

ANNEX A

Economic Development Board's Industry Highlights

The Economic Development Board, together with its partner agencies the Infocomm Development Authority and the Media Development Authority, aims to make Singapore the region's media hub.

The intention is to promote Singapore as a compelling location for media companies across the entire industry value chain; creating a self-reinforcing, inter-dependent ecosystem that will continuously attract talent, ideas, capital and enterprises to create international products and services from Singapore.

Singapore's vision to become the region's media hub, combining both production and regional business responsibilities, is being realised with enterprises setting up, expanding and extending their operations in Singapore. With our technological capabilities and global reach, Singapore is primed to develop the media industry into an unparalleled success.

Below are examples of international companies with presence in Singapore spanning across the Publishing & Information Services, Broadcast & Production and Games & Animation sectors.

PUBLISHING & INFORMATION SERVICES

Wiley Services Singapore

Established in 2005, this is the first publishing services project in Singapore on a global scale, and also from the world's number 3 Scientific, Technical and Medical (STM) & Academic Journal publisher Wiley-Blackwell. Wiley Services Singapore was established as the Global Publishing Services HQ to support all Blackwell Publishing entities globally in the area of journals and books printing & distribution, customer services, IT support and production management.

Ink Publishing Pte Ltd

Established in 2006, Ink Publishing from UK is the world's leading in-flight magazine publisher, with titles that include Bangkok Airways Fah Thai, Cebu Pacific Smile, China Airlines Sky Boutique, China Airlines Sky Couch, Jetstar Airways Jetstar, Siem Reap International Airways Sarika and Tiger Airways Tiger Tales. Ink is also the publisher of Time Out Singapore magazine, a deal brokered in Singapore by the EDB. Based in Singapore, Ink is able to leverage the fast-growing airline industry in the region.

Reader's Digest Asia

Reader's Digest relocated its Regional HQ for English language products from Hong Kong to Singapore in 2006 after being in Hong Kong for 40 years. This is testament to Singapore's English language editorial capabilities and attractive business environment. In February 2008, Reader's Digest also partnered with Discovery Asia in Singapore, to launch Discovery's first magazine (Discovery Magazine) which has already outsold its first print run.

Reuters Asia Pte Ltd

Reuters, the leading Media and Financial Information Services company, has 900 staff in Singapore today as it continues to expand its HQ here. Its main activities include a world editorial desk, Asia-Pacific IT service centre, 1 of the 3 global data centres, global pictures desk and newly established Reuters Communications Services which is the global product charter for communications technologies in enterprises.

Cengage Learning

Previously Thomson Learning, consolidated its Regional HQ in Singapore and launched a new Chinese Language Teaching product charter here. First educational publisher to develop Chinese Language Teaching products here on a global scale.

BROADCAST & PRODUCTION

HBO

HBO was the first Cable and Satellite Broadcaster to establish its Regional HQ in Singapore in 1993. It employs some 130 staff in programming, promotions, technology and operations, finance and administration, legal and human resources, sales and marketing. HBO Asia manages five channels (HBO, HBO SIGNATURE, HBO HITS, HBO FAMILY and CINEMAX).

CNBC

CNBC Asia Pacific is headquartered in Singapore and provides eight hours of live Asia-produced programming every business day. Live market action, interviews and analysis from Europe and the US complements Asian coverage to deliver a mix of local, regional and global business news, relevant to viewers across Asia Pacific. In Asia Pacific, CNBC is distributed via satellite, cable and terrestrial broadcast networks, as well as broadband. CNBC content is also distributed on the 3G platform through selective markets.

ESPN STAR Sports

ESPN STAR Sports (ESS) was established in Singapore in 1996 as a 50:50 joint venture between two of the world's leading cable and satellite broadcasters, ESPN Inc. and STAR. Headquartered in Singapore, ESS has seventeen customized networks spanning 24 countries delivering the world's premier sports programming to over 310 million viewers in Asia. ESS today is the largest international cable and satellite broadcaster based in Singapore. With a completely digitized production office, ESS is well-positioned to lead Asia in the area of new media content distribution.

AETN All Asia Networks

A joint venture of A&E Television Networks (AETN) and ASTRO ALL ASIA NETWORKS plc (ASTRO). Headquartered in Singapore with operations in Kuala Lumpur, Malaysia, AETN All Asia Network builds and operates branded channels and services throughout South East Asia, Hong Kong and Taiwan. The company will launched The History Channel and Crime & Investigation Network in the region in 2007.

SPE Networks

SPE Networks – Asia is the leading broadcaster in Asia, bringing viewers the best television shows from around the world and exciting original productions through 5 channels – AXN (action & adventure shows & #1 US dramas), Animax (Japanese animation & unique youth content), SET (female-targeted lifestyle shows), PIX and PIX THRILLER (on demand movies).

