



EU-CHINA INFORMATION SOCIETY PROJECT  
中国—欧盟信息社会项目

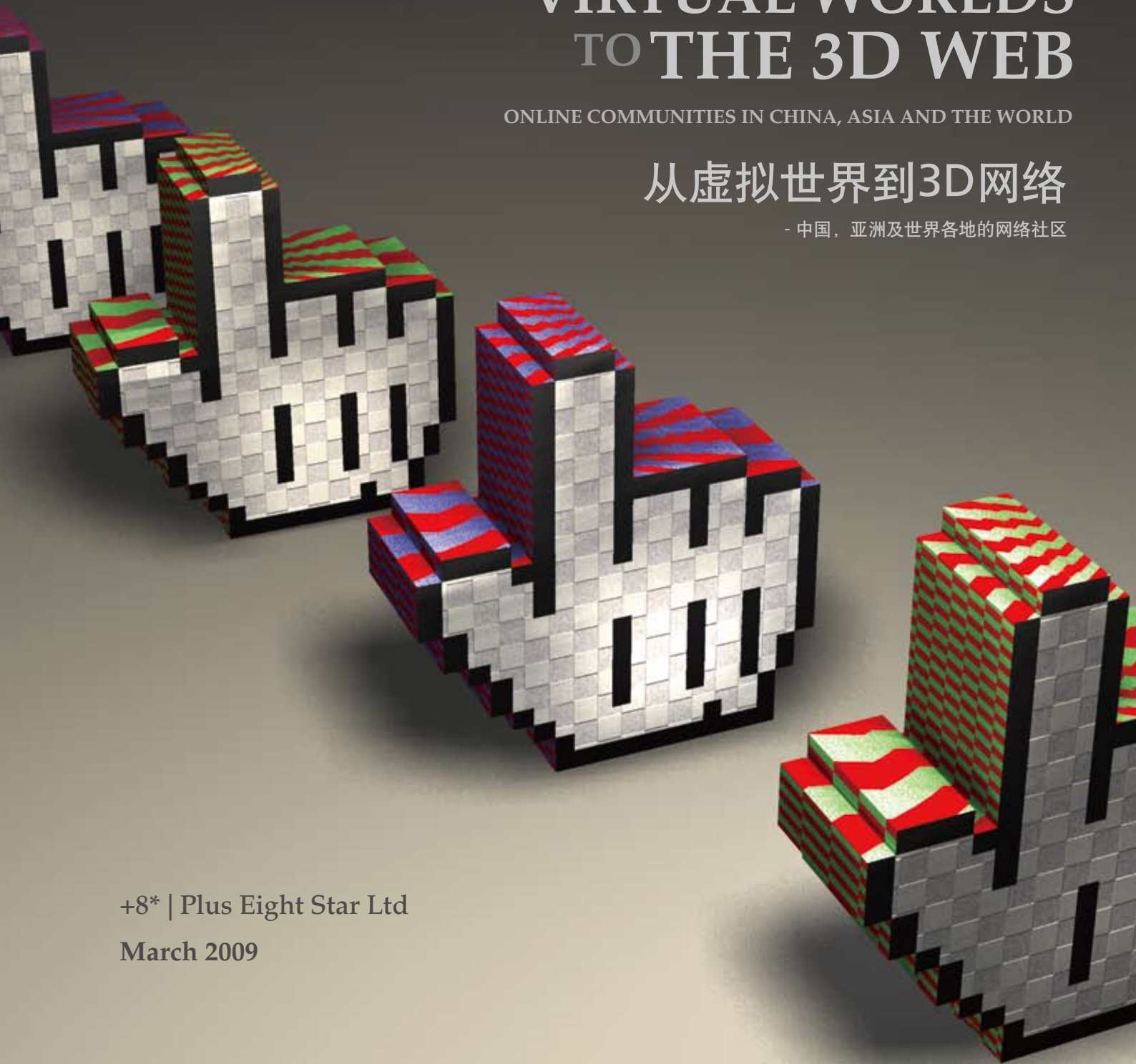


# FROM VIRTUAL WORLDS TO THE 3D WEB

ONLINE COMMUNITIES IN CHINA, ASIA AND THE WORLD

## 从虚拟世界到3D网络

- 中国，亚洲及世界各地的网络社区



+8\* | Plus Eight Star Ltd

March 2009

# 目录 Contents

前言	1	Foreword
介绍	2	Introduction
市场状况	6	Market situation
中国虚拟世界的演变与趋势	16	Evolution and trends of virtual worlds in China
政策和法规	18	Policy and regulation
结论	26	Conclusion

此研究报告为中欧信息社会项目简报系列之一部分，如需更多信息，请登陆网站或联系Thomas Hart博士  
This report is part of the EU-China information Society Project briefing paper series  
For more information: [www.eu-china-info.org](http://www.eu-china-info.org) or contact Dr. Thomas Hart, [thart@eu-china-info.org](mailto:thart@eu-china-info.org)

在过去几年里，虚拟世界成为众人瞩目的焦点。那么，它今天的状况又如何呢？

首先，我们需要认识到，虚拟世界有许多种：从2D社区到游戏世界，再到商业或教育环境。

虽然虚拟世界，或从更广意义来说，在线社区发源于美国，但许多亚洲国家（尤其是中国、日本和韩国）却通过推出形象化身（avatar）及通过虚拟商品赚钱抢得了先机。这方面的发展促进了2D虚拟世界和网络游戏的成长。

目标针对青少年的服务及以游戏为导向的封闭系统通常拥有最大用户群及最高收入。到目前为止，没有哪个3D虚拟世界能够创造不菲的收入。（此次研究中，我们不将MMORPG<sup>1</sup>等网络游戏看作是虚拟世界）

此外，曾经是独立的服务现在已与众多其他服务交织在了一起，尤其是社交网络和网络游戏。服务与服务之间的界限正在模糊化，这种趋势在将来会变得更加明显。我们的方法是提供各种示例来展现全景，而不是强行将这些服务进行分类。

从监管方面来看，虚拟世界涉及知识产权（商标、版权和专利）、电子商务和法律权利问题的诸多方面。其中的大部分问题都不是新的，但这些问题发生的频率很可能会迅速增加，法规框架的更新将有益于这些问题的解决。

随着计算机处理能力的增强，网络速度变得越快，3D的显示也将不成问题。因此，我们会看到更多的3D，它在操控信息、协作或分享情感方面能够显示其优势。

编者，

**Benjamin Joffe**, 首席执行官  
+8\* | Plus Eight Star Ltd

**Yiqun Bo**, 咨询和研究部经理  
+8\* | Plus Eight Star Ltd

## 前言 Foreword

Virtual worlds gathered a lot of attention during the past few years. What is the situation today?

The first point is to recognize that there are many genres of virtual worlds: from 2D communities to gaming worlds to business or educational environments.

While virtual worlds and more generally online communities were pioneered in the United States, several Asian countries (especially China, Japan and South Korea) got an early start by introducing avatars and monetizing by virtual goods. These developments helped grow the 2D virtual world and online gaming scenes

The services with the largest number of users and highest revenues are generally aimed at teen, gaming-oriented closed systems. So far, no 3D virtual world has achieved significant revenues so far (in this research, we do not consider online games like MMORPG<sup>1</sup> as virtual worlds).

Moreover, what used to be siloed services are now intertwined with a variety of others, notably social networks and online games. The lines between services are blurred and will continue to become more so in the future. Our approach has been to offer a variety of examples to illustrate the landscape rather than force a classification onto them.

In terms of regulation, virtual worlds touch upon various aspects of IPR (trademark, copyright and patents), e-commerce and legal rights issues. Most of them are not new, but the frequency of their occurrence is most likely to grow rapidly and would benefit from an updated regulatory framework.

As computers gain more processing power and networks become faster, displaying 3D will be much less of a difficulty. Therefore, we can expect to see more 3D wherever it can bring advantages for manipulating information, collaborating or sharing emotions.

