

**GENB 7297**

**International Business Residency**

## **China Pre-Trip Report**

**on**

**Crystal CG**



**Pinnacle 6: Troy Berreth, Emily Dart, Simon Lee, John McDaniel, Humayun Qureshi**

## **Company Introduction**

While Crystal CG Ltd was established in 1995, in Beijing, it did not become a well known company outside of its market space until last year's summer Olympics. Their 3D computer graphics (CG) and animation work was at the center of the spectacular grand-opening and closing ceremonies of the 2008 Summer Olympics held in Beijing. The delicate and beautiful scenery on the 'scroll painting', the dynamic videos shown on the ribbon screen atop the stadium, and the rhythmically-unveiled footage behind LiNing's ascent to light the torch were all our Crystal's work <sup>(1)</sup>.

Crystal first expanded outside of mainland China in 2002 and is now the largest professional multimedia provide in Asia, employing over 2200 in 10 countries. Their core business is 3D visualization, including architectural visualization, 3D animation, multimedia and interactive presentations, 3D web applications and special effects for films. Crystal operates in various professional sectors including architecture, science, culture, education, film production, city planning, and real-estate development.

2006 was another crucial year in Crystal's history, when they were officially appointed as the 'Beijing 2008 Olympic Games Graphic Design Service Supplier'. This was the first time in the Olympic history that a computer graphics company was a crucial part of the Olympic Games.

## **Company Vision**

Crystal's mission is to offer digital media solutions that champion their client's cause.

Their core values are to:

- Put customers first
- Exceed customers' expectations

- Produce creative work of the highest quality
- Develop and produce innovative digital media solutions

## **Market Overview**

The North American computer-generated imagery (CGI) market includes companies such as Digital Domain, Industrial Light & Magic and Rainmaker Entertainment who focus on films, advertising and video games. Companies such as DreamWorks Animation and Pixar use CGI to develop animated feature films. None of these companies have the breadth of capabilities that Crystal does.

The CGI market is heavily dependent upon artistic talent as opposed the actors, extra and studio sets of traditional film and advertising ventures. Crystal is developing China's creative services industry through the Crystal Institute of Digital Technology<sup>(2)</sup>. By building a pipeline of talented individuals with the required skills, Crystal is both achieving a national objective and ensuring a capable workforce to take on future projects and drive business growth. This also gives Crystal a competitive advantage over local and global competitors.

Development of China's creative services will help move China from "made in China" to "created in China," in the nation's attempts to move up the global value chain. Creative industry in booming cities has increased sharply in China. In 2007, the growth rate in Beijing, Shanghai and Shenzhen were 19.4%, 22.8% and 25.9%, respectively.

Li Wuwei, a leading Chinese economist, believes that "creative industry, which consists of interlocking industry sectors that focus on creating and exploiting intellectual property products such as music, books, film, and games; economic activities focused

on designing, making and selling objects or art works, can generate new value into stockpiled products amid financial turmoil<sup>(3)</sup>.

## **Technology**

Crystal uses Autodesk's 3ds Max software to design and model the visuals they create. Autodesk 3ds Max offers *"Production-proven 3D modeling, animation, and rendering solution for games, film, television, and digital publishing"* <sup>(4)</sup>. Crystal uses a combination of creative and talented artists, working closely with computer graphical designers using powerful desktop publishing computers within a robust network environment to create the large-scale projects for their work. They are considered to be the leaders of the post-production industry in China.

## **Past and Future Projects**

Crystal awed everyone last summer by providing much of the computer animation and computer graphics in the 2008 summer Olympics. The opening and closing ceremonies were some of the most spectacular in the history of the games.

Crystal has also provided visualization services for design competitions and continues to apply their professional skills and advanced technology for creating digital presentations, visual materials, publications, venue maps, promotional films, online promotional tools.