Darlow Smithson Productions

Darlow Smithson Productions is a multi-award winning company producing high quality factual programmes for broadcasters worldwide, with a focus on ambitious docudramas, series and documentaries for theatrical release. TV subsidiary of IMG Media, it has established a production hub in Singapore.

Mark Burnett Productions Asia

Genting International and Mark Burnett Productions partnered to form Mark Burnett Productions Asia (MBPA) which covers all of Asia except Japan and the Middle East, and will herald the age of new exciting television content for this region. Besides continuing MBP's successful run in producing TV series for Asia, MBPA will hold the exclusive license to produce and distribute these programs to multiple media platforms that range from broadcast, the Internet to mobile television. Audiences in Asia can expect not only new entertainment content, but also to join in the programs or shows, many of which will be produced in Asia. The new company will also develop original television shows for Asia that will be licensed for format productions throughout the world.

GAMES & ANIMATION

Electronic Arts

The world's leading developer and publisher of interactive entertainment, has based its Asia Regional Headquarters and localization studio in Singapore. The studio customises popular EA games for the Asian markets, distributing them in at least five different languages.

Koei

A leading Japanese game company, established its first overseas game development studio in Singapore to produce the first made-in-Singapore Massively Multiplayer Online Role Playing Game (MMORPG) titled "Romance of the Three Kingdoms Online", launched in Japan in Feb 2008.

Ubisoft

Ubisoft is a global Top 3 developer and publisher of videogames, with over 4000 employees and 18 studios around the globe. In February 2008, Ubisoft announced that will be opening its first South East Asian games studio in Singapore in mid-2008. When this studio reaches full headcount of 300 persons, it will be the region's largest games studio.

Anark

Anark, a US games middleware/technology company, developed a game user-interface middleware in Singapore. The middleware, "Gameface", is currently being employed for development of top games on the latest next-generation console and PC game platforms.

Gevo Entertainment

Formerly a games studio of Genki (Japanese game company). It has since gone independent of Genki, and is developing games for Nintendo's platforms (i.e. DS, Wii). Studio has extensive working experience with Japanese publishers on various game projects.

Boonty

A French casual game developer and distributor. Presence in Singapore encompasses its Asia RHQ, advanced casual game studio and game hosting in Singapore.

Seasky Netjoy

Chinese mobile game developer using Singapore as its International HQ to reach markets outside of China.

Lucasfilm Animation Singapore (LAS)

LAS is Lucasfilm's 1st 3D animation studio outside USA and is currently the largest in Singapore. It occupies a 63,000 square feet facility and expects to hire about 300 employees by end-2008. LAS' working model is unusual in that employees have a chance to work on projects for all three platforms – TV, film and games. LAS has also embarked on an in-house training programme aptly named the Jedi Masters Programme (JuMP).

Southern Star Singapore

Southern Star Singapore is an animation studio set up by the Southern Star Group, Australia's largest independent television production and distribution group. The studio produces the very successful children's animation series, The Adventures of Bottle Top Bill. This TV-animated series has won the DigiCon Territorial Award.

ANNEX B
Infocomm Development Authority's Industry Highlights

ESTABLISHING SINGAPORE AS A CENTRE FOR THE MANAGEMENT AND DISTRIBUTION OF MEDIA SERVICES

To develop Singapore into a global Digital Media and Entertainment capital by offering innovative content, services and technologies through the use of infocomm is IDA's iN2015 masterplan for the IDM sector. With our robust infrastructure, Singapore can become a global node that provides core services for storing, trading and distributing digital assets.

IDA was instrumental in making available platforms for media and entertainment companies to create content and services through the following projects:

Asia's First Interactive Digital Centre

IDA worked with private and public organisations to spearhead the strategic use of infocomm to encourage innovation and research & development. Launched in November 2007, the centre at Temasek Polytechnic (TP) houses state-of-the-art 3D innovative technologies and laboratories for industry project development, training and research.

IDC Asia which will contribute towards Singapore's long-term vision of becoming a global interactive digital media capital will be spearheaded by TP and IM Innovations in the following areas:

- Provide leadership and be a focal point for the development of novel 3D applications, manpower capabilities, as well as technology integration and research in the emerging area of interactive 3D visualisation content and application creation.
- Champion the rapid adoption of innovative IDM solutions to help businesses enhance sales, marketing, education, training and support, so as to gain a competitive advantage in key industry sectors such as medical, education, transportation, aerospace, architecture, construction and engineering.
- Develop synergistic partnerships in Asia with businesses, universities and other organisations to offer new IDM tools, applications, training and professional services.

Asia's First Digital Cinema Hub and Network Operations Centre (NOC)

Thomson, through its Technicolor Digital Cinema business announced plans in Dec 2007 that they will offer digital cinema service and related management solution capabilities to the motion picture industry in Singapore and other Asia-Pacific regions.