The editors,

**Benjamin Joffe**, CEO  
+8\* | Plus Eight Star Ltd

**Yiqun Bo**, Consulting & Research Manager  
+8\* | Plus Eight Star Ltd

<sup>1</sup>多人在线角色扮演游戏  
Massively Multiplayer Online Role-Playing Game



虚拟世界是一种没有游戏机制的网络游戏

## 虚拟世界的界定

为虚拟世界找到一个标准的定义是很困难的，尤其是因为其设计和用途各不相同。通常的设计包括2D, 2.5D 和 3D，而其用途也大相径庭，从社交、创作、游戏，到商业、约会、教育等等。

我们最终发现，人们通常所看到的虚拟世界是一个拥有形象化身但无明确规则或确切目标的永久网络环境。从某种意义上来说，虚拟世界是一种没有游戏机制 (game mechanics) 的网络游戏。

如果说虚拟世界的声名鹊起始于2005年左右出现的Second Life (第二人生)，值得注意的是，几乎在同一时期，西方世界两个最大的社交网络Facebook, MySpace以及全球人气最旺的MMORPG游戏World of Warcraft (魔兽世界) 在媒体上也同时抢尽了风头。

事实上，我们的研究发现虚拟世界、网络游戏以及社交网络之间有许多交叉点。因此，此研究将虚拟世界定义为具有以下标准的网络环境：

- 2D 或3D永久网络环境
- 用户的视觉展示(形象化身)
- 服务中无确定终点或单一目标
- 不仅仅是一项游戏 (如魔兽世界)
- 不仅仅是一个社交网络 (如 Facebook)

我们将看到，虚拟世界的理念、问题和机会，如身份、隐私、在线和离线商务、版权、专利或法律权利等不是虚拟世界所特有的，他们通常是其他各种网络服务所共有的。

## Is this the real life? Is this just fantasy?

"Virtual" has numerous connotations and we found it was often a misnomer. Notably, the interactions taking place in so-called "virtual worlds" might be digital, but are nonetheless "real" in the sense that they affect the users, at least emotionally if not economically. Hence, while the environments are not "material", they remain "real" nonetheless. Though we strongly prefer the term "online" to "virtual", especially since the former contrasts nicely with "offline", we chose to stick to the usual "virtual world" term in this report for easier reading.

To illustrate how interactions in virtual worlds are not made of dreams, let's remember that offline interaction is not a pre-requisite for forming relationships or friendships. Friends made in online environments are no less "real" than pen-pals, or people called on the phone.

In addition, computer-mediated interactions have a number of advantages over offline interactions including a potentially better

## 这是真实生活吗? 或只是虚幻?

"虚拟"这个词有多种含义，我们发现这个此属于用词不当。这些在所谓"虚拟世界"中进行的互动可能是数字化的，但不管怎么说，他们在感情或经济上对用户产生实际影响，从这种意义上来看他们是"真实的"。因此，虽然环境不是"物质的"，他们却确实"真实的"。虽然我们强烈偏好于"在线"而不是"虚拟"这个词，尤其是因为前者与"离线"相呼应，但此报告中我们仍使用人们习惯的"虚拟世界"这个词，以便于读者阅读。

为了说明虚拟世界中的互动不是由虚构构成的，让我们记住，离线互动并不是建立社会关系或友谊的先决条件。在线环境中交的朋友与笔友或电话那边的人同样是"真实的"。

control over communication compared to face-to-face thanks to an asynchronous input and handling of "digital body language".

In essence, online interactions and avatars do not replace entirely offline interactions, but can surely complement them.

The divide between online and offline is mostly generational. Young generations of "digital natives" transfer seamlessly between the two environments. On the other hand, older generations of "digital immigrants" have a more difficult time understanding the point of using avatars, and distinguish online and offline interactions by calling them "real" and "virtual".

The importance of avatars – a central piece in virtual worlds – should not be underestimated. It is fundamental to understand that the point of having an attractive visual representation is related to both status and reach. The modern world

此外，通过计算机进行的互动与离线互动相比有着诸多优势，其中包括与面对面交流相比它能够更好地掌控相互之间的沟通，这要归功于"数字肢体语言"的非同步输入和处理。

从本质上说，在线互动和形象化身并不能完全替代离线互动，但确实可以作为其补充。

在线和离线之间的划分主要是因不同时代的人而异。年轻一代的"数字土著人"可以在两种环境中自由切换。从另一方面来看，老一代"数字移民"们在对形象化身的理解上有较大困难，他们对在线和离线互动加以区分，把他们称为"虚拟的"和"真实的"。

我们切不可低估形象化身 (avatars) 的重要性，他是虚拟世界中的中心构件。有一点我们必须明白的是，吸引人的视觉形象与地位和影响力密切相关。

现代世界使我们能够通过计算机而不是面对面的方式与越来越多的人进行交流互动。在这种环境下，与"离线"情形下购买服装一样，你所买的服装通常是让人欣赏的，它表现了你的情绪和/或地位。因此对在线展示的方式进行控制也就不足为奇了。

"一般二十五岁左右的年轻人都会经历在线和离线朋友以及同事之间的广泛交叉。"

这种交叉如此之大，以至于'网际空间'这个词和概念已经无人问津了。"

Clay Shirky 《大家都来了》

*"The experience of the average twenty-five-year-old is one of substantial overlap between online and offline friends and colleagues.*

*The overlap is so great that both the word and concept of "cyberspace" have fallen into disuse."*

Clay Shirky  
*Here comes Everybody*

## 介绍 Introduction

### Defining virtual worlds

Developing a standard definition for a virtual world is a challenge, notably since their design and usage vary widely. The common designs include 2D, 2.5D and 3D while the uses vary from socializing, creation, gaming, business, dating to education and more.

Eventually, we found that what is generally seen as a virtual world is a permanent online environment with avatars and no clear rules nor definite objective. In a way, a virtual world is an online game without game mechanics at the center.

If virtual worlds came to fame with the service named Second Life (Linden Lab, 2003) circa 2005, it is interesting to note that around the same time, several other services such as Facebook and MySpace, the largest social networks in the Western world, and World of Warcraft, one of the most popular MMORPG globally, shared the media spotlight.

In fact, our research identified numerous overlaps between virtual worlds, online games and social networks. As a result,

this research defines a virtual world as an online environment possessing the following criteria:

- 2D or 3D permanent online environment
- Visual representation of the user (avatar)
- No defined ending nor single aim in the service
- Not only a game (e.g. World of Warcraft)
- Not only a social network (e.g. Facebook)

We will see that many of the concepts, problems and opportunities with virtual worlds such as identity, privacy, online and offline commerce, copyright, patents or legal rights are not specific to virtual worlds but are often common to various other online services.

*A virtual world is an online game without game mechanics at the center.*

## 虚拟世界之起源

### 文学和流行文化

虽然听起来有点新，但实际上虚拟世界由来已久。二十五年前的科幻小说中首先对其进行了预见，早在二十多年前的1986年就付诸实施了。

科幻作家Vernor Vinge的《真名实姓》(1981), William Gibson的《神经漫游者》(1984)及Neal Stephenson的《雪崩》(1992)所描述的数字化世界与今天的在线环境有很多相似之处。这些小说中发明了诸如“网际空间”和“虚拟实境”等词汇。

True Names (真名实姓), Neuromancer (神经漫游者) 和 Snow Crash (雪崩): 虚拟世界的三大灵感

流行文化很快跟上了文学的步伐，其代表作是日本动画“攻壳机动队”(manga, 1989; anime, 1995)，这部动画为好莱坞提供了灵感。继而催生了“黑客帝国”(1999)这部家喻户晓的主流电影。

## 今天的虚拟世界

虚拟世界声名鹊起始于“第二生命”(Second Life) (Linden实验室, 2003)，该游戏重视地再现了小说《雪崩》中所描绘的愿景。

下面的章节将提供当今美国、欧洲和亚洲虚拟世界中的一些例子，并对它们的成功程度加以比较。我们将从一系列示例中发现，知名度并不意味着创新性或商业成功。

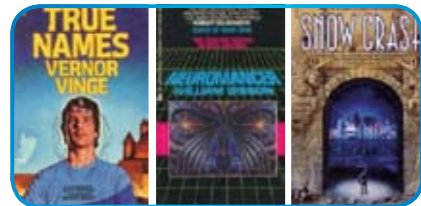
在亚洲，日本和韩国都拥有非常先进的IT基础设施，这使得它们能够更轻而易举地实施这类服务，而中国则在互联网用户数量和风险资本强大支持方面拥有优势。

## Origins of virtual worlds

### Literature and pop culture

As new as they might sound, virtual worlds are not really new. They were initially envisioned 25 years ago in science fiction and first implemented as early as 1986 – over 20 years ago.

Science fiction writers like Vernor Vinge's **True Names** (1981), William Gibson's **Neuromancer** (1984) and Neal Stephenson's **Snow Crash** (1992) described digital worlds sharing many similarities with today's online environments, coining terms like "cyberspace" and "metaverse".



