOTICE OF LIMITATIONS OF THE BUSINESS MODELS

This section is not intended to help calculate potential financial returns or other quantified calculations. The intended purpose of the economic models is to determine the size of the global network of digital giant-screen theaters needed to create a sustainable global network capable of supporting sufficient ongoing new programming. It is intended to look at the interaction of a few principal variables: a) network size; b) film budget; c) films per year; and; d) share of non-equity funds, recognizing that there are many other variables that can have an impact on the network's sustainability. Further, the methodology treats the behavior of sectors of the field as aggregated averages, when in fact every film is different, as is every theater and its market and operating context. The sample size is stronger for theater operations, but relatively thin for production/distribution data, although the latter include data from organizations with many years of experience and many completed and distributed films. When looking at the relative impact of key variables, we believe these anomalies cancel out and the aggregated methodology is appropriate. However, applying this business model to make forecasts for a specific project would not result in an appropriate analysis. ***This study model should not be used as a financial forecasting tool.***

Currently the business model for film production does not work without non-equity funding. The debt financing market has also been very tight in recent years, making it harder to borrow funds for new films. The number of theaters showing primarily STEM-related films is declining and the expected convergence, after their conversion to digital, with fulldomes is currently viewed as limited, though with technical advances over time that could change. Showing 3D films on domes has been problematic, though recently a few theaters have installed 3D in their dome theaters and are projecting on only part of the screen.

A benefit to future film production costs will be filming digitally, which is cheaper than analog film. That is reflected in the slightly lower average cost assumed for a 2D film for the future scenarios compared to the current cost.

Frankly, the field in transition and it is hard to predict how and what new factors, especially technological, that will have an impact on the field. One example of more recent entrepreneurial efforts is that filmmakers are now producing one film on multiple media platforms and in different lengths of time allowing distributors to reach a greater number of theaters and home entertainment media, not just GS theaters.

CONSIDERATIONS

The tables in this section present a framework for a business model that allows for a range of scenarios based on various assumptions that can be changed. As indicated earlier in this chapter, the three business models were based on the film production budgets of $9 million, $6 million and $3.6 million. Each of these has two funding

models: 35% non-equity funding and 0% non-equity funding, resulting in six scenarios. The business model is predicated on global leases, not just leases to U.S. institutional theaters.

A key assumption driving the model is that five film releases per year are needed to sustain the global network, especially the theaters and their programming needs. That number is based on the assumption that the number of theaters in the network will not grow dramatically.

The six scenarios show that a network of as few as 144 global theaters or as many as 323 are needed to support five films, depending on the film production budget and on the funding assumptions. If the 193 current GS theaters showing STEM programming (as of May, 2010) all converted to digital, that would support three of the scenarios. With the assumption of relatively small growth in the global market of GS theaters showing STEM-related films, it is difficult to see how a steady stream of high-budget, high-quality films can be sustained. There is a wide range of film production costs depending on the film producer. The range indicated by the survey respondents for 2D films was $2 - $5 million for a "bare bones" budget and $2 - $8 million for an optimal budget. The range for 3D was $3-$6 million for a "bare-bones" budget to $4-$12 million for an optimal budget.

FINDINGS AND ASSUMPTIONS

- For a $6.0 million film, from the perspective of the producer/distributor, the future business model only works with "free money" from non-equity investors.
- Based on a $6.5 million film production budget, the current model appears to support only 4.77 films annually. (Input from DISCUSS advisors, as of November 2010, indicates that this number may now be closer to 3.5-4 films annually due to continual loss of screen time.)
- The future scenarios assume that five new film releases per year are needed to sustain the classic film industry.
- The film producers and distributors who responded to the survey and/or attended the DISCUSS Colloquium believe that the fulldome industry may have little convergence and overlap with GS and DIGSS-compliant theaters. A key factor is that fulldomes generally don't show 3D programming. This does not preclude some fulldomes from becoming DIGSS-compliant and showing giant-screen films. One industry expert estimates that there are about 70 fulldomes that meet the GSCA size requirement for GS theaters. Recent data indicate that a few dome theaters have installed 3D and project the image on only part of the dome.
- The future scenarios assume that ancillary income (i.e. videos, books, etc.) will increase marginally, however this merits future research and analysis over the next several years due to the rapidly developing 3D home entertainment market.