Technicolor, with the support of the IDA, plans to construct an efficient and secure digital cinema hub and NOC in Singapore to offer digital cinema service and related management solution capabilities to the motion picture industry for the Singaporean territory and other Asia-Pacific regions.

Thomson's Singapore facility is expected to have the capability to support the following digital cinema services: physical and electronic forms of content delivery; Technicolor's key distribution and management systems; equipment monitoring; and 24/7/365 multi-lingual call-centre support, fully integrated with its premier operations in the U.S.

The build-out of the new digital cinema hub and NOC in Singapore is slated to begin in mid-2008.

DEVELOPING THE DIGITAL CINEMA AND GAMES HUB

Digital Cinema

Companies like Mega Media, Mega Films and Shaw Media Services are equipped with digital cinematic processing capabilities such as digital subtitling, encoding and water-marking. Technicolor, MediaCorp Technologies, Globecast and SingTel are capable of digital cinematic content management and distribution.

To date, there are about 25 screens at cinemas across major local movie chains which are equipped to screen digital cinematic content. Through efforts in developing the digital cinema industry, cinema exhibitors are able to bring in exciting alternative entertainment content like operas from *The Metropolitan Opera* and *Cinema Kabuki*, enabling local audience to experience new and exciting content in the intimacy of a cinema environment.

The Metropolitan Opera

For the first time in Asia, outside Japan, opera fans and music lovers enjoyed world-class opera on the big screen in August 2007. Golden Village Vivo City screened the Metropolitan Opera's new productions of Tan Dun's *The First Emperor* and Mozart's *The Magic Flute* in high definition (HD) digital format on the cinema screens. The two productions, which were staged live at the Metropolitan Opera House in New York City, have been shown in HD format at cinemas in the United States, Canada, Japan, Germany, the United Kingdom, Sweden, Norway, and Denmark, with spectacular success both from the media and public.

Cinema Kabuki

In April 2008, Cathay Cineplexes showcased Cinema-Kabuki, an exclusive Japanese Digital Film in Singapore for the first time outside of Japan. Performances from two different genres, namely dance and drama are showcased at The Cathay Cineplex:

- Dance - Kyokanoko Musume Ninin Dodoji
- Drama - Togitatsu no Utare (Noda Version)

Previously showcased live only in Japan, Paris and New York, it is being screened in Singapore between 12 – 20 April 2008, using the Sony SXRDCineAlta 4K Digital Projection System for unsurpassed audio and visual quality for the very first time outside of Japan. Cinema-Kabuki is the filming of a live Kabuki performance using high-performance, high-definition digital video cameras for showing in movie theatres. The use of high definition digital cameras for the live Kabuki performances marries tradition and technology beautifully.

Regional Games Hub

In 2006, a GXA member company, Activate Interactive developed a world's first cross-platform MMORPG (Massively Multi-player Online Role-Playing Game) that is playable on both the computer and mobile phones in real time for Nokia. This allows gamers to fight monsters, find treasures and meet new friends whether they were at home or on the go.

Home-grown companies such as Infocomm Asia Holdings has secured rights to manage and distribute top-tier massively multiplayer online game (MMOG) titles like *Granado Espada* and *Hellgate: London* to the region. In early 2008, AsiaSoft, the publisher of popular free-to-play MMOGs such as "MapleStory" and "CABAL Online", managed to clinch the rights to publish the much anticipated MMORPG "Mythos" in Southeast Asia.

Games Exchange Alliance (GXA)

An initiative of Infocomm Development Authority of Singapore, GXA is a network of companies that help games companies cross last-mile commercialisation hurdles to place titles into the hands of Asian gamers. This is in line with Singapore's intention to be a centre for the creation and commercialisation of digital media and entertainment (DME) technologies. Since October 2004, GXA's network of companies across the games ecosystem in Singapore has grown about three times – from 12 companies to about 30 companies to date. Each member provides their respective

strengths in games distribution, hosting, localisation and marketing, to shorten the time-to-market for game companies.

To strengthen Singapore as a games hub, GXA signed a Memorandum of Intent (MOI) with ten national games associations in the Asia Pacific during the Games Convention Asia last year. This marks the beginning of greater collaboration in areas such as games development, bill payment services and distribution. The associations are:

- Australia Games Developers Association (AGDA)
- China Games Publishers Association
- Hong Kong Digital Entertainment Association
- Japan Online Games Association (JOGA)
- Korea Entertainment System Industry Association
- New Zealand Games Developers Association (NZGDA)
- Games Developers Association of Philippines (GDAP)
- Taipei Computer Association (TCA)
- Thai Games Association (TGA)
- Vietnam Software Association - Digital Content Business Club (VINASA)

Through the GXA network, alliance members such as games service providers, publishers, content developers and solutions providers are provided market access to over 13 key Asian countries, including China, India, Hong Kong, Taiwan, Japan and Australia.