True Names (真名实姓), Neuromancer (神经漫游者) 和 Snow Crash (雪崩): 虚拟世界的三大灵感  
True Names, Neuromancer and Snow Crash: three major inspirations of virtual worlds.

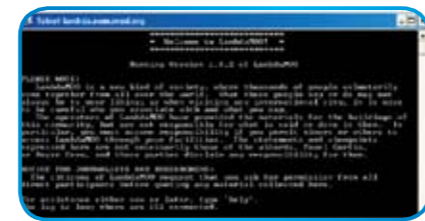
Pop culture soon followed literature with works like Japan's Ghost in the Shell (manga, 1989; anime, 1995), which inspired Hollywood and gave birth to Matrix (1999), the most famous reference in the mainstream.



虚拟化流行文化的代表“黑客帝国”，它的灵感来自于日本动画“攻壳机动队”  
Matrix, pop culture icon of virtuality and its Japanese inspiration Ghost in the Shell.

### From text-based to online games

Among the first examples of online virtual communities were text-based virtual environments like LambdaMOO (Pavel Curtis, 1990), an "object oriented multi-user dungeon" (MUD-OO) and Habitat (Lucasfilm, 1986), which was the first to offer a graphical interface. While those services did not gather large numbers of users (LambdaMOO had only a few thousands at peak) since the Internet was yet to spread, the company faced the same joys and challenges of many of today's online environments.



LambaMOO, 一个基于文字的虚拟社区，拥有数千个用户(1990)  
LambaMOO, a text-based virtual community with several thousand users (1990)



Habitat (栖息地), 首个图形虚拟世界(1986)  
Habitat, the first graphical virtual world (1986)

### 从基于文字到网络游戏

早先的在线虚拟社区是基于文字的虚拟环境，如LambdaMOO (Pavel Curtis, 1990)，一个“以物件为导向的多用户城堡”(MUD-OO)，以及Habitat (Lucasfilm, 1986)，它首次提供了一个图形界面。这些服务未能吸引大量的用户(LambdaMOO在高峰时期仅有数千用户)，因为当时互联网还不够普及，但公司当时经历着与今天的许多在线环境相同的喜悦和挑战。

A decade later, the first multiplayer online games appeared. Among the pioneering games were the 2D MMORPG, **Nexus: The Kingdom of the Wind** (Nexon, 1996) in South Korea and **Ultima Online** (Origin Systems, 1997) in the US.

The first 3D MMORPG was **EverQuest** (Sony, 1999), released a decade ago.

Virtual communities and online games developed in parallel, and current virtual worlds could be seen as their grandchildren.



索尼的EverQuest (1999)  
EverQuest by Sony (1999)



Nexon的NexusTK (1996)  
NexusTK by Nexon (1996)

### Today's virtual worlds

Virtual worlds came to fame with **Second Life** (Linden Lab, 2003), which quite faithfully reproduced Snow Crash's vision.

The following chapter will provide examples of today's virtual worlds in US, Europe and Asia, and compare their level of success. Notably, we will see from a number of examples that visibility does not imply innovativeness or commercial success.

In Asia, both Japan and South Korea enjoy a very advanced IT infrastructure which makes it easier to deploy such services, while China has advantages of a large Internet user base and strong support by venture capital.



“第二人生”中会议场景  
Conference in Second Life

## 细分市场

到目前为止，虚拟世界所遭遇境遇各不相同。我们可以根据以下各项对众多服务进行分类：图形（2D/3D），主要目的，服务的开放性 – 是否允许用户生成的内容，以及目标用户群。

从目的上来看，我们将服务分为四类：平台，社区，游戏和商务。

毫无疑问，社区和游戏世界以其开放性和“娱乐因素”而成为当今最为活跃的服务。因此，下面的章节将重点介绍这两类。

## 2D 虚拟世界

总的来说，拥有很少或没有用户生成内容、针对青少年的2D世界比任何其他3D服务的表现要好得多。我们发现其中的主要原因是进入的门槛较低，因为现有技术使基于浏览器的使用（尤其是Flash和Shockwave）成为可能，能够使服务提供商将重点更好地聚焦于自己的目标用户群，并能够通过虚拟商品创造更多的盈利。

这些服务为用户提供了讨论、社交及其他方面的空间。主要的活动通常是形象化身（avatar，一个能够代表用户的人物）的个性化以及个人空间的个性化，为用户提供一个进行互动的视觉环境。

## 西方的 2D 世界

西方世界中著名的此类服务有Habbo<sup>2</sup>（芬兰，2000），Gaia Online（美国，2003）Stardoll<sup>3</sup>（瑞典，2004）和 Club Penguin<sup>4</sup>（加拿大，2005）。虽然确切数字不得而知，但所有这些服务都报告说拥有数百万注册用户，据说服务都接近于盈利。

这些服务的共同点是能够吸引大量的用户，并通过注册或在一个封闭系统和经济体中销售数字化商品来赚钱。

Habbo使用户能够创建形象化身并可带着它们在一个酒店中走动，在那里它们可以与其他用户会面；用户可使自己的形象化身个性化，并用虚拟的家具来装点自己的房间。2008年6月，此服务创造了自己的第一个形象化身。Habbo在游戏内物件和活动方面已与众多品牌和名人进行了合作。

Stardoll的理念是创造数字化纸玩偶。2008年11月，该服务报告说已拥有超过两千万个注册用户，每月有八百万个独立访客，其中的94%是十三至十九岁和八至十二岁的女孩<sup>5</sup>。收入来自于装扮玩偶和房间的数字物品的销售。该网站与许多著名时尚品牌和艺术家建立了合作关系，每天销售的物品超过100,000个<sup>6</sup>。

Club Penguin（企鹅俱乐部）是一个虚拟世界，用户可在此控制卡通企鹅、聊天和玩儿迷你游戏。游戏的目标群体是6-14岁的青少年。它的商业模式是将月会员资格与虚拟商品销售结合起来。2007年底，该服务拥有一千二百万个账户。根据调研公司DFC的估计，其2008年的收入在五千万到一亿五千万美元之间。

Gaia Online 是一个集在线论坛、创意出口、博弈游戏网站和虚拟世界为一体的服务。根据报告，此服务2008年每月的独立访客量为700万人，虚拟商品销售额100万美元。

## 虚拟世界类型

类别	定义	举例
平台	平台是“开放的”环境，在这种环境中用户没有定义的目标	Second Life
社区	虚拟社区是控制性更强的环境，它围绕着社会关系这个中心	IMVU
游戏	主要目的是游戏。游戏本身可以是开放型的。	The Sims
商务	此环境的设计主旨是商业使用	Qwak

来源: Plus Eight Star

## 西方几个主要的 2D 虚拟世界

服务	注册用户	2008 年收入(E) <sup>7</sup>	估值(E) <sup>8</sup>
Habbo	1亿	5千万美元	12.5亿美元
Gaia Online	7百万 UV/月	1千万美元	n.a.
Stardoll	2千万	3千万美元	4.5亿美元
Club Penguin	1200万	5千万-1.5亿美元	3.5-7亿美元 <sup>9</sup>

## 市场状况 Market situation

### Segmentation

Virtual worlds have so far experienced very different fortunes. It is possible to categorize the variety of services according to the **graphics** (2D/3D), the main **purpose**, the **openness** of the service – whether it allows user-generated content or not – and the target **demographics**.

In terms of purpose, we divided the services into 4 categories: platforms, communities, gaming and business.

Unsurprisingly, the most active services today are the communities and gaming worlds thanks to their openness and “fun factor”. The following chapters will thus focus on those two categories.

### 2D virtual worlds

Overall, 2D worlds with little or no user-generated content aiming at teenagers have generally fared far better than any 3D service. We found the main reasons to be a much lower barrier of entry thanks to technologies allowing browser-based usage (notably Flash and Shockwave), better focus on their demographics, and better monetization with virtual goods.

Those services provide spaces for users to discuss, socialize and more. The main activities are often the personalization of an avatar – a character representing the user – and of a personal space to provide a visual context to interactions.

