

**For discussion  
on 11 March 2002**

**Legislative Council Panel on  
Information Technology and Broadcasting**

**Development of Digital Entertainment in Hong Kong**

**Purpose**

This paper briefs Members on the development of digital entertainment in Hong Kong.

**Digital Entertainment**

2. Digital entertainment refers to entertainment that involves the use of digital technologies such as computer graphics and interactive techniques. Common forms of digital entertainment include games played in arcades, game rooms, games played via television, computer or the Internet, edu-tainment and entertainment like films, television programmes and animations that employ digital technologies in the production process.

**International Trends**

3. Digital entertainment is growing fast in the world. The global game business is estimated to be worth US\$20 billion a year. Half of all Japanese households, one third of US ones and one fifth of UK ones have at least one game console of some kind at home. For film production, it is now a widespread practice to employ digital technologies to enhance entertainment value. Recent examples include “Mummy 2”, “Planet of the Apes” and 3-D animation “Shrek”.

## **Hong Kong's Potential**

4. Hong Kong has good potential to develop digital entertainment. Between 1998 and 2000, import of electronic games increased by about 50% from HK\$4.02 billion to HK\$5.97 billion. Export during the same period increased by over 30% from HK\$5.92 billion to HK\$7.86 billion. As for video games and related products, import between 1998 and 2000 increased by nearly 170% from HK\$2.32 billion to HK\$6.22 billion. Export during the same period jumped from HK\$1.05 billion to HK\$4.60 billion, representing an increase of nearly 340%.

5. On the film production side, the use of digital special effects is getting more and more common. This ranges from “StormRiders (風雲)” back in 1998 to last year’s summer hits like “Shaolin Soccer (少林足球)” and “Legend of Zu (蜀山傳)”. In fact, Hong Kong computer graphics production houses have been winning awards locally and overseas with their special effect works in film and advertising productions. Some have also ventured into the production of computer games and edu-tainment software.

6. There are at present around 30 computer graphics production houses in Hong Kong with some 600 animators. With about 50% of the households connected to the Internet, we have the potential to develop on-line entertainment.

## **Measures to Support the Digital Entertainment Industry**

### ***Infrastructure***

7. We have liberalised the telecommunications market to enhance competition and encourage private sector investment. We now have developed an advanced telecommunications infrastructure. The telecommunications networks are fully digitalised and broadband coverage reaches practically all commercial buildings and over 95% of households. This advanced infrastructure gives Hong Kong an advantage in developing digital technologies, and the availability of broadband networks paves the way for the further development of on-line entertainment.

8. We have issued licences for providing third-generation mobile communication services. This, coupled with the high mobile phone penetration rate (currently 85%), provides an excellent platform to deliver online digital entertainment services to mobile users.

9. In the future Cyberport, we will provide high speed broadband connection, a full range of shared facilities such as multimedia laboratory and studios, and a CyberCentre (with entertainment, educational and retail facilities). The Cyberport will provide a niche environment for many companies including those working on digital entertainment. The facilities there will support the development of digital entertainment locally. Two sites in Tseung Kwan O have also been allocated for development of film production facilities. Advanced and digitalised post-production facilities will be provided in the future film studio, including sound dubbing and effects studios and post-production suites for graphics, animation and digital effects, of which local digital entertainment companies can make use.

10. Separately, small and medium enterprises (SMEs) in digital entertainment business can apply for the newly established SME Business Installations and Equipment Loan Guarantee Scheme to secure funding from banks and financial institutions for procuring necessary equipment and business installations to support their operation.

### ***Human Resources Development***

11. At present, there is a wide array of courses covering digital graphics, multimedia design and computer animation provided by local institutions (details at **Annex I** and **Annex II**). Many of these courses are new, reflecting that local institutions are responding to market demands. The Film Development Fund has supported a project for selected local tertiary students in the creative media disciplines to study short-term courses in computer animation at a renowned overseas institution so that the students can acquire knowledge in state-of-the-art digital technology, establish networking with overseas industry and enhance their international exposure. The Fund has also recently supported another project for local youngsters to attend training courses in computer animation and digital effects run by the Hong Kong Productivity

Council which includes placement opportunities for the trainees in leading local production houses.