ESTABLISHING SINGAPORE AS A TRUSTED AND SECURE DIGITAL MARKETPLACE

To position Singapore as a trusted and secure marketplace for businesses to store, aggregate, trade and distribute digital assets, a *Digital Marketplace* programme will put in place the infrastructure and services needed for the development of services to hub and trade digital assets for various distribution platforms. This marketplace will help to jumpstart the interactive and digital media sector.

We have also seen early efforts by the industry in building Singapore's capability as a global digital marketplace in line with IDA's iN2015 masterplan:

- 1-Net Singapore set up a one-stop service platform NexMedia for managing content distribution across multiple platforms such as Video on Demand over Broadband, IPTV, Mobile and Wireless. These capabilities have in turn attracted collaborations with content owners such as MOBTv (MediaCorp), a leading UK media company, and corporations for webcasting services.

TRANSFORMING THE EDUCATION SECTOR THROUGH THE USE OF INTERACTIVE DIGITAL MEDIA

The use of IDM has also enabled engaged learning in the education sector. Through IDM, learning can be reinforced by using graphics, images and sound, and not just text, thus stimulating more senses. These can be easily integrated into the lessons and brought out at the right time.

- Schools are also exploring 3D Immersive technologies similar to the ones used in IMAX theatres. Students learn not just from what the teacher communicates verbally in school or from textbooks. They can also draw on digital content and online information to gain a deeper understanding of what is being taught in class. Whether stored in the student's PC or within an information network, such content allows their learning experiences to be replicated and repeated.
- In May 2007, five future schools in Singapore were announced. These schools will push for innovative transformation of the education experience in Singapore and lead the way for other schools in providing possible models for seamless and pervasive integration of ICT, such as IDM into the curriculum for engaged learning in schools.

- An example of a future school - Canberra Primary School, teachers use Tablet PCs to develop their students' reading comprehension skills. They also engage their students through games and visual manipulation using Interactive White Boards.

REACHING INTERNATIONAL MARKETS

With strong support from government agencies such as IDA, MDA, and IE Singapore, games companies were able to reach out to international markets collectively to distribute their products and services. Strong presence at international events such as:

- Games Developers Conference (USA)
- Games Convention Europe (Germany) further enhances Singapore's position as the gateway to Asia.
- Notably, Singapore successfully hosted Southeast Asia's first regional games event, Games Convention Asia, in September 2007 which attracted more than 70,000 local and foreign visitors.
- With the popularity of computer and console games rising across the world and interest in events like the World Cyber Games at an all time high, IDA and GXA showcased 13 Singapore software companies' products in the 1,600 square metre Singapore pavilion at the Electronic Entertainment Expo (E3).

ANNEX C
Media Development Authority's Industry Highlights 2007

ESTABLISHING SINGAPORE AS A MEDIA EXCHANGE

Media Marketplace

Singapore plays host to two major media markets annually, namely BroadcastAsia and Asia Media Festival, which attract buyers, sellers and investors from all over the world to Singapore to finance, trade and distribute media content and services.

BroadcastAsia 2007, the region's most successful broadcasting and digital multimedia technology trade event, brought together more than 760 exhibiting companies from 42 countries to Singapore from 19 to 22 June. The 1,000-sq-m Singapore Pavilion was the largest-ever and saw local companies showcasing their latest services, applications and tools in mobile broadcasting, internet protocol TV and high-definition TV.

From 14 November to 4 December, **Asia Media Festival 2007**, primarily a rights market in TV, film and animation, saw the signing of sales and deals worth a total value of US\$76.7 million, a 63 per cent increase from the previous year. In all, 5,300 trade participants from more than 50 countries took part in the Festival.

Asia Media Festival	2003	2004	2005	2006	2007
Deals Made (In US\$ millions)	13	21	32.7	47.1	76.7

Media Financing Hub

Singapore's media financing scene is abuzz with activities from increased participation of financial institutions and commercial banks. To date, there is over S\$500 million worth of funds available for financing of and investing in media projects. Key media financing activities in 2007 included the following:

- Singapore-headquartered RGM Entertainment announced a S\$80 million film fund in end 2006 to produce six international feature films with Singapore production companies over a two-year period. In 2007, the fund generated projects such as *The Girl in the Park*, starring Sigourney Weaver and Kate Bosworth; *Just Buried*, starring Rose Byrne and Jay Baruchel; and *Winged Creatures* starring Forest Whitaker and Jennifer Hudson and directed by acclaimed director, Rowan Woods.
- In 2007, Singapore's production company Imagine OmniMedia partnered Mark Burnett Productions to produce *The Contender Asia*, the Asian edition of the successful US reality TV series. *The Contender Asia* is shot entirely in Singapore and is supported by the Development Bank of Singapore. The series is currently airing on AXN.
- A US\$40 million Europe-Singapore Co-production Fund was set up in October 2007 and managed by a local content management and distribution company, Six-Six-Eight, with their European partners. The fund is supported by MDA and financed by Standard Chartered Bank.
- Neo Studios Pte Ltd, a company set up by Jack Neo, established a S\$10 million Raffles China Media Fund in October 2007, which aims to produce movie projects for distribution in China over the next three years. Neo Studios signed landmark deals with China's prestigious movies studios which include Shanghai Film Group Corporation, Xian's Western Movies Group and Hong Kong's Big Media in October 2007.

- In October 2007, Upside Down Entertainment – a partnership between one of Singapore's production companies, Upside Down Concepts and US multi-E Emmy nominee Quixotic Media Group – announced a US\$10 million deal with financing partner Cinema Solutions, Inc. to fund two feature motion pictures for the international market.
- Singapore's Mega Media, in collaboration with France's Project Images Films co-produced the first ever Singapore-France TV series *Déjà Vu*. The US\$4.1 million youth fiction series (26 episodes x 26 minutes) was filmed in both France and Singapore and shown on France 2 and is supported by MDA and the French Embassy, Singapore.

Intellectual Property Rights Management

In November 2007, the Motion Picture Association and MDA launched the Centre for Content Protection (www.contentprotection.net), further underscoring Singapore's robust intellectual property regime that is crucial to its development as a media exchange.

Media Services

The last few years witnessed a growing interest from the international community to use Singapore a film location and post-production partner, giving it greater credence as a hub for the post-production, hosting and distribution of media content and services.

- One high-profile production in 2007 was the AXN reality series *The Contender Asia* co-produced by Singapore's Imagine OmniMedia and United States-based Mark Burnett Productions. The project was filmed entirely in Singapore and post-production was undertaken by Singapore's Infinite Frameworks.
- Another project was Silk Road Pictures' feature film *Dance of the Dragon*, which was post-produced by Blackmagic Design and Yellowbox Studios.

EXPORTING MADE-BY-SINGAPORE CONTENT

Media Content

Singapore media companies have developed the confidence and capabilities to partner leading international player and co-produce high quality content aimed at the global market. As media convergence takes flight, Singapore media companies are seizing the opportunity to commercialise their intellectual properties across the full range of media platforms, from print, broadcasting, film and publishing to new areas of convergent media such as digital and online media.

Television

Quality high-definition factual programmes with an Asian element have become the trademark of Made-by-Singapore television content.

- *Little Big Dreams* by Threesixzero Productions won the Gold Medal Award for Best Direction at the New York Festivals International TV Broadcasting Awards 2008, and has been picked up for international distribution by ID Distribution and sold to broadcasters in Germany, Sweden, Belgium, Estonia, Denmark and UK.
- Fremantle Media, one of UK's leading distributors, is collaborating with MDA on the international distribution of two High-Definition productions - *Kylie Kwong: My China* by Sitting in Pictures and *'FestivAsia – Moon Dance* by Big Communications (Singapore) together with Creo Contents (Korea).
- The launch of Asia High-Definition Documentary Initiative between MDA, National Geographic Channels International (NGCI) and Off the Fence (OTF), a leading international factual specialist distributor. This initiative will see 15 original documentaries produced in

HD over three years by Singapore production companies. These documentaries will be premiered on NGCI, reaching 190 million homes in 165 countries, and distributed worldwide by OTF.

- *Man-made Marvels*, a High-Definition factual series by Beach House Pictures (Singapore) and Natural History New Zealand. It debuted on Discovery Channel across Asia Pacific and was picked up by Off The Fence (Amsterdam) for worldwide distribution.

Animation

Made-by-Singapore animation are the forerunners when it comes to crossing media platforms, widening their appeal through books, mobile phone games, merchandise, interactive websites and other media forms.