- The future scenarios assume that lease fees will remain at current levels.
- The assumption was made that distribution costs may come down a little or remain at current levels, with potentially more dollars going to marketing the films.

IMPLICATIONS FOR FILM PRODUCERS AND DISTRIBUTORS

- Essentially no increase in the size of the market for classic films. The market could potentially decrease if it splinters into IMAX and non-IMAX theaters or giant and conventional size screens.
- Possibility of producing new kinds of digital films for the fulldome market.
- Some additional revenue from ancillary products.
- More competition for screen time, from DMR as well as new digital productions and live events.

IMPLICATIONS FOR THEATERS

- More options for different kinds of programming: classic, DMR, and digital.
- If theaters show too many films per year, they could reduce revenue to distributors to the extent that making new films would not be feasible. About four "A" films per year seems to be a reasonable minimum. The future model for the DIGGS digital network assumes an average of five films per year, though if the network of theaters does not grow, five films may be too many, especially as alternative digital programming grows and creates more competition for screen time.

TEMPLATE FOR A FUTURE BUSINESS MODEL FOR DIGSS-COMPLIANT DIGITAL THEATERS

Key assumptions driving the future business model scenarios appear in the following table. The current number of theaters that regularly lease classic films, 193, was obtained by subtracting all multiplexes (161) and inactive theaters (41) from the 395 global theaters that lease classic films.

The scenario allows assumptions to be changed to see the ripple effects through the model. The number of future theaters in the network is manually adjusted until the goal of approximately five films per year is achieved.

Table of Key Assumptions — Current and Future Business Models
(Theaters Regularly Showing Classic Films)

	Analog Current Scenario	Digital - Future Scenarios					
		1a	1b	2a	2b	3a	3b
ASSUMPTIONS (in 2010 Dollars)	35% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds
Film Productions Average Costs	$6,500,000	**$9,000,000**	**$9,000,000**	**$6,000,000**	**$6,000,000**	**$3,600,000**	**$3,600,000**
Film Format	All types	3D	3D	2D	2D	2D	2D
# of Current GS Theaters Showing STEM-Related Films	**193**						
Average number of films per year	**4.77**	**5.00**	**5.00**	**5.00**	**5.00**	**5.00**	**5.00**
Equity Financing	55.0%	55.0%	90.0%	55.0%	90.0%	55.0%	90.0%
Non-Equity Financing, i.e., "Free money"	35.0%	35.0%	0.0%	35.0%	0.0%	35.0%	0.0%
Debt Financing	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
U.S. Theaters Share of Global Theaters	40%	40% for All Scenarios					
International Theaters Share of Global Theaters	60%	60% for All Scenarios					
Relative Annual Lease Fees	Base	1.15	1.15	1.00	1.00	0.85	0.85
Average Lease Fees: U.S. Theaters	$203,000	$233,450	$233,450	$203,000	$203,000	$172,550	$172,550
AVerage Lease Fees: International Theaters	-10%	-10% for All Scenarios					
Ancillary income in Addition to Film Leases	+10%	+20% for All Scenarios					
Continuing Distribution Commission	25%	25% for All Scenarios					
Up-front Distribution Costs	$850,000	$850,000 for All Scenarios					

Table 5.24

Source: WOI: Current model derived from DISCUSS Survey of Theaters and Producers/Distributors and the DISCUSS Colloquium