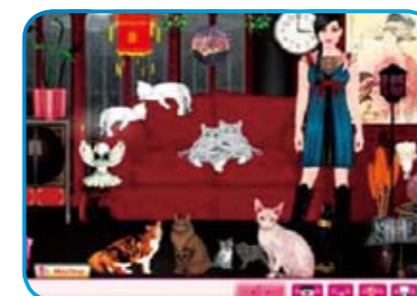
### Western 2D worlds

Among well-known services of this kind in the Western world are **Habbo**<sup>2</sup> (Finland, 2000), **Gaia Online** (US, 2003) **Stardoll**<sup>3</sup> (Sweden, 2004) and **Club Penguin**<sup>4</sup> (Canada, 2005). Though not disclosing precise numbers, all those services report millions of registered users and are rumored to be nearing profitability.

The common point of those services is their ability to attract large numbers of users and monetize their audience via subscriptions or the sale of digital goods in a closed system and economy.

**Habbo** allows users to create avatars and move them around a hotel, where they meet other users, personalize their avatar and populate their room with virtual furniture. The service had its 100 millionth avatar created in June 2008. Habbo worked with a variety of brands and celebrities for in-game objects and events.

**Stardoll's** concept is to create digital paper dolls. In November 2008 it reported over 20 million registered users with 8 million unique visitors every month, 94% of whom were teen and tween<sup>5</sup> girls. Revenues were coming from the sale of digital items to dress up a doll and its room. The site has partnerships with famous fashion brands and artists and is selling over 100,000 items per day<sup>6</sup>.



Stardoll的数字化纸玩偶  
Stardoll's digital paper dolls

**Club Penguin** is a virtual world where users control cartoon penguins, chat and play mini-games. The game is targeting the 6-14 year old demographic. The business model is a combination of monthly membership and virtual goods sales. The service had over 12 million accounts at the end of 2007. According to the research firm DFC Intelligence its revenues were estimated to be between 50 and 150 million USD in 2008.



Club Penguin中各式各样的企鹅  
Club Penguin's myriad of penguins

**Gaia Online** is a hybrid between an online forum, creative outlet, casual gaming site and virtual world. It reported over 7 million unique visitors and 1 million USD virtual goods sale per month in 2008.



Gaia Online

### Virtual world categories

Category	Definition	Example
Platform	Platforms are “open” environments where users do not have clearly defined objectives.	Second Life
Community	Virtual communities are more controlled environments centered on relationships.	IMVU
Gaming	The main purpose is gaming. The game itself can be open-ended.	The Sims
Business	This environment is designed primarily for business use.	Qwak

Source: Plus Eight Star



Habbo酒店大厅  
Habbo's lobby

### Some of the major Western 2D virtual worlds

Service	Registered users	Revenue 2008 (E) <sup>7</sup>	Valuation (E) <sup>8</sup>
Habbo	100 million	50 mln USD	1.25 bln USD
Gaia Online	7 million UV/month	10 mln USD	n.a.
Stardoll	20 million	30 mln USD	450 mln USD
Club Penguin	12 million	50-150 mln USD	350-700 mln USD <sup>9</sup>

<sup>2</sup> www.habbo.com

<sup>3</sup> stardoll.com

<sup>4</sup> www.clubpenguin.com

<sup>5</sup> 8-12 岁女孩

<sup>6</sup> 8-12 years old

<sup>7</sup> www.forbes.com/2008/05/29/mitra-stardoll-retail-tech-ebiz-cx\_sm\_0530stardoll.html

<sup>8</sup> http://gigaom.com/2009/02/01/top-10-money-making-mmos-2008/

<sup>9</sup> 根据Silicon Alley Insider 2008年4月的估计 | www.businessinsider.com/sai25 及纽约时报 ( ) 对 Gaia 首席执行官的采访 www.nytimes.com /2008/12/08/technology/internet/08virtual.html

Estimate by Silicon Alley Insider in April 2008 | www.businessinsider.com/sai25 and Gaia's CEO interview at www.nytimes.com/2008/12/08/technology/internet/08virtual.html

基于迪斯尼2007年的收购价格，即3.5亿美元，如果具体目标实现，外加3.5亿美元。

Based on the acquisition price by Disney in 2007 for 350 million USD with an additional 350 million if specific targets are met.

## 亚洲领先的基于形象化身社区

服务	注册用户	2008 年收入(E)	估值(E) <sup>13</sup>
Cyworld	2200万	2亿美元	n.a.
Mobile Game Town	1260万	2.5亿美元	14亿美元
Gree	800万	6000万美元	12亿美元
Nicotto Town	100,000	n.a.	n.a.

数据来源: Plus Eight Star

## 日本和韩国

几个亚洲服务的运营理念基本类似，经营也非常成功。如韩国的Cyworld<sup>10</sup> (SK 电信, 1999), 日本的 Mobile Game Town<sup>11</sup> (DeNA, 2006) 和 Gree<sup>12</sup> (2004)。它们都吸引了数百万用户，并从形象化身的个性化中获得了不菲的收入和利润。

以上的服务准确来说不是虚拟世界，因为他们既不提供同步互动，也不具备必要的永久性“世界”。然而，其所具备的网络空间和形象化身使用户产生兴趣。

2003年，Cyworld 被SK电信收购，并将其从网络扩展到手机。其服务是一种实名制社交网

络，提供类似于Facebook的个人日记、形象化身、照片和其他服务。Cyworld 是探索虚拟商品模式的先驱，它在韩国有着巨大的影响力，这个国家大部分15-30岁的网民都有自己的一个网页。

Mobile Game Town (MGT) 和 Gree 是移动服务 (Gree的网络使用率有限)，它们使用基于Flash的手机游戏来吸引用户。根据MGT的报告，其1200万用户中约10%的人购买了增值服务 (虚拟商品和形象化身)。两家公司都已在日本上市，由于它们在收入和利润方面不俗的表现，两公司的股票市值都保持在10亿美元左右。

2008年，日本的视频游戏厂家Square-Enix (以其“最终幻想”和“勇者斗恶龙”系列而闻名) 推出了一个新的服务，名为Nicotto Town (“微笑之城”)。

在数月之内，该服务就吸引了十多万用户。

该服务与Habbo, Stardoll 和 Cyworld有极为相似之处。

## 中国

在中国，许多服务都依赖于形象化身和虚拟商品。最成功的是QQ (腾讯, 1998)，2008年，公司的销售额和利润分别为10亿美元和5亿美元，公司基于形象化身的服务在用户、收入和利润方面成为世界领先者。

其主要服务围绕着即时讯息，但还包括类似于Club Penguin 名为QQ宠物的2D虚拟世界。

虽然QQ遥遥领先于所有其他服务，但其他几个基于形象化身的2D服务也吸引了大量用户，其中包括爱情公寓 (iPart) (商情网络, 2003), 娜娜米米 (2005), 1D.com (Mocre, 2007) 和 梦境家园 (Xlands, 2008)。

## Japan & South Korea

Several Asian services are operating successfully with similar concepts, such as Korea's<sup>10</sup> Cyworld (SK Telecom, 1999), Japan's Mobile Game Town<sup>11</sup> (DeNA, 2006) and Gree<sup>12</sup> (2004). All of them gathered millions of users and are generating strong revenues and profits from avatar personalization.

The above services are not exactly virtual worlds as they do not provide synchronous interactions nor is there necessarily a permanent surrounding "world". However, the presence of online spaces and avatars make them interesting to consider.

Cyworld was acquired by SK Telecom in 2003 and extended from web to mobile. Its service is a real-name social network offering personal diaries, avatars, photos and other services with some similarities to Facebook. Cyworld is a pioneer of the virtual goods model and has had an enormous impact in South Korea where most netizens from 15-30 have a page.



Cyworld's 迷你小家，其中有迷你小屋和形象化身  
Cyworld's mini-home with mini-room and avatar

Mobile Game Town (MGT) and Gree are mobile services (Gree has a limited web usage) using Flash-based mobile games to attract users. MGT was reporting that around 10% of its 12 million users paying for value-added services (virtual goods and avatars). Both companies went public in Japan and enjoy a market capitalization in the 1 billion USD range due to their revenues and high profitability.



Mobile Game Town的形象化身室  
Mobile Game Town's avatar room

In 2008, a new service named Nicotto Town ("Smile Town") was launched by the Japanese video game maker Square-Enix (famous for its Final Fantasy and Dragon Quest series).

Within a few months, the service gathered over 100,000 users.

The service has strong similarities with Habbo, Stardoll and Cyworld.



Square-Enix 的 Nicotto Town  
Nicotto Town by Square-Enix

## China

In China, a number of services rely on avatars and virtual goods. The most successful is QQ (Tencent, 1998), which recorded an estimated 1 billion USD in sales and 500 million USD in profits in 2008, making it the leading avatar-based service by users, revenues and profit worldwide.



