# Corporate Visit

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**Kennedy Tsang**
(852) 2533 37xx
kennedytsang@sbie2capital.com

# GDC: Emerging leader of China cinema

**Recommendation: Not Rated** **China Media**

| | | | |
|---|---|---|---|
| **Price** | **HK$2.26** | **Yield (12/06A)** | n/a |
| **12 mth range** | HK$1.45-2.20 | **ROE (12/06A)** | n/a |
| **Market cap.** | US$261.1m | **Net gearing (12/06A)** | n/a |
| **No. shares o/s** | 988.7m | **Net debt/sh. (12/06A)** | HK$0.021 |
| **Daily t/o, 3 mth** | US$1.8m | **BV/sh. (12/06A)** | (HK$0.156) |
| **Free float %** | 26.1% | **Consensus EPS** | |
| **Major shareholder** | Shougang Grand (730 HK) – 51.9% | **- 12/07F** | n/a |
| **Ticker** | 8271.HK/ 8271 HK | **- 12/08F** | n/a |

## Key points:

- Signed strategic agreement with China Film Group to deploy digital cinema systems and operate the digital distribution of cinema content in China's top 2,000 cinemas. It will effectively become the monopoly player in cinema distribution in China.
- World leading provider of digital cinema solutions with about 15% of the global market and 66% of the Asia market. GDC's cinema distribution standard is backed by a consortium of Hollywood studios and hardware vendors.
- GDC's digital cinema solution is the enabler of in-cinema advertising, which may potentially transform the industry. Cinema ad spend accounted for only 0.4% of worldwide ad spend in 2005.
- Leader in CG animation in China, launched the country's first full length CG animation "Thru the Moebius Strip" in Aug 2006 and is working with several North American-based animation studios.
- Our preliminary estimates suggest that, without advertising revenues, GDC can record a net profit of HK$139.8m in FY12/08F, representing a P/E of 17.5x. The valuation will come down on the inclusion of advertising contribution as we expect it to further boost bottom line.

**Business model.** Global Digital Creations (GDC) is a multimedia and animation services and solutions provider focusing on the global cinema industry. It is engaged in the following four main lines of business: 1) digital cinema network operation; 2) provision of digital cinema solutions; 3) computer generated (CG) content creation and 4) CG professional training. The company was listed on the GEM Board of HKEx in Aug 2003.

**Leading provider of digital cinema technology.** The company is a leading provider of digital cinema distribution technologies through its 56.25%-owned subsidiary GDC Technology. The subsidiary has R&D and marketing facilities in Singapore, Hong Kong, China and the US. Digital cinema distribution entails the centralized distribution of digital content from a remote server to cinemas equipped with processing servers and customized digital projectors. The content can be distributed via physical hard drives, satellite and/or the Internet. GDC's digital distribution standard is developed as part of the Digital Cinema Initiatives (DCI), a consortium of Hollywood studios and vendors including: *Buena Vista Group (Disney)*, *20$^{th}$ Century Fox*, *MGM*, *Paramount Pictures*, *Sony Pictures Entertainment* amongst others. The standard has been earmarked as the defacto standard on which all next generation cinemas will be based. GDC is already one of the world's leading providers of digital cinema servers and was the world's first to upgrade its server products to DCI MXF format in Jul 2005. According to "www.dcinematoday.com" and several manufacturers' websites, the company has 15% of the global market and 66% of the Asian market, with an installed base of over 550 digital servers globally.