12. Furthermore, SMEs in digital entertainment business may apply for the newly established SME Training Fund to provide relevant training for both their employers and employees.

### ***Research and Development***

13. The HK\$5 billion Innovation and Technology Fund (ITF) has provided support to projects for promoting research and development in digital entertainment. The Hong Kong Digital Entertainment Association and local academic institutions have obtained funding through this source to support their activities. We welcome interested parties to seek funding support from the ITF on project proposals relating to digital entertainment.

### ***Intellectual Property Right Protection***

14. Intellectual property right protection in Hong Kong is compatible with the prevailing international standards and norms, like the WTO-Agreement on Trade-Related Aspects of Intellectual Property Rights. The intellectual property legal framework in Hong Kong provides a legal environment favourable to those who engage in research and development, creative productions and commercial distribution. This is crucial for the creative digital entertainment businesses to develop and flourish. Copyright protects computer programmes; dramatic, musical and artistic works; sound recordings; films, broadcast and cable programmes. There is also a comprehensive framework for registration of design and trademark protection.

### ***Market Promotion***

15. The Hong Kong Trade Development Council has promoted Hong Kong's digital entertainment through its marketing activities for electronics and film industries, Filmart, Hong Kong Electronic Fair, etc. The Hong Kong Digital Entertainment Association has also promoted the development through the annual Interactive, Digital and Electronic Entertainment Expo Asia. An

on-line news web site has also been developed with Government funding support to disseminate useful market information. The Hong Kong Information Infrastructure Expo & Conference this year also features online games as one of its themes.

16. SMEs in digital entertainment business can also apply to the newly established SME Export Marketing Fund for participation in export promotion activities held locally or outside Hong Kong. We will also explore opportunities to lead local digital entertainment businesses to take part in international conferences and exhibitions to strengthen Hong Kong's exposure and image.

### **Further Deliberations**

17. A Working Group on Digital Entertainment, comprising members from relevant organisations in the trade, industry support bodies, academic, business and social service sectors, etc. has been set up under the Information Infrastructure Advisory Committee to advise the Government on how to facilitate and support the further development of digital entertainment in Hong Kong.

18. We have also worked together with the Hong Kong Productivity Council to hold a forum on a regular basis with parties related to digital entertainment to facilitate exchange of views and information.

### **Way Forward**

19. We will brief Members on the deliberations of the Working Group in due course.

**Information Technology and Broadcasting Bureau  
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**Creative Media/Digital Media Programmes  
offered by UGC-funded Institutions**

<b>Institution</b>	<b>Programme</b>	<b>In-take in 2001-02</b>
City University of Hong Kong	Associate of Arts in Media Technology	39
	BA (Hons) in Creative Media	48
	Master of Fine Arts in Media Design and Technology	19
Hong Kong Baptist University	BSocSc(Hons) in Communication – Digital Graphic Communication Option	23
The Chinese University of Hong Kong	BSocSc in Journalism and Communication (Concentration in Multimedia and Telecommunications)	Not Available <sup>1</sup>
The Polytechnic University of Hong Kong	Higher Diploma in Multimedia Design and Technology	131
	BA(Hons) in Design (Option in Visual Communications Design)	48 (Year II) <sup>2</sup> 39 (Year III) <sup>2</sup>
	MSc in Multimedia and Entertainment Technology	29
The Hong Kong University of Science & Technology	BEng in Computer Science (Information Engineering) – Multimedia Computing Option	16 (Year II) <sup>2</sup>
University of Hong Kong	BSc Computer Science and Information Systems (professional area in multimedia)	43

<sup>1</sup> Students can have different concentration under the programme.

<sup>2</sup> Courses are only available to students after the first-year programme.

**Related Post-Secondary Courses offered by the Institutes of Vocational Education (IVE) of the Vocational Training Council**

<b>No. of students</b>	<b>Design IVE, Shatin (Intake of 2001)</b>	<b>Digital Media IVE, Kwun Tong (Intake of 2001)</b>	<b>Multimedia and Digital Entertainment IVE, Tsing Yi (Projected no. for 2002)</b>
High Diploma (full-time)	332	90	100*
High Diploma (part-time)	163	44	N/A
Diploma (full-time)	178	102	N/A
Higher Certificate (part-time)	276	44	N/A

\* A new course which has just begun to accept applications.