Crystal's working principles are based on quick response, immediate communication, and efficient production. Crystal strives to further develop their technology, team management, talent training systems, and work flow. Crystal continues to be a pioneer in this industry by improving technology, service level and

exploring new types of digital visualization. Their focus is on achieving success for their clients.

## **Experience**

**Beijing 2008 Olympic Venue Promotion Film (1999)** - Crystal produced a 10-minute video for BOBICO entitled “Beijing 2008 Olympic Venue Promotion Film” that was intended to showcase many of the planned sports venues with cutting edge 3D technology. When the IOC (The International Olympic Committee) visited Beijing, they were impressed to see such a clear vision of the city’s future planning. This effort helped in the selection of Beijing as the 2008 Olympic Venue <sup>(1)</sup>.

**School for educating new generations of students interested in architecture, film and television animation, computer games, graphic design (2003)** – The Crystal Institute of Digital Education was founded in 2003. Crystal is dedicated to promoting creative industries by encouraging sustainable development and training of talented personnel. The institute’s goal is to develop and nurture practical creative talents by offering various vocational programs. A large percentage of the faculty is senior employees of Crystal. Through this type of training, students can quickly upgrade their skills and broaden their job opportunities. Since its inception, the Institute has trained more than one thousand design and 3D visualization professionals. Crystal’s education philosophy emphasizes practical experience, and career enhancement <sup>(1)</sup>.

**Beijing 2008 Olympic Games Graphic Design Service Supplier (2006)** – Crystal provided services for the 2008 Summer Olympics. This was the first time in the Olympic history that a computer graphics company was a crucial part of the Olympic Games <sup>(1)</sup>.

**Beijing 2008 Olympics Opening and Closing Ceremony Digital Provider and  
Beijing 2008 Olympic Games and Paralympic Sports Game Presentation 3D**

**Design Supplier (2007)** – Crystal spent nearly 8 years working on various Olympic-related projects. Approximately 800 members of Crystal staff worked on 135 different productions for 27 departments of BOCOG (Beijing Organizing Committee for the Olympic Games). The Olympics employed the greatest amount of digital technology in the history of the games. Altogether, Crystal produced 60 minutes of digital content for the grand Opening Ceremony <sup>(1)</sup>.

**Shanghai World Expo – Virtual World (2010)** - Ogilvy China, is working with Crystal on a virtual world project called "World Expo". Targeted at the Shanghai World Expo with a launch set for May 2010, it will use Crystal's' N City, which allows for mapping and exploration of various buildings and sites. Ogilvy has described the project as "integrating 3D technology and virtual communities." <sup>(1)</sup>

**International Experience** - Crystal has well established and long-term relationships with many clients in the US, Europe, and the Middle East. This includes a large number of architects, designers, and developers. Crystal's high quality 3D renderings and animations help them to visualize ideas and successfully bid for important projects worldwide, like the Dublin Airport (HOK), Burj Tower & Trump Tower (SOM), and Huamao Center & Songdo (KPF) <sup>(1)</sup>.

## **Conclusion**

Crystal generated great momentum and awareness for its brand at the 2008 Summer Olympic games in Beijing. The stunning and unique visuals demonstrated the

company's 3D graphics expertise. Supported by a national effort to grow the creative services industry, Crystal is educating and developing future leaders in their Institute of Digital Technology. Already working on projects for the next summer Olympics, Crystal is poised for great growth in their specializations in the coming years.

## **Questions for Crystal CG**

1. Are there any plans for the future to enter the gaming industry and provide superior software graphics for various gaming studios?
2. Are there any plans to develop tools such as software packages that will allow an average user to create their own graphics?
3. Do you have any plans to expand to North America or Europe?
4. Do you have any holographic technology?

## **Appendix**

### **Company Main Events**

1995: The founding of Crystal CG

1998: Autodesk awarded Crystal CG the title of Supporting Center of Multimedia Users of China

1999: Shanghai and Shenzhen branches of Crystal CG are established

2000: Crystal CG's investment in the architectural website Far2000.com.