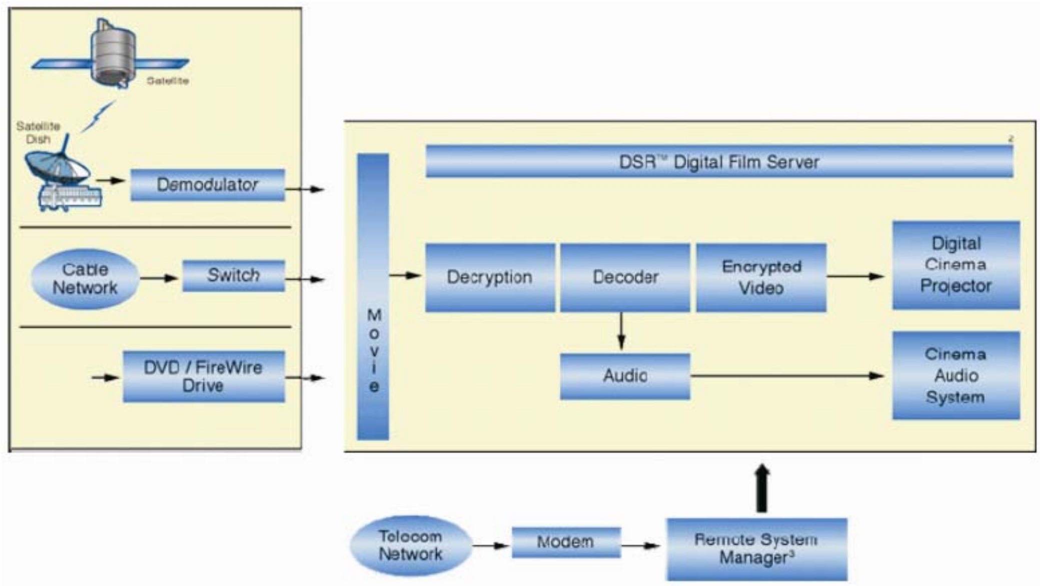
**DCI paves way for global transition to digital cinema.** Developed over several years, the DCI standard was formally released in Apr 2007 and is expected to accelerate the industry's transition to digital. The sector still derives the bulk of its revenue from box office receipts and the roll out of digital cinema will provide a platform for production houses and cinema operators to diversify their revenue streams, introduce more flexible scheduling (demand-based) and improve distribution security. Moreover, with vendor/production interests aligned, we are unlikely to see a standard war that is occurring in the next generation DVD space.

**Table 1: Digital cinema advantages**

| Digital cinema advantages |
|---|
| **Viewer advantages** |
| - Better picture and sound quality (same clarity from first to last screening) |
| **Distributor/producer advantages** |
| - Better control of content distribution |
| - More flexible management of content and advertising |
| - Increased protection of IPR through advanced encryption |
| - Enables small producers to distribute their content effectively |
| - Lower cost of print production and content distribution |
| **Theatre operator advantages** |
| - Allows theatres to show more content than just movies |
| - Increased operating efficiency for chain operators and improves scalability |

*Source: Company data and SBI E2-Capital*

**Chart 1: Digital cinema architecture**




*Source: Company data*

**Strategic partnership with China Film Group.** GDC has entered into an agreement with China Film Group (CFG) in Nov 2006 to install, and operate digital cinema systems, based on the DCI standard, for the top 2,000 cinema screens in China. Management estimates that the screens generate about 75% of box office receipts in China. GDC will provide network monitoring, content distribution management, technical support and maintenance services. The agreement is significant as CFG is China's biggest film production and distribution company and is wholly-owned by the State Administration of Radio Film and Television (SARFT). CFG has a tremendous amount of influence on China's cinema industry given that it has both administration and censorship powers as well as distribution dominance. It distributed more than 70% of Chinese film titles and 45% of foreign film titles in China annually.

**Instant formation of high entry barrier.** Given that GDC will control around 75% of China's cinema distribution market, the company will effectively enjoy first mover advantage and become the monopoly player in the industry. The landmark agreement will instantly give GDC access to film content, operating scale and distribution reach. Therefore, any would-be competitor will face significant hurdles in entering the market. Moreover, GDC, as Asia's leading digital cinema solutions provider, may be in a position to constrain the supply of digital solutions to a potential competitor if a second licence to operate digital cinema networks on the mainland is issued.

**Profit sharing with CFG and cinema operators.** The company will undertake cinema network operations through a profit sharing agreement with CFG and cinema operators. Currently, box office receipts are split with 50% going to cinema operators, 30% to production houses and 20% to distributors (CFG). GDC will take a cut of the receipts from both the cinema operator and the distributor. After deducting administration costs, we estimate that GDC can capture around RMB0.07-0.08 per RMB of box office receipt. Once the business is fully ramped up, we estimate that gross margins could be in the region of 50%. In our view, the business model is extremely lean. Marketing costs are minimal, while G&A costs can also be relatively well controlled given that monitoring and distribution of content will essentially be centralized into one operation center in Shenzhen. According to the SARFT, China's box office receipts reached RMB2,620m in 2006 and are expected to grow at around 25-30% annually for the foreseeable future. To minimize technology switching costs and avoid resistance from cinema operators, the company plans to "finance" transition to digital cinema by installing the system up-front and receiving payment through the profit sharing arrangement. It has an ambitious roll-out schedule commencing from 2H FY12/07, with plans to install 700 by end-FY12/07, followed by a fully installed 2,000 base by end-1H FY12/08.