- Peach Blossom Media's series of children's DVDs, *Tao Shu – The Warrior Boy*, won the US-based iParenting Media Award, under the "2007 Greatest Products" category. The series was broadcast on Nickelodeon Asia, and in France as well as the Middle East; it was also developed into merchandise such as stationery and bilingual children's books.
- Animated series *The New Adventures of Nanoboy* (Scrawl Studios) and *Katakune* (Character Farm) have secured distribution channels in the Asian, European and US markets, and are also available as AI games for mobile platforms.
- *Tu Tu Le*, a children's television series co-produced by Singapore's Earth Tree and Shanghai Media Group, had crossed platforms into interactive websites and workbooks.
- Co-produced by ST Electronics (Digital Media) together with Promenade Pictures and Huhu Studios, *The Ten Commandments*, a full-length animated feature based on the biblical story was launched as a limited theatrical release in the United States and Singapore in 2007 and on DVD in both markets in 2008.
- *The Future is Wild*, a ST Electronics (Digital Media) animated series co-produced with Nelvana Studios, made its debut on Discovery Kids Channel in the US in October 2007 and will debut in Canada in 2008.
- *Future is Wild*, a ST Electronics (Digital Media)'s animated series co-produced with Canada partners, debuted on Discovery Kids Channel in the US in October 2007.
- *Growing Up Creepie*, an animated series co-produced by Peach Blossom Media and its American and Korean counterparts, was nominated for an Emmy Award (Outstanding Special Class Animated Programme) in 2007.

Games

More Singapore game companies are developing branded properties for the international market.

- *Dropcast*, developed by Mikoishi, became Singapore's first Nintendo DS title. The game is scheduled for launch in the second quarter of 2008
- Activate Interactive developed *Steel Odyssey* which is scheduled for launch in China the first quarter of 2008
- *Lonewolf – Flight from the Dark*, a game adapted from the globally successful role-playing book of the same title, is produced by Ksatria Gameworks in Singapore.
- *Toribash3.0* developed by Nabi Studios was a winner of PC Format Review Award 2007, and Finalist for Independent Games Festival in 2007. In addition, Nabi Studios has just been

featured as one of the most promising and innovative companies around the world to watch out for on BusinessWeek Online last month.

- *Steam Iron* developed by Mikoishi won the Technical Achievement Award at the Independent Games Festival (for Mobile) held during the Games Developers' Conference 2008, with Nexon-Mobile as deployment partner in South Korea.
- The development of the local games industry is enhanced by the introduction of the INVIGORATE for Casual Games Initiative Initiative, which serves as both a mentorship as well as product development programme to fuel local games developers with innovative ideas/concepts by partnering them with reputable international casual games publishers such as Big Fish and PlayFirst. To-date, at least 7 games have been produced.

Publishing

- *Freedom Formula*, one of the submissions under IDEAS by Imaginary Friends, will see the production of a five issue 22-page comic book series to be published under a new imprint, Imaginary-Radical comics and distributed by Diamond Comics Distributors, with high licensing potential into other media and merchandise.
- Children's books from the First-Time Writers & Illustrators Publishing Initiative launched at the Frankfurt Book Fair 2007, also received exceptionally positive feedback. For instance, *The Elephant and The Tree* sold worldwide English rights to one of US' largest independent publisher, The Running Press.
- Celestial Zone comic book series by TCZ Studio has been adapted into a series of mobile comics, available in both English and Mandarin.

Films

2007 was a bumper year for Singapore feature films which harvested a crop of 12 releases, compared to an average of five films per year from 2002 to 2006. Of the local releases, Royston Tan's *881* went on to become the highest-grossing Asian film in Singapore with box office takings of over S\$3.5 million.

On the international front, Singapore films continue to raise their profile as evidenced by their selection and awards at prestigious film events:

- Anthony Chen's short film *Ah Ma (Grandma)* nabbed Singapore's first prize at the Cannes Film Festival with a Special Mention award in the Short Film category. At the same event, Pok Yue Weng's short film *SuperDONG*, was screened at the Directors' Fortnight while Ekachai Uekrongtham's full-length feature film *Kuaile Gongchang (Pleasure Factory)* was screened at the Un Certain Regard category.
- Royston Tan's short film *Monkey Love* won the Grand Prize in the Labo Competition at the Clermont-Ferrand International Short Film Festival while *18 Grams of Love*, a High-Definition romantic comedy written and directed by Han Yew Kwang, won the Public Award for Best Film (Bronze) and Junior Jury Award (Silver) at the 13th Lyon Asian Film Festival.
- Singapore-Australia drama *The Home Song Stories* received seven nominations at the Golden Horse Awards and eventually won Best Actress Award for Joan Chen. Royston Tan's musical *881* was nominated for Best Makeup and Costume Design while Jack Neo's *Just Follow Law* had three nominations – Best Visual Effects, Best Original Screenplay and Best Actor for Singaporean Gurmit Singh.

- Local film *Singapore Dreaming* by husband-and-wife team Colin Goh and Woo Yen Yen, about a typical Singaporean family coming to grips with their aspirations, clinched the Best Asian/Middle Eastern Film Award at the 20th Tokyo International Film Festival.

INTERNATIONALISING SINGAPORE'S MEDIA ENTERPRISES

Market Development

Last year, several successful co-production deals between local media companies and their partners were announced at key international trade shows such as MIPTV, Cannes Film Festival, Asian Film Market, Frankfurt Book Fair and MIPCOM where, as part of an MDA-led industry delegation, local media companies promoted and sold their content and services to international players.