2001: Crystal CG became the business sponsor of the Beijing 2008 Olympic Games and the designated 3D CG provider

2001: Nanjing branch of Crystal CG established

2002: Singapore and Hong Kong branches of Crystal CG established

2002: Crystal CG was contracted to make the promotional film Boao Economic Forum for Asia



2002: Restoration of old Beijing city for the first time using 3D CG technology; Memory of Beijing City----Digital Images exhibition held

2003: Hangzhou and Tianjin branches of Crystal CG established

2004: Became the designated 3D CG provider of the 28th World Heritage Conference

April 2004: Held competition for Online Architectural Design of the Crystal CG Cup

April 2004: Discreet awarded Crystal CG the title "The Best User of 3DMAX Software and Institute of Visualization in Mainland China"

June 2004: Made films Immortal City and New Beijing for Beijing Museum of City Planning

March 2005: At the invitation of the China Council for the Promotion of International Trade and the Shanghai Council for International Exhibition, Crystal CG was contracted to make the presentation film for the Chinese Exhibition Hall and the multimedia design of the Digital Image Hall at EXPO 2005 Aichi

May 2005: Won the bid for making the digital film and multimedia presentation at the Beijing Capital Museum

June 2005: Crystal CG and J&W Management Ltd. jointly created the first eight-in-one digital image "E XinXin", the virtual girl, in a 3D MV

Nov 2005: Crystal CG Training Center developed into Crystal Institute of Digital Education

Nov 2005 to March 2006: full-length documentary Palace Museum and New Silk Road, both featuring 3D motion pictures made by Crystal CG

Dec. 2005: Shanghai Crystal CG Training Center was jointly established with the Shanghai Multimedia Association

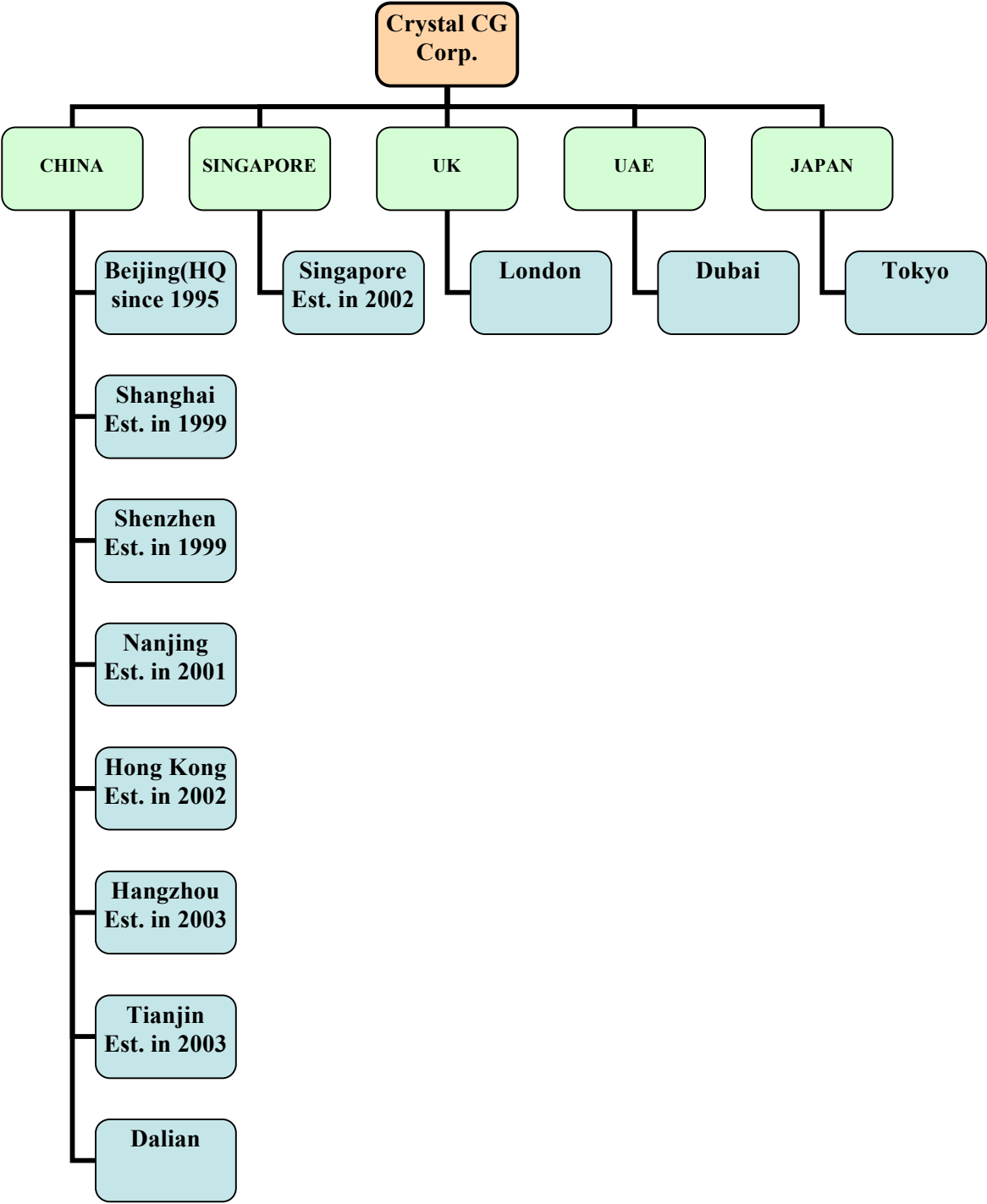
March 2006: Crystal CG entered into a contract with the 2008 Beijing Organizing Committee of the Olympic Games as its major CG design provider