**Table 2: GDC's cinema operations profit sharing model**

| Description | % of office receipt | RMB |
|---|---|---|
| Box Office Receipt | | 1.00 |
| Cinema | 50.0% | 0.50 |
| Producer | 30.0% | 0.30 |
| Distributor (CFG) | 20.0% | 0.20 |
| | | |
| GDC proportion of cinema | | 0.05 |
| GDC proportion of distributor (CFG) | | 0.05 |
| Administration costs to CFG | | (0.02) |
| **GDC revenue** | **8.3%** | **0.08** |

*Source: Company data, SBI E2-Capital*

**Tremendous ad spend opportunities.** Traditionally, cinema advertising revenues are low and represented only about 0.4% of worldwide ad spend in 2005. We believe this is primarily due to the archaic and inflexible distribution system and difficulties associated with coordinating the broadcasting of advertising. The lack of a proper infrastructure means that advertising clients have a hard time finding the appropriate distribution channels. Note that on other media platforms such as newspapers and magazines, advertising revenues typically account for 70.0-80.0% of overall revenues. This metric is even higher, at 90.0%+ on platforms such as the Internet and TV. Despite the nascent situation, the advantages offered by cinema in-screen advertising are intriguing. The nature of the cinema is that it essentially locks moviegoers into a captive environment and audiences are often focused on the advertising message with minimal interruptions, which leads to a reach rate upwards of 90.0%. In addition, China's movie goers are predominantly well educated and affluent young consumers, who are often the target of many fast moving consumer goods (FMCG) and luxury goods companies.

**Table 3: 2005 worldwide ad spend by media**

| Media type | Ad spend (US$m) | Percentage of total |
|---|---|---|
| Cinema | 1,697 | 0.4% |
| Internet | 18,712 | 4.7% |
| Outdoor | 21,769 | 5.4% |
| Radio | 34,348 | 8.6% |
| Magazine | 52,992 | 13.3% |
| Newspaper | 119,171 | 29.8% |
| TV | 151187 | 37.8% |
| **Total** | **399,876** | **100.0%** |

*Source: Zenith Optimedia*

**Table 4: Characteristics of China's movie going population**

| Characteristics | Remarks |
|---|---|
| High income earners | 73% of China's movie goers annual income is above US$3,000, well above the GDP per capital of around US$1,700 |
| Young age | Average age of China's movie goers is 29.2. 82.6% between 18-40 years old. |
| Well educated | 67% with university degrees, 92.3% are high school graduates or above |
| Highly concentrated | 6,546m shows sessions and 1.43b movie goers in China in 2005 |

*Source: Company data*

**Potential upside from advertising revenue.** With the onset of digital distribution, as well as centralized content management, we think that GDC can unlock extensive value in cinema advertising. The advent of the digital cinema distribution system will completely change the operating landscape of the industry. With GDC's centralized digital cinema architecture, it will be possible to centralize all of the coordination of the in-screen advertising. The system can customize the advertising messages based on the target audience of the respective movie features, as well as cater to the undertaking of simultaneous advertising campaigns at multiple locations by third party brand owners. Moreover, GDC will be able to collect customer data through their cinema operation network. Such data is tremendously valuable to advertisers as the "measurability" of the data can allow them to estimate the efficiency and impact of their ad campaigns. Effectively, the GDC's digital cinema system is the "enabler" that will drive ad spend in cinema media. In addition, GDC may be in a position to obtain the in-cinema advertising rights of the complex, most likely in a profit sharing agreement with the owner. We believe that cinema complex owners will be receptive to such innovative business models as they realize that GDC's digital cinema system can attract advertisers to allocate more of their advertising budgets to the cinema medium, making it a new revenue source for them and a win-win situation. GDC has the technical expertise and, more importantly, a channel to capture this lucrative market. We believe that the company will look to break into this revenue stream once the cinema network is established.

**Large market for digital cinema systems.** Given its strong market share, GDC will also be able to benefit from the worldwide transition of digital cinema server systems. Reports estimate the addressable market size worldwide at US$3.0b, while in China, the number of digital cinema screens is projected to surge from 186 in 2005 to 2,500 in 2009 and 7,000 in 2015. Management aims to sell on average 2,000-4,000 sets/year of digital cinema solutions or servers from FY12/08F at the ASP of US$12,000 (server) to US$65,000 (integrated solutions). The company has signed an agreement with Belgium-based Barco Ltd. to supply DLP cinema projects for bundling into GDC's digital cinema solutions. Barco is a world leader in the provision of large-screen visual and display solutions and one of only three projectors licensed to use Texas Instruments' DLP Cinema Technology. We expect this segment to form a steady cash cow for the company once the worldwide switching process reaches overdrive and estimate that the company would be able to derive around HK$800.0-1,000.0m in revenues from FY12/08F. Management has already prepared for the production ramp up by setting up assembly facilities in Hong Kong and Shenzhen. GDC will procure component parts and conduct the core-assembly of the solution in-house. The company is currently in talks with several large cinema chains in the US to roll out their solutions.