带有形象化身的QQ即时讯息服务  
QQ's IM service with avatars

messaging but also includes a 2D virtual world named QQ Pet comparable to Club Penguin.

While QQ outshines all other services by an order of magnitude, several other 2D avatar-based services managed to gather significant numbers of users. Among them are iPart (ShangQing Networks, 2003), Nanamimi (2005), 1D.com (Mocre, 2007) and 1001m (Xlands, 2008).



虚拟宠物服务 QQ宠物  
The virtual pet service QQ pet

## Some of the major Western 2D virtual worlds

Service	Registered users	Revenue 2008 (E)	Valuation (E) <sup>13</sup>
Cyworld	22 million	200 million USD	n.a.
Mobile Game Town	12.6 million	250 million USD	1.4 billion USD
Gree	8 million	60 million USD	1.2 billion USD
Nicotto Town	100,000	n.a.	n.a.

Source: Plus Eight Star

<sup>10</sup> www.cyworld.com

<sup>11</sup> www.mbg.jp/pc/

<sup>12</sup> gree.jp

<sup>13</sup> Estimate for Cyworld by Plus Eight Star 对Cyworld的估计是基于SK电信的财务数据和移动收入估计。DeNA 和 Gree的估值是基于到2009年2月23日的市值。Estimate for Cyworld by Plus Eight Star based on SK Telecom's accounting and estimate of mobile revenues. Valuation for DeNA and Gree based on market capitalization as of 23 February 2009.

“在 2D 虚拟世界里已经有很多成功的案例。但他们为什么能够获得成功呢？因为在他们的世界里不存在完全的用户生成内容。”

大公司们说：‘就只将我们的虚拟商品作为一种媒介吧’。”

Zafka Zhang, “青年志”共同创始人, 虚拟世界专家

*"In 2D virtual worlds there are many success stories already. But why were they successful? Because in those worlds there was no case of total user-generated content."*

*Big companies said:*

*'just use our virtual goods as a kind of media'."*

Zafka Zhang Co-Founder, China Youthology Virtual Worlds Expert

“爱情公寓”与Stardoll有很多相似之处，而“娜娜米米”，1D.com 和“梦境家园”则类似于 Habbo 的乐高风格和理念。当然，它们都通过虚拟商品来赚钱。

有趣的是，它们都将 2D 空间和形象化身与真实照片和视频结合起来，给服务带来了通常在社交网站或视频聊天中存在的社交特色。1D.com 和“梦境家园”还提供了卡拉OK服务，用户可以通过网络摄像头唱歌和播放自己实际聚会中的视频。

这一群体中最为成功的 可能就是，“爱情公寓”，2008年，该服务宣布，自己的注册用户超过了1400万，其中60%是女性，服务的收入在三百万美元左右。

### 2D 世界的结论

这些服务将在线社区与玩偶屋娱乐结合在一起，吸引了女孩，继而又吸引了男孩。总的来说，这些服务已经在整个世界范围使用，并创建了有效的商业模式。

它们一般采用两种虚拟钱币：一种是用来奖励用户活动的免费钱币，另一种是用来购买高级物品的付费钱币。内容通常全部由服务运营商来提供，用户互动由其员工来主持。

iPart has similarities with Stardoll while Nanamimi, 1D.com and 1001m resemble the Lego-style and concept of Habbo. Of course, all of them monetize using virtual goods.

Interestingly, all of them mix 2D spaces and avatars with real pictures and videos, bringing in social features generally found in social networks or video chat services. Both 1D.com and 1001m offer a karaoke service where users can sing and broadcast their video via their webcam during in-world parties.

In 2008, iPart – likely the most advanced of the group – was announcing over 14 million registered users, 60% of them female, and revenues in the vicinity of 3 million USD.

### Conclusion on 2D worlds

Blending online communities with doll-house entertainment, they primarily attract girls, who in turn attract boys. Overall, those services have already achieved worldwide adoption and developed effective business models.

They generally employ two virtual currencies: a free one to reward users of their activity and a paying one to buy premium objects. Content is most often provided entirely by the service operator and interactions are moderated by its staff.

## 3D 虚拟世界

### 西方 3D世界

初期的成功激发了其他公司开发3D虚拟环境的兴趣。虽然“第二人生”报告说自己的注册用户已超过200万（为了与活跃用户相区分，注册用户被Linden Lab叫做“居民”，因为他们的形象化身“生活”在“第二人生”的世界里），其他效仿它的大多数3D世界却未能取得巨大成功。

3D虚拟世界有多种应用，从游戏到社交再到教育或商务。其中表现较好的3D虚拟世界类型是

现成世界（封闭系统）而非那些集中于用户生成内容（开放系统）的虚拟世界。截至到本文截稿之日，报告说There.com (Forterra, US, 2003) 和 IMVU (US, 2004)（其创始人同为There.com的发明者Will Harvey）都接近于盈利。

2008年，IMVU宣布自己从虚拟商品中获得的月收入已超过100万美元。<sup>15</sup>

为了克服必须安装客户端软件的障碍（这对服务使用来说是一个巨大的障碍），多个公司已推出基于浏览器的服务。

其中最著名的尝试是Google的 Lively服务。这个服务一方面从IMVU获得了很大灵感，同时能够使用户能够更容易地进入3D环境。该服务仅在2008年7月至12月使用过，之后Google决定停止此实验。

## 3D virtual worlds

### Western 3D worlds

The initial interest sparked the creation of other companies developing various 3D virtual environments. While Second Life was reporting over 2 million registered users (to distinguish from active users, registered users are named "residents" by Linden Lab as their avatars "live" in Second Life's world), most other 3D worlds modeled after it did not achieve much success.

There are several usages for 3D virtual worlds, ranging from gaming to socializing to education or business. Among them, one category of 3D virtual worlds that has fared reasonably well are ready-made worlds (closed systems) rather than those that focused on user-created content (open systems). At the time of writing, There.com (Forterra, US, 2003) and IMVU (US, 2004), which was also founded by There.com's inventor Will Harvey, were reported to be close to profitability.

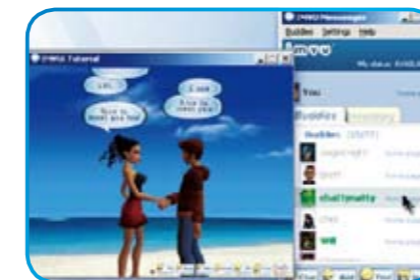
In 2008, IMVU announced over 1 million USD in monthly revenues from virtual goods<sup>15</sup>.

To overcome the barrier of having to install a software client (a significant barrier for service adoption), several companies have released browser-based services.

The most notable attempt was Google's Lively service. While drawing strong inspiration from IMVU, it allowed an easier entry into 3D environments. The service lived only from July to December 2008 when Google decided to stop this experiment.



Google的Lively实验  
Google's Lively experiment



IMVU中的3D聊天  
3D chat in IMVU



爱情公寓, 娜娜米米, 1D.com 和梦境家园<sup>14</sup>  
iPart, Nanamimi, 1D.com and 1001m<sup>14</sup>

<sup>14</sup> www.ipart.cn ; www.nanamimi.com ; www.mocre.com ; www.1001m.com  
<sup>15</sup> www.reuters.com/article/pressRelease/idUS145552+31-Oct-2008+BW20081031

## 日本和韩国

在日本, Splume<sup>16</sup> (2007) 是第一个推出类似于“第二人生”的3D虚拟世界的本土公司。

2007至2008年还宣布或推出了一系列其他服务。例如 Al sp@ce, Daletto World, Hatena World<sup>17</sup>, Internet Adventure iA<sup>18</sup> (by Sega), Meet-me<sup>19</sup>, ntomo<sup>20</sup>, Poki Poki<sup>21</sup>, PRUM<sup>22</sup>, Vizimo<sup>23</sup> 和 3D 世界解决方案提供商 3Di<sup>24</sup>。

截止到2008年末, 这些服务中没有一个能够达到2D世界甚至“第二人生”的用户数。

日本还推出了数个移动3D虚拟世界。如迪斯尼的“迪斯尼奇妙世界”, Softbank的 S!Town 和 Ask.jp 的 Metamo<sup>25</sup>, 但它们的用户数量仍很低。

值得注意的是, 2006年, 任天堂Wii 游戏机及其形象化身的推出和成功对虚拟世界市场产生了巨大影响。索尼和微软都在为各自的游戏机推出在线世界。

在韩国, PuppyRed<sup>26</sup> (2004), 一款为十几岁女孩设计的带有卡通形象化身的 3D世界报告说自己的用户数已超过180万人, 每月的收入超过100,000美元, 其中80%来自于数字物品, 其他收入来自于使用虚拟宠物和虚拟世界内的横幅广告。

最近, 韩国目前最大的社交网站Cyworld 的3D演进版Cyworld Mini-life<sup>27</sup> (2008)报告说, 用户的人数和收入仍很低, 用户从数千人到最多的十几万人不等。Cyworld 3D和PuppyRed之间有着诸多相似之处, 后者所提供的娱乐选择更少一些。

最近出现的最令人感兴趣的服务是名为 Nurien<sup>28</sup>(2008) 的“3D游戏社交网络。它为用户提供了非常逼真的 3D形象化身和游戏, 如舞蹈游戏和谜语。

## Japan and South Korea

In Japan, Splume<sup>16</sup> (2007) was the first local company to introduce a 3D virtual world comparable to Second Life.