April 2006: Branch established in the Advanced and New technology District, Dalian

May 2006: The documentary Construct a City for Olympic Games was produced in collaboration with Beijing television station and broadcast

August 2006: The Beijing Organizing Committee of the Olympic Games and Crystal CG held a joint press conference at the Beijing Diaoyutai National Guest House, Crystal CG was officially appointed as the Beijing 2008 Olympic Games Graphic Design Services Supplier.

Company Structure



## Locations



## Headquarters

### **Crystal Digital Technology Co.Ltd. (Beijing)**

Address: 3 Yard, 1 District, Sanlihe, Xicheng, Beijing, P.R.C.

Postal Code: 100045

Tel: +86-10-6858 6281

Marketing Department: +86-10-6858 6280 j6858 6248

Customer Service Department: +86-10-6858 6281

FAX: +86-10-6858 6311

E-mail: [info@crystalcg.com](mailto:info@crystalcg.com)

## **Other Offices**

### **Shanghai Crystal Information Technology Co., LTD (Shanghai)**

Address: 3-4F Baoli Plaza No. 10 of 100 alleys, Changshu Rd. Shanghai P.R.C.

Postal Code: 200040

TEL: +86-21-6249 7280

FAX: +86-21-6248 1949

E-mail:crystal@mail.online.sh.cn

### **Shenzhen Crystal Computer Graphics Co., LTD. (Shenzhen)**

Address: Room 208 Wanyuan Plaza, Bloc 22 Hongli Rd., Shenzhen, P.R.C.

Postal Code: 518028

TEL: +86-755-83234728 83320051 83248151

FAX: +86-755-83276592 83202435

e-mai:crystal8@public.szptt.net.cn

### **Nanjing Crystal Computer Graphics Co., LTD (Nanjing)**

Address: No. 57 Beijingsong Rd., Nanjing, P.R.C.