**Table 5: Worldwide digital cinema solutions addressable market**

| Year | Addressable market (US$m) | YoY growth |
|---|---|---|
| 2006 | 62.8 | |
| 2007 | 117.5 | 87.1% |
| 2008 | 176.3 | 50.0% |
| 2009 | 186.0 | 5.5% |

*Source: Company data*

**Table 6: Projected digital cinema screens**

| Year | No. of projection screens |
|---|---|
| 2005 | 186 |
| 2009 | 2,500 |
| 2015 | 7,000 |

*Source: Company data*

**CG animation leader in China.** GDC is already a leading CG animation developer in China. Last year, it released China's first full length CG animation film "Thru the Moebius Strip", while its "Legend of Shangri-la (Peach Blossom Valley)" was a first place winner at Tokyo Broadcasting System's DigiCon 6+2 Gold Award. Typically, the script, director and voice-overs for the animation feature are sourced from overseas while the animation is produced in China. The company has a 300 strong animation team based in Shenzhen and is conducting outsourcing work for several North American-based animation film studios.

**FY12/06A results and preliminary estimates for FY12/07F and FY12/08F.** In FY12/06A, GDC recorded a HK$30.2m net loss on a turnover of HK$54.9m. The bulk of the turnover (HK$30.4m) was derived from its CG animation business. Conservatively, we expect a turnaround in FY12/07 followed by an explosive FY12/08 as its digital cinema network operations and sales of digital cinema productions reach critical mass. We estimate net profit at HK$38.7m in FY12/07F and HK$139.8m in FY12/08F, on a turnover of HK$551.6m and HK$1,024.9m, respectively. We are deliberately conservative on the FY12/07F numbers to factor in the execution risks of the business. For FY12/07F, we expect sales of digital solutions to be the main top line contributor with around HK$429.8m. However, for FY12/08F we expect cinema network operations to deliver around HK$191.8m and solutions sales around HK$748.4m. Note that our preliminary estimates do not include any contribution from cinema advertising, which we expect to further boost bottom line.

**Valuation.** There is no consensus estimate on the company. However, our preliminary estimates suggest that the company is trading at around 17.5x forward FY12/08F P/E.

**Corporate governance issues.** Shougang Grand (730 HK, HK$0.77, NR) is the largest shareholder with a 55.9% stake in the company. Other substantial shareholders include Keywise Capital (8.20%), Credit Suisse (5.04%) and Li Kashing (3.36%), while public shareholders account for around 26.09%. The company was listed on the GEM Board in 2003. Deloitte has been GDC's auditor since Mar 2005. Prior to this, the auditor was PricewaterhouseCoopers.

**Corporate actions.** The company has undertaken a number of corporate actions recently, including: 1) placement of 30m shares by Shougang Grand at HK$1.20 on 30 Mar 2007; 2) placement of 120m shares and the subscription of 100m new shares by Shougang Grand at HK$0.54 on 16 Mar 2007; 3) Li Kashing subscribing for 40m shares at HK$0.2436 on 1 Dec 2006 and 4) placement of 105.0m shares by Shougang Grand at HK$1.61 on 2 May 2007.

**Risks.** 1) execution of digital system roll out in China's cinema network operations; 2) financing requirements of the execution plan in the event that it would be accelerated; 3) significant drop in movie going attendance in China's theatres; 4) ability to capture advertising revenues and 5) regulatory impact by SARFT and other related government departments.

**Table 7: P&L**

| Year to Dec (HK$m) | 04A | 05A | 06A |
|---|---|---|---|
| Turnover | 50.0 | 32.2 | 54.9 |
| Cost of sales | (35.3) | (34.8) | (30.1) |
| Allowance for production work in progress | (84.6) | (24.7) | - |
| Gross profit | 71.9 | (27.4) | 24.8 |
| Other income and gains | 0.1 | 0.6 | 1.1 |
| Selling and distribution costs | (4.2) | (2.0) | (6.5) |
| Administrative expenses | (34.7) | (37.4) | (38.4) |
| Impairment losses recognized in respect of PPE | (14.9) | (2.4) | - |
| Operating profit | | | |
| Finance costs | (5.5) | (7.7) | (13.1) |
| Exceptionals | - | - | 1.8 |
| Profit/(loss) before taxation | (131.2) | (76.2) | (30.2) |
| Taxation | - | (0.2) | - |
| Profit/(loss) after tax | (131.2) | (76.4) | (30.2) |
| Minority interests | - | - | - |
| Profit/(loss) attributable to shareholders | (131.2) | (76.4) | (30.2) |
| *% chg* | *n/a* | *41.8* | *60.5* |
| Dividends | - | - | - |

*Source: Company data*