A number of other services have been announced or launched from 2007 to 2008, such as Al sp@ce, Daletto World, Hatena World<sup>17</sup>, Internet Adventure iA<sup>18</sup> (by Sega), Meet-me<sup>19</sup>, ntomo<sup>20</sup>, Poki Poki<sup>21</sup>, PRUM<sup>22</sup>, Vizimo<sup>23</sup> and the 3D world solution provider, 3Di<sup>24</sup>.

As of late 2008, none of them had reached a number of subscribers comparable to 2D worlds or even Second Life.

Japan also sported several mobile 3D virtual worlds, such as Disney's "Disney Wonder Days", Softbank's S!Town and Metamo<sup>25</sup> by Ask.jp, again with low usage.

It has to be noted that the introduction and success of Nintendo's Wii game console in 2006 and its avatars has had a powerful influence on the virtual world market. Both

Sony and Microsoft are launching an online world for their respective console.

In Korea, PuppyRed<sup>26</sup> (2004), a 3D world designed for teenage girls with cartoonish avatars, reported 1.8 million users and revenues over 100,000 USD per month, 80% coming from digital items and the remainder from advertising using virtual pets and in-world banners.

More recently, Cyworld Mini-life (2008), the 3D evolution of Cyworld, Korea's largest social network by far, was still reporting fairly low number of users and little revenues, ranging from tens to hundreds of thousands of users at most. There are numerous similarities between Cyworld 3D and PuppyRed, the latter providing much less entertainment options.

The most interesting service that came out recently is the "3D gaming social network" named Nurien (2008). It offers very realistic 3D avatars to hang out and play games such as dance games and quizzes.



Internet Adventure (互联网探险)  
Internet Adventure



Wii 游戏机的Mii 形象化身  
Mii avatars for the Wii console



PuppyRed



Meet-me

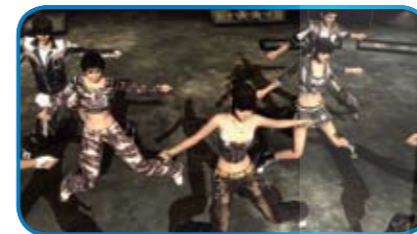


任天堂的 Wii游戏机  
Nintendo's Wii game console

<sup>16</sup> splume.jp/  
<sup>17</sup> http://w.hatena.com/  
<sup>18</sup> ia-world.jp/  
<sup>19</sup> http://www.meet-me.jp/  
<sup>20</sup> http://ntomo.co.jp/  
<sup>21</sup> http://pp.clubhanbit.jp/  
<sup>22</sup> http://prum.jp/  
<sup>23</sup> http://vizimo.jp/  
<sup>24</sup> http://3di.jp/en/  
<sup>25</sup> www.mtmo.jp/  
<sup>26</sup> www.puppyred.com/  
<sup>27</sup> http://minilife.cyworld.com/  
<sup>28</sup> www.nurien.com/



Cyworld Mini-life



Nurien逼真的形象化身  
Nurien's life-like avatars

“大多数互联网用户不能很好地使用互联网，他们只是在找乐。

他们想看到评述；他们想玩游戏，看电视以及诸如此类的事。

我们现在正在看来B2C，计划未来直接向用户销售虚拟商品。”

Patrick Zha  
NOVOKing首席执行官，总裁及创始人

*"Most of the Internet users cannot use the Internet very well and they are just looking for entertainment.*

*They want reviews; they want to play games, watch TV, and all these kind of things.*

*We are now looking into B2C and plan to sell virtual goods directly to users in the future"*

Patrick Zha CEO, President & Founder NOVOKing

## 中国：第一代

媒体对“第二人生”的关注推动了众多公司进入中国的3D世界市场。2007年，推出了具有相似理念的HiPiHi<sup>29</sup>，NOVOKing<sup>30</sup>和uWorld<sup>31</sup>。

遗憾的是，到目前为止，这些服务的用户数量仍非常低。阻碍它们成功的原因有：

- 有限的宽带网络速度
- 需要安装客户端软件
- 服务中“现成”娱乐的有限性
- 网络广告的支持不足，虚拟世界的收入有限

面对这种状况，众多服务探索了其他创收模式，一些新进入市场者制定出一系列创收和服务战略。

## 中国：第二代

认识到模仿“第二人生”模式的第一代3D虚拟世界的困难以及“第二人生”本身及Google Lively的缺陷，几个公司已在另辟蹊径。

2008年底和2009年推出的三种方式尤其值得关注。

## China: First Generation

Encouraged by the media attention to Second Life, a number of companies have made an entry into 3D worlds in China. HiPiHi, NOVOKing and uWorld all launched during 2007 with similar concepts.



HiPiHi

Unfortunately, user figures have been very low so far. Among barriers to their success are:

- Limited speed of broadband networks
- Necessity to install a software client
- Limited "ready-made" entertainment within the service
- Low support from online advertising and limited revenues from virtual real estate

Facing this situation, a number of services have explored alternative revenue models and new entrants have devised a number of revenue and service strategies.

## China: Second Generation

Recognizing the difficulties of the first generation of 3D virtual worlds modeled after Second Life as well as the shortcomings of both Second Life itself and Google Lively, several companies have taken original approaches.

Three of them launched in late 2008 and 2009 are of particular interest.

<sup>29</sup> www.hipih.com/

<sup>30</sup> www.novoking.com/

<sup>31</sup> www.uworld3d.com/

<sup>32</sup> www.guodong.com

<sup>33</sup> www.cmune.com

<sup>34</sup> www.frenzoo.com

## 与社交网络相连接

果冻网(Guodong<sup>32</sup>) (2009)是一个3D娱乐平台，它植入网页和社交网络，如当地的知名网络“校内网”。果冻网利用Flash来提供浏览器内的3D聊天。

Cmune<sup>33</sup>创造了“miniverses”（迷你虚拟世界），可从社交网络中使用浏览器登录，也可使用Apple的小插件或iPhone登录。

## 浏览器内3D聊天

Frenzoo<sup>34</sup>是一个基于形象化身和时装的3D聊天服务。它与许多品牌合作，销售品牌虚拟商品。

## Connection with social networks

Guodong (2009) is a 3D entertainment platform that plugs into web pages and social networks such as the local leader Xiaonei. Guodong relies on Flash to offer in-browser 3D chat.

Cmune<sup>33</sup> creates "miniverses" (mini-virtual worlds) that can be accessed from the browser, within social networks and with Apple's widgets or iPhone.



果冻（“校内网”内）  
Guodong (within Xiaonei)



Cmune (Facebook内)  
Cmune (within Facebook)

## 网络游戏公司进入3D虚拟世界领域

目前其他一些服务仍在开发之中，并将于2009年推出。其中的一个服务是名为Hapa的3D社区。同时，两个由网络游戏公司运营的3D世界也将于2009年面世，他们是：由9You运营的GT，和由法国公司F4开发、由Giant Interactive公司在中国运营的体育主题虚拟世界 Empire of Sports（体育帝国）

## In-browser 3D chat

Frenzoo is a 3D chatting service based on avatars and fashion. It partners with brands to sell branded virtual goods.



Frenzoo的时尚形象化身  
Frenzoo's fashionable avatars

## Online gaming companies enter the 3D virtual world field

A few other services were still under development to launch later in 2009. Among those is a 3D community called Hapa. Also, two 3D worlds operated by online game companies should launch in 2009. They are GT by 9You and Empire of Sports, a sports-themed virtual world developed by the French company F4 and operated in China by Giant Interactive.