Framework for Current and Future Business Models for Classic Films

ASSUMPTIONS (in 2010 Dollars)	Analog Current Scenario	Digital - Future Scenarios					
		1	2	3	4	5	6
	35% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds
Average number of films per year	4.77	5.00	5.00	5.00	5.00	5.00	5.00
Film Productions Costs	$6,500,000	$9,000,000	$9,000,000	$6,000,000	$6,000,000	$3,600,000	$3,600,000
Film Production Revenue Goal							
Goal for Producer's Net Revenue and Start-up Distrib. Costs per film	$6,531,000	$8,716,000	$13,063,000	$6,094,000	$8,992,000	$3,996,400	$5,735,200
Calculated Goal for Revenue per year for 5 Films		$43,580,000	$65,315,000	$30,470,000	$44,960,000	$19,982,000	$28,676,000
Annual Classic Film Lease Fees per Year / per Theater							
Assumed Increase/Decrease over Current U.S. Annual Lease Fees	Base	1.15	1.15	1.00	1.00	0.85	0.85
AVG U.S. Annual Lease Payments for Classic films / year / thtr	$203,000	$233,450	$233,450	$203,000	$203,000	$172,550	$172,550
Factor for non-US Annal Lease Payments	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Ratio of US / Total Global Network	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
International AVG Annual Lease Payments for Classic Films	$190,820	$219,443	$219,443	$190,820	$190,820	$162,197	$162,197
Ancillary Revenue							
Ancillary Revenue to Distributor (as % of Film Lease Revenue)	10.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Attendance and Per Capita Lease Fees							
Average Annual Attendance	189,000	not assumed	not assumed	not assumed	not assumed	not assumed	not assumed
Calculated Per Capita Film Lease Fees	$1.07	not assumed	not assumed	not assumed	not assumed	not assumed	not assumed
Number of Theaters in 2010 Showing Classic Films on a Regular Basis							
Number of theaters in network that Show Classic Films	193	n/ap	n/ap	n/ap	n/ap	n/ap	n/ap

Table 5.25 (Part 1 of 3)

Source: WOI: DISCUSS Survey of Theaters and Producers/Distributors and the DISCUSS Colloquium, *LF Examiner* Databases and Industry Experts at the DISCUSS Colloquium

Framework for Current and Future Business Models for Classic Films

	Analog Current Scenario	Digital - Future Scenarios					
		1	2	3	4	5	6
ASSUMPTIONS (in 2010 Dollars)	35% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds
Average number of films per year	4.77	5.00	5.00	5.00	5.00	5.00	5.00
Film Productions Costs	$6,500,000	$9,000,000	$9,000,000	$6,000,000	$6,000,000	$3,600,000	$3,600,000
ASSUMPTIONS (in 2010 Dollars)							
Film Cost and Financing							
AVG Cost of film (equity total + non-equity) = budget	$6,500,000	$9,000,000	$9,000,000	$6,000,000	$6,000,000	$3,600,000	$3,600,000
Non-equity funds (sponsors, pre-leases, grants) share of budget "Free mo	35.0%	35.0%	0.0%	35.0%	0.0%	35.0%	0.0%
Debt and other off-the-top reimbursements	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Equity Funds per Film	55.0%	55.0%	90.0%	55.0%	90.0%	55.0%	90.0%
Total Non-equity Funds per film	$2,275,000	$3,150,000	$0	$2,100,000	$0	$1,260,000	$0
Total Debt Financing per film	$650,000	$900,000	$900,000	$600,000	$600,000	$360,000	$360,000
Total Equity Funds per film	$3,575,000	$4,950,000	$8,100,000	$3,300,000	$5,400,000	$1,980,000	$3,240,000
Distributor							
Start-up Costs	$850,000	$850,000	$850,000	$850,000	$850,000	$850,000	$850,000
Commission / Share of Gross Revenues	25%	25%	25%	25%	25%	30%	25%
Timing and Payback of Financing							
Investors							
Years from mid-spending to mid-revenues	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lost opportunity of other potential Investments as % / yr	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Add'l Risk margin needed to motivate investment	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Lost Opportunity (Equity Funds x % Lost opportunity x Years out) per film	$1,072,500	$1,485,000	$2,430,000	$990,000	$1,620,000	$594,000	$972,000
Add'l Risk margin amount	$286,000	$396,000	$648,000	$264,000	$432,000	$158,400	$259,200
Total minimum goal return to investors	$1,358,500	$1,881,000	$3,078,000	$1,254,000	$2,052,000	$752,400	$1,231,200
Plus equity funds to return to investors	$3,575,000	$4,950,000	$8,100,000	$3,300,000	$5,400,000	$1,980,000	$3,240,000
Total goal to return to investors (equity + return on investment)	**$4,933,500**	**$6,831,000**	**$11,178,000**	**$4,554,000**	**$7,452,000**	**$2,732,400**	**$4,471,200**
Debt Financing							
Percentage of Film Budget	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Amount of Loan	$650,000	$900,000	$900,000	$600,000	$600,000	$360,000	$360,000
Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Years out	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Interest to Pay	$97,500	$135,000	$135,000	$90,000	$90,000	$54,000	$54,000

Table 5.25 (Part 2 of 3)

Source: WOI: DISCUSS Survey of Theaters and Producers/Distributors

Investor payback and debt financing rates and terms are assumptions by White Oak and not developed from survey findings or discussions with Colloquium participants.