Bilateral Exchanges

To facilitate our local companies' efforts to break into the competitive global market, MDA concluded two new co-production agreements with Korea and Australia in 2007. These add to Singapore's existing co-production agreements with Canada, Japan and New Zealand and enable quality co-productions to be considered as national productions in both countries.

In addition, MDA forged new cooperation partnership agreements and MOUs with Canal France International, Philippines, the State Administration of Radio, Film and Television of the People's Republic of China and Korea Culture & Content Agency, amongst others, to facilitate bilateral cooperation, information, training and technical exchanges.

Singapore media companies also participated in Singapore Season China, a key diplomacy effort to engage China through cultural, arts and economic links. A series of events was organised in Beijing and Shanghai to bring media companies from both China and Singapore together. These activities resulted in the signing of 17 MOUs covering governmental, industry and academic exchanges and collaborations between both countries. Industry deals inked at the China-Singapore Media Business Forum in Beijing amounted to S\$33 million. An agreement was also sealed with China to co-host each country's film festivals, starting with the first-ever Singapore Film Festival in China held during Singapore Season.

ASEAN Collaborations

To support the broader national objectives of realizing the goal of an ASEAN Community, MDA took on the role of developing and hosting a new web portal aimed at showcasing media content from ASEAN countries. Launched on 16 November 2007, the ASEAN Media Portal (www.aseanmedia.net) provides information related to ASEAN tourism, culture and heritage as well as media industry content from its 10 ASEAN member states.

DIGITAL MEDIA DEVELOPMENTS

National deployment of digital media services

In July, Singaporeans had their first experience of Internet Protocol TV with the launch of SingTel's mio pay-TV service. And by November, Singaporeans were enjoying an over-the-air High-Definition channel called HD5.

The official launch of HD5 on 11 November placed MediaCorp as the first broadcaster in Southeast Asia to roll out an HDTV channel on a terrestrial platform. HD5 is a simulcast of Channel 5, MediaCorp TV's flagship English channel, and features native HD content as well as upconverted content. HD5 is also available on SingTel's mio TV.

In the area of broadcast, MDA facilitated more choice for consumers with its approval of 14 cable and 13 IPTV stations and 11 subscription (digital) radio stations in 2007. Malay cable viewers also saw the launch of Sensasi in August 2007, Starhub's first locally packaged Malay cable TV channel.

Developing Digital Technology

MDA supports the development of original and innovative applications, services and devices for the broadcasting industry through its Digital Technology Development Scheme (DTDS).

Last year, Pixelmetrix Corporation, a DTDS recipient, was awarded an Engineering & Technical Emmy Award from the National Academy of Television Arts and Sciences in United States, for its DVStation Transport Stream Analysis products. This distinction reflects positively on Pixelmetrix Corporation, a global specialist in preventive monitoring for digital TV and IPTV, as the first Singapore company to be accorded the Emmy Award.

Interactive and Digital Media (IDM) Research & Development

The IDM Research and Development Programme Office (IDMPO)¹ has put in place the foundation pieces to build an ecosystem in the IDM sector by strengthening the interlocking efforts of four key groups of stakeholders over the past year – individuals, industry, schools and research institutions.

In 2007, the IDMPO funded 94 projects started by the four groups. Collectively, they are expected to deliver some 100 new innovative patents and products and will help nurture 900 researchers and engineers. These research projects focus on three broad areas: Animation, Games & Effects; Intermediary services comprising technical capabilities in the organisation, distribution and security of digital media; and On-the-Move Technologies which identify new ways of reaching and interacting with mobile-connected people who are always on the move.

i. ROCK (IDM Research Oriented Centres of Knowledge)

Over the last year and half, most of the local Institutes of Higher Learning (IHL) have established focused centres, initiatives and courses in IDM. In 2007, a total of 21 projects from the local IHLs were awarded grants. These projects are collectively expected to involve more than 350 Researchers, Scientists and Engineers (RSEs) and 300 students.

The goal of attracting international research centres from the US, Europe and Asia is beginning to take shape. In addition to the Gamers, Aesthetics, Mechanics, Business, Innovation, Technology (GAMBIT) Game Laboratory with MIT, we have attracted the Chinese Academy of Sciences to establish its first ever overseas R&D institute – the China-Singapore Institute of Digital Media (CSIDM) – in Singapore by first quarter 2008. CSIDM will focus on language mediation technologies, and position Singapore as a hub for large-scale immersive and interactive language learning, particularly of the Chinese language.