Postal Code: 210018

TEL: +86-25-83215 715 / 83215 716 / 83215 717 / 83215 718

FAX: +86-25-83609 338

E-mail:crystal-nj@sina.com

### **Crystal Computer Graphics Pte. LTD (Singapore)**

Address: 10 Anson Road, #30-09 International Plaza, Singapore 079903

TEL: +65-6221 0369

FAX: +65-6221 0737

E-mail:crystal@crystalcg.com.sg

### **Crystal COMPUTER GRAPHICS LIMITED (Hongkong)**

Address: Suite 1204, 12/F, Top Glory Tower, 262 Gloucester Road, Hong Kong.

TEL: +852-2575 2002    £-2575 1002

FAX: +852-2575 1230

E-mail:crystalhk@crystalcg.com.hk

### **Hangzhou Branch Beijing Crystal Digital Technology Co .Ltd. (Hangzhou)**

Address: Rm1239, Building No.1, Eastern Software Zone, No.90. WenSan Rd., Hangzhou, P.R.C.

Postal Code: 310012

TEL: +86-571-88473456

FAX: +86-571-88223014

E-mail:wfeitian@vip.sina.com

**Tianjin Branch, Beijing Crystal Digital Technology Co. Ltd. (Tianjin)**

Address: 18F Qixiang Plaza, No. 100, Qixiangtai Rd., Hexi, Tianjin P.R.C.

Postal Code: 300074

Marketing Department: +86-22-23550298 23550291

FAX: +86-22-23550298

E-mail: tianjin@crystalcg.com

**Crystal Training & Research Development Center**

Address: No. 2, 3 Yard, 1 District, Sanlihe, Xicheng, Beijing, P.R.C.

TEL: +86-62323277 010-62323933 62398702

E-mail: hrl@crystalcg.com

**London Crystal Digital technology Co Ltd**

1 Hammersmith Grove

London W6 0NB

Tel: +44 (0) 20 31706131

Tel: +44 (0) 20 31706130

Fax: +44 (0) 20 30086161

**Dubai Crystal Digital Technology**

Office No D 103 Dubai Silicon Oasis

Dubai U.A.E

P.O.Box 341039

Dubai U.A.E

Tel: +971-4-3724050

Fax: +971-4-372048

**Crystal Computer Graphic Pte Ltd**

10 Anson Road #30-09

International Plaza

Singapore 079903

Tel: +65 6221 0369

Fax: +65 6221 0737

**Crystal Computer Graphic**

3F Amashin 2-4-18 Yotsuya Shinjuku

Tokyo, Japan 160-0004

Tel: +81 3 53632818

Fax: +81 3 53232717

## References

- 1) Behind the Magic. How Crystal CG Visualized the 2008 Beijing Olympics  
[http://www.designbook.us/magazine/issue/1/behind\\_the\\_magic](http://www.designbook.us/magazine/issue/1/behind_the_magic)
- 2) Crystal Institute of Digital Education  
[http://www.crystalcg.com/en/DIGITAL\\_EDUCATION.html#](http://www.crystalcg.com/en/DIGITAL_EDUCATION.html#)
- 3) China Economic Net. Creative industry could be a bright spot  
[http://en.ce.cn/Industries/MI/200901/11/t20090111\\_17925451.shtml](http://en.ce.cn/Industries/MI/200901/11/t20090111_17925451.shtml). Jan 11, 2009
- 4) Autodesk 3Ds Max  
<http://south-apac.autodesk.com/adsk/servlet/index?id=12340873&siteID=1157326>
- 5) Crystal CG Architectural Visualization  
<http://www.archcrystalcg.com/flash/>
- 7) Interview with Lu Zheng Gang  
[http://supersatellites.burb.tv/view/Interview\\_with\\_LU\\_ZHENGANG](http://supersatellites.burb.tv/view/Interview_with_LU_ZHENGANG)
- 8) Tianjin Commission of Commerce  
<http://english.tjcoc.gov.cn/htmlfiles/2008-8-11/2008811102226.shtml#>