Framework and Scenarios for Current and Future Business Models for Classic Films

	Analog Current Scenario	Digital - Future Scenarios					
		1	2	3	4	5	6
ASSUMPTIONS (in 2010 Dollars)	35% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds	35% non-equity funds	0% non-equity funds
Average number of films per year	4.77	5.00	5.00	5.00	5.00	5.00	5.00
Film Productions Costs	$6,500,000	$9,000,000	$9,000,000	$6,000,000	$6,000,000	$3,600,000	$3,600,000
RESULTING MODELS BASED ON THE ASSUMPTIONS							
Summary of Goal for Return on Investment and Start-up Distribution Costs							
Start-up Distribution Costs per Film	$850,000	$850,000	$850,000	$850,000	$850,000	$850,000	$850,000
Debt Repayment - Principle and Interest	$747,500	$1,035,000	$1,035,000	$690,000	$690,000	$414,000	$414,000
Equity Funds to pay back	$3,575,000	$4,950,000	$8,100,000	$3,300,000	$5,400,000	$1,980,000	$3,240,000
Return on Equity to pay back investors	$1,358,500	$1,881,000	$3,078,000	$1,254,000	$2,052,000	$752,400	$1,231,200
Total Minimum Needed for Net Revenue per Film	$6,531,000	$8,716,000	$13,063,000	$6,094,000	$8,992,000	$3,996,400	$5,735,200
Calculated Annual Lease Fees and Producer's Net Revenue							
Current Model Based on Total 193 Theaters in Network Showing Classic Films on a Regular Basis							
Future Model Based on Assumption of # of Thtrs in Network, 5 Films / Year and Revenue Goal per Film							
Total U.S. annual lease payments for all Classic Films per Year	$15,671,600	$20,170,080	$30,161,740	$14,128,800	$20,787,200	$9,938,880	$13,251,840
Total International annual lease payments for all Classic Films per Year	$22,096,956	$28,439,813	$42,528,053	$19,921,608	$29,309,952	$14,013,821	$18,685,094
Total Global Annual lease payments for all Classic Films per Year	$37,768,556	$48,609,893	$72,689,793	$34,050,408	$50,097,152	$23,952,701	$31,936,934
Plus Ancillary Revenue	$3,776,856	$9,721,979	$14,537,959	$6,810,082	$10,019,430	$4,790,540	$6,387,387
Total Revenue to Distributor	$41,545,412	$58,331,871	$87,227,752	$40,860,490	$60,116,582	$28,743,241	$38,324,321
Less Distributor's share (exclusive of start-up distribution costs) 25%	$10,386,353	$14,582,968	$21,806,938	$10,215,122	$15,029,146	$8,622,972	$9,581,080
Producer's Net Revenue and Pre-Distribution Start-Up Costs	$31,159,059	$43,748,904	$65,420,814	$30,645,367	$45,087,437	$20,120,269	$28,743,241
Producer's Net Revenue and Start-up Distribution Costs per Film	$6,531,000	$8,749,781	$13,084,163	$6,129,073	$9,017,487	$4,024,054	$5,748,648
Goal for Producer's Net Revenue and Start-up Distribution Costs per Film	$6,531,000	$8,716,000	$13,063,000	$6,094,000	$8,992,000	$3,996,400	$5,735,200
Variance	$0	$33,781	$21,163	$35,073	$25,487	$27,654	$13,448
Annual # Films supported by the network	4.77						
Goal of Annual # Films Supported by the Network	n/ap	5.02	5.01	5.03	5.01	5.03	5.01
Number of Theaters Needed to Support 5 Films	n/ap	216	323	174	256	144	192
Calculated Total Network Annual Attendance	36,477,000	n/av	n/av	n/av	n/av	n/av	n/av
"Free Money" Needed / Yr (grants, sponsors, etc.) (free $ x films / yr)	$10,853,906	n/av	n/av	n/av	n/av	n/av	n/av
Cost of Impact / Visitor (free $ / total attendance)	$0.30	n/av	n/av	n/av	n/av	n/av	n/av

Table 5.25 (Part 3 of 3)