GAMBIT is progressing well. In addition to the two R&D projects that started in 2007, six games have also been developed. The games have received much media interest and were highlighted at international exhibitions such as Games Convention Asia and IndieCade. One, *Backflow*, was a finalist in two categories at the Independent Games Festival Mobile Competition: Best Game and Innovation in Mobile Game Design.

Futurescape

Over the last two years, IDMPO, through the efforts of the EDB, IDA and MDA, has secured 45 industry projects.

Several of the industry R&D companies are receiving attention for their IDM R&D. Ufinity Interactive Media won an award from Suzhou Industrial Park for being one of the 12 most promising enterprises for Innovations in Interactive Media. XiD, with its face-recognition software, emerged second in a global competition to identify promising new security technology. MXR Cube has been awarded patents for its interface technology in both the US and Singapore while KooBits, a digital publishing software, was sold to 11 schools in Singapore, with an average of 1,500 e-books being generated

¹ Multi-agency office comprising Agency for Science, Technology and Research (A*STAR), Defence Science and Technology Agency (DSTA), DesignSingapore Council, Economic Development Board (EDB), Infocomm Development Authority (IDA), International Enterprise (IE) Singapore, Singapore Science Centre, Ministry of Education (MOE), Media Development Authority (MDA), Ministry of Information, Communications and the Arts (MICA) and the Ministry of Trade and Industry (MTI).

per school on a monthly basis. In addition, Sparky's technology was deployed in the animated movie *The Ten Commandments*.

Singapore has also attracted international companies such as 10tacle Studios, EON Reality, Motorola and Anark to set up media R&D activities and continues to engage world-class leading companies such as Linden Lab to conduct their cutting-edge research in Singapore.

Another notable development in 2007 was the launch of the S\$6 million Joint Research & Development Grant for Interactive Digital Media User Interface (IDM UI) with DesignSingapore Council to target the design community. This collaboration is an important chapter of our multi-agency efforts, and contributes to our vision of IDM becoming a transformative force for the country.

i.JAM (IDM Jumpstart and Mentor)

Young start-ups or individuals with exciting R&D ideas can now receive up to S\$50,000 through a scheme to seed their ideas and get a chance to be entrepreneurs in the high-growth IDM space. The IDMPO aims to seed about 750 projects and create entrepreneurship opportunities for more than 2,000 individuals over the next five years.

Though less than a year old, i.JAM has unleashed grassroots innovation, with some of the funded projects receiving recognition for their IDM R&D. For example, SharedCopy was featured in TechCrunch, a top 100 technology blog that is widely followed by technologists, startups, and venture capitalists; and First Meta was selected as one of Red Herring's Top 200 Most Promising Private Technology Companies.

CAPABILITY DEVELOPMENT

Talent Development

Every year, MDA trains more than 5,000 media professionals through various programmes such as the Media Education Scheme (MES), Capability Development Scheme (CDS), Skills Conversion programmes, masterclasses, seminars and workshops. Under the CDS, more than 130 industry professionals and students attended short local/overseas advanced courses or attachment programmes in 2007 to gain specialist skills and international experience. Twenty MES scholars pursued further media-related studies in both local and overseas institutions. Last year was also the first time MDA collaborated with the industry to nurture talents, with ST Electronics (Digital Media) co-sponsoring the MES. Two students were awarded the ST Electronics-MDA Media Education Scheme.

Under the International Media Manpower Programme (IMMP), MDA helps local media enterprises to achieve a quantum leap in their production capability and expertise in the short-term by attracting top international media talents and anchoring their presence in Singapore. Since the launch of the programme in 2006, over 25 such talents in diverse fields such as animation, scriptwriting and games development have started work with Singapore media companies.

Multi-agency Manpower Taskforce

A multi-agency Digital Media (Games and Animation) Manpower Taskforce led by MDA and comprising EDB, IDA, the Ministry of Manpower/Contact Singapore (MOM), Workforce Development Agency (WDA) and the Ministry of Education (MOE) was formed in 2007 to drive manpower attraction and nurturing.

The Taskforce will address immediate manpower demand through training and upgrading initiatives, including trainee programmes, industry attachments and skill conversion programmes. International and local recruitment efforts are being stepped up with recruitment drives to major international trade events and schools in the region. In the long term, the Taskforce will oversee the development of local talents through international accreditation of Singapore-based media programmes, stepping up collaborations with international tier-one institutions and reviewing academic curriculum to align closely with industry needs.

Enterprise Capability

MDA helped more media companies in honing their business skills in areas such as identifying their enterprise positioning and strategy plans, exploiting their intellectual property etc. This was done through various programmes such as the mentorship programme with Pembridge Partners LLP, a London-based business accelerator and investment group focused on the creative industry, and the Licensing and Merchandising Programme in partnership with international firm Global Brands (the exclusive licensing agent for FIFA worldwide and Warner Bros Consumer Products in South-east Asia).