# 中国虚拟世界的演变与趋势

## Evolution and trends of virtual worlds in China

虚拟世界的主要趋势的目标是获得较快的应用和商业成功：增加普及率，降低应用障碍，创造收入。

### 市场趋势

- **市场细分化：**需要差异性和更好的用户定位。为青少年而设计的2D世界将变现实尤其抢眼。
- **更多企业客户进入虚拟世界，体验3D市场营销。** iLemon公司正致力于建设定制性虚拟世界。另一个例子是 uOneNet，该公司

得到CETV（中央电视台教育频道）2100万元人民币的合同，2009年1月基于公司的平台建立一个3D教育世界。

- **更多的监管和客户服务问题，**从欺骗，网络沉迷到侵犯知识产权等。

### 技术趋势

从技术上来看，正出现如下几种趋势：

- **使用网络浏览器而不是客户端软件。**许多服务将软件的下下载作为一个重要的障碍。

浏览器内一次点击登录将可解决此问题。Flash 和Shock wave等技术以及更新的3D技术。Cmune 和 Frenzo 都使用Unity3D插件，在网路浏览器中提供3D。

- **社交网络内社交功能整合。**可通过现有网络进行病毒式扩张。

- 随着网络速度、计算机性能以及浏览器功能的提升，3D 将蔓延开来。

The major trends of virtual worlds aim at achieving faster adoption and commercial success: increasing reach, lowering the adoption barriers and bringing in revenues.

### Market trends

- **Market fragmentation:** Differentiation and better targeting of users will be needed. 2D worlds designed for teens can be expected to do particularly well.
- **More corporate clients enter VWs and experience 3D marketing.** The company iLemon is dedicated to building custom virtual worlds. Another example is uOneNet, who was awarded a contract of 21 million RMB by CETV (CCTV education channel) to build a 3D world for education in Jan 2009 based on its platform.

- **More regulatory and customer service issues,** ranging from cheating, addiction, IPR infringement, etc.

### Technology trends

In terms of technology, several trends are emerging:

- **Use of web browsers rather than software client.** Many services identified the download of software as an important barrier. One-click access within the browser should solve this issue. Technologies like Flash and Shock-wave, as well as newer 3D-enabling technologies. Both Cmune and Frenzo use the Unity3D plug-in to offer 3D in web browsers.

- **Integration of social features and within social networks.** This would allow a viral spreading via existing social networks.

- **3D will spread as network speed, computer performance and browser capabilities evolve.**

- **Open-source virtual world platforms raised some interest but it is still unclear how they can deliver sufficient quality for large scale commercial projects.** So far, commercial 3D engines look better positioned.

事实证明，在中国通过销售虚拟土地来实施和扩展“虚拟地产”模式是极其困难的。

这一点对SNS和VW来说已变得日益明显，两者目前也都在实施数字商品模式。

数字商品模式还从投资者那里得到了验证：根据“虚拟世界管理”杂志发布的报告，2008年，超过5.8亿美元已被投入到41个与虚拟商品相关的业务中。

### 虚拟世界的商业模式

商业模式	示例	注解
虚拟地产	第二人生	B2C/B2B, 占“第二人生”收入的70%
虚拟货币	第二人生	B2C, 占“第二人生”收入的30%
虚拟商品	Habbo, QQ Pet	B2C, 在中国奏效的模式
电子商务	n.a.	将虚拟产品与实际产品联系起来
广告	第二人生, HiPiHi	B2B, 不成熟
平台执照	iLemon	B2B
内容制作	HiPiHi, iLemon	B2B, 为3D世界带来了第一笔收入

来源: Plus Eight Star

- **开源虚拟世界平台提高了人们的兴趣，**但它们如何为大规模商业项目提供足够的数量目前尚不清楚。目前，商业3D引擎似乎处于更有利地位。

- **内容交互操作性和开放平台是流行的概念：**例如，可将3D形象化身或制作出来的内容从一个世界带到另一个世界，但这样做似乎与3D世界最有前途的虚拟商品商业模式不相符。

### 商业模式趋势

一些依赖于注册或虚拟商品小额交易的2D虚拟世界表现不错，但对效仿“第二人生”模式的虚拟世界来说，商业模式其主要挑战之一。

Notably, adapting and scaling up model of “virtual real estate” with the sale of in-world territory proved extremely difficult in China.

This has become increasingly clear to both SNS and VW who are now implementing the digital goods model as well.

The digital goods model received its validation from investors as well; according to a report released by Virtual Worlds Management, 580 million USD were invested in 41 virtual goods-related businesses in 2008.

- **Content interoperability and open platforms are popular concepts:** bringing a 3D avatar or created content from one world to another, for instance, but does not seem in line with the virtual goods business model, which appears to be the most promising for 3D worlds.

### Business model trends

While some 2D virtual worlds relying on subscription or micro-transactions for virtual goods have done well, business models are one of the major challenges of virtual worlds modeled after Second Life.

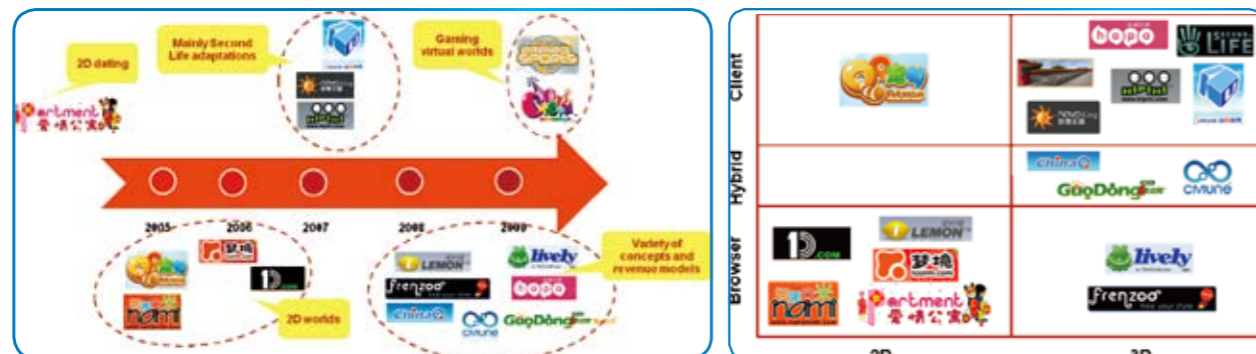
2008年，超过5.8亿美元已投向41个与虚拟商品相关的业务中。

*In 2008, over 580 million USD were invested in 41 virtual goods-related businesses.*

### Business models for virtual worlds

Business model	Examples	Comment
Virtual real estate	Second Life	B2C/B2B, 70% of SL revenue
Virtual currency	Second Life	B2C, 30% of SL revenue
Virtual goods	Habbo, QQ Pet	B2C, proven model in China
E-commerce	n.a.	Linking virtual and real products
Advertising	Second Life, HiPiHi	B2B, not mature
Platform licensing	iLemon	B2B
Content creation	HiPiHi, iLemon	B2B, generating the first revenues for 3D worlds

Source: Plus Eight Star



中国虚拟世界的演变 来源: Plus Eight Star  
Virtual worlds evolution in China. Source: Plus Eight Star

中国的虚拟世界类型 来源: Plus Eight Star  
Virtual world types in China. Source: Plus Eight Star

## 政策和法规 Policy and regulation

虚拟世界的发展带来了一系列问题，其中的主要问题有：

### 与用户相关的：

- **身份：**如何评定谁是谁？（证明，隐私权）
- **公民权利：**用户以及服务提供商和其他用户的法律权利是什么？（攻击，袭击）
- **个人数据的保护：**虚拟世界中垃圾信息如何处理？对内容进行过滤来使在线空间更安全或更适合儿童？

### 与知识产权相关的：

- 与数字内容相关的商标、专利和版权：用户能够防止自己的形象或作品在网上被复制吗？品牌能够保护自己吗？

### 与贸易相关的：

- **在线商务：**线上创造的财富能够转移到线下吗？虚拟世界内的合同能够得到履行吗？用户能够“拥有”虚拟财产吗？

在很多情况下，该去找谁、什么可以得到赔偿以及谁去解决问题仍不明确。

## 知识产权

### 商标

商标问题涉及两个方面：

- “线下”商标的保护
- 虚拟世界产生的商标的保护

The development of virtual worlds brought about a number of issues. Among the key issues are:

### User-related

- **Identity:** how to assess who is who? (certification, privacy)
- **Civil rights:** what are the legal rights of users against the service providers and other users? (assault, offense)
- **Protection of personal data:** how about spam in virtual worlds? Content filtering to make online spaces safer or suitable for kids?

### IRP-related:

- Trademarks, patents and copyrighting related to digital content: Can a user prevent the reproduction of his image or his work online? Can brands protect themselves?

### Trade-related:

- **Online commerce:** can wealth created in online be transferred offline? Can in-world contracts be enforced? Can a user "own" the virtual properties

In many cases, it is still unclear who to turn to, what can be claimed and who should solve the problems.

## Intellectual property rights

### Trademarks

The issue with trademarks is two-fold:

- Protection of "offline" trademarks
- Protection of trademarks originated in virtual world.



“第二人生”中用户制作的劳力士牌手表  
User-generated watch in Second Life with the Rolex brand

就“离线”商标而言，侵权事件在虚拟世界里经常发生。这使用户很难区分“官方产品”和假冒产品。

品牌将如何保护自己？华盛顿特区Banner & Witcoff<sup>35</sup>律师事务所的Ross Dannenberg<sup>36</sup>认为：

“因为你无法起诉一个‘形象化身’，因此你必须找到谁是谁那个形象化身账户的所有者。商标所有者可以起诉一个“无名氏”，然后传唤虚拟世界的业主（如Linden实验室），使其透露建立帐户的用户真实姓名。之后诉讼可以进一步将对侵权负有责任的形象化身实际拥有者包括进来。”

In the case of "offline" trademarks, infringement happens regularly in virtual worlds. This makes it difficult for users to distinguish "official products" from fake ones.

How can brands protect themselves? According to Ross Dannenberg<sup>35</sup> of the law firm Banner & Witcoff<sup>36</sup> in Washington, D.C.:

"Because you cannot sue an "avatar", you must find out who is the owner of the account with which that avatar is associated. A trademark owner can file a lawsuit against "John Doe", then seek a subpoena against the proprietor of the virtual world (e.g., Linden Lab) to divulge the user's real name provided when the account was created. The lawsuit can then be amended to include the real life owner of the avatar responsible for the infringement."

这样就可以对账户的合法操作者—公司或个人—采取法律措施。

2008年，一起与虚拟选美相关的案件导致现实中的“环球小姐”组织向“SL环球小姐”的获奖者发送了一份商标侵权通知书。<sup>37</sup>

但虚拟世界也是一块打造品牌的肥沃土地：PixelDolls<sup>38</sup>是“第二人生”中的一个著名虚拟服装品牌，由名为"Nephilaine Protagonist."的形象化身所拥有。它能够得到保护吗？到目前为止，所有者能够采取的唯一方式是其像其他商标那样进行注册。

The legal action can thus be brought to the legal operator of the account – company or individual.

In 2008, a case associated with a virtual beauty contest lead to the sending of a trademark infringement notice to the winner of the "Miss SL Universe" contest by the offline Miss Universe organization.<sup>37</sup>

But virtual worlds are also a fertile ground for building brands: PixelDolls<sup>38</sup> is a well-known brand of virtual clothing in Second Life, owned by an avatar named "Nephilaine Protagonist." Can it be protected? So far, the only way is for the owner to register the brand like any other trademark.



2008 SL 环球小姐  
Miss SL Universe 2008



PixelDolls: “第二人生”中广受欢迎的数字服装品牌  
PixelDolls: a popular brand of digital clothes in Second Life

主题：答复：Linden实验室收到商标侵权通知书

我们此次写信的目的是告知你有关对你在“第二人生”中档案所做的更改。环球小姐 L.P, LLLP—“环球小姐”商标的所有者—对“第二人生”环境中使用“环球小姐”商标提出控告。

Linden实验室尊重“第二人生”居民和商标所有者的权利。因此，Linden实验室将“环球小姐”和“环球SL小姐”从你的“第二人生”档案中移除。请不要在“第二人生”环境中继续使用“环球小姐”和“SL环球小姐”。

感谢您的合作  
祝万事顺意，  
Linden实验室

*Subject: Re: Notification of Trademark Infringement Received by Linden Lab*

*We're writing to let you know about changes made to your profile in Second Life. Miss Universe L.P, LLLP — the owner of the Miss Universe trademark — has complained about use of the Miss Universe trademark in the Second Life environment.*

*Linden Lab respects the rights of both Second Life residents and trademark owners. Accordingly, Linden Lab has removed uses of "Miss Universe" and "Miss SL Universe" from your Second Life profile. Please do not continue to use "Miss Universe" or "Miss SL Universe" in the Second Life environment.*

*Thank you for your cooperation.  
Best regards,  
Linden Lab*

<sup>35</sup> www.bannerwitcoff.com

<sup>36</sup> www.linuxinsider.com/story/65119.html?wlc=1234679789

<sup>37</sup> virtuallyblind.com/2008/11/24/miss-universe-trademark/

<sup>38</sup> www.nafii.com/PixelDolls/



There.com中的 Word balloon, IMVU 及其鼻祖 Habitat  
Word balloon in There.com, IMVU and their ancestor Habitat

## 专利

就专利而言，我们应区分两种情况：

- 与虚拟世界相关的专利
- 虚拟世界用户的专利侵权

### 与虚拟世界相关的专利

九十年代首次开发虚拟世界期间，多个公司申请了相关专利。由于虚拟世界，尤其是网络游戏已成为公认的市场，一些专利开始浮出水面，同时还伴有一些侵权赔偿案。3D环境已成为数十亿美元的市场，这种状况会变得日益复杂。

### Word balloon专利

第一起案件涉及由Forterra 公司拥有的“Word

balloon”专利，这家公司运营着There.com虚拟社区。这家公司起诉另一家名为IMVU的公司，该公司的创始人是There.com的原始创始人及此专利的发明者。

Forterra 在此案中败诉，因为被告方证明了现有技术存在以及初期的专利仅涵盖“Word balloon”功能的一个具体方面。人们不禁要问，如果Forterra在此案中获胜将会发生什么情况，因为大多数网络游戏都涉及一定形式的视觉聊天，包括著名的魔兽世界。

### 虚拟空间互动方面的专利

最近一起开始于2008年12月并到此报告书写之日仍在法庭审理的案件涉及Worlds.com<sup>39</sup>就“帮助用户在虚拟空间进行互动的系统和方法”专利<sup>40</sup>向韩国网络游戏开发商NC Soft提出的索赔申请。

## Patents

For patents, we will distinguish two cases:

- Patents related to virtual worlds
- Infringement of patents by virtual world users

### Patents related to virtual worlds

During the first developments of virtual worlds in the 90s, several companies filed related patents. Now that virtual worlds and especially online gaming are recognized markets, some of them started to surface along with infringement claims. This situation is likely to become more and more complex as 3D environments have become a multi-billion dollar business. We selected two cases to illustrate this situation.

### Word balloon patent

The first case involves a patent on “Word balloon”, held by the company Forterra, which operates the virtual community There.com. They attacked another company called IMVU, whose founder was the original founder of There.com, and inventor of the patent.

Forterra lost the case as the defendant proved the existence of prior work and that the initial patent covered only a specific aspect of the “Word balloon” function. One can wonder what would have happened if Forterra had won the case, as most online games involve a form of visual chat, including the famous World of Warcraft.

### Patent on interaction in a virtual space

A recent case that started in December 2008 and was still in court at the time of writing, involves a claim by Worlds.com<sup>39</sup> against the Korean online game developer NC Soft for a patent on “System and Method for Enabling Users to Interact in a Virtual Space”<sup>40</sup>.



2007年2月20日授予的美国专利 7,181,690 “帮助用户在虚拟空间进行互动的系统和方法”  
US Patent 7,181,690 “System and Method for Enabling Users to Interact in a Virtual Space” granted on February 20, 2007.

当地的一个律师对此案评论道：“作为一个外国被告来到德克萨斯不是一件令人愉快的事。许多人会说，审判团偏向于美国原告方，并有判给高额赔偿金的倾向。”<sup>41</sup>

随着市场的发展，和可能还会有更多有关专利侵权的赔偿案出现。

亚马逊的“1-click”<sup>42</sup>（单击订购）专利（一种使用户能够点击一次即可进行在线订购的技术）禁止其他未授权网站使用此购物流程，从而为电子商务的发展制造了障碍，同样，此类专利的使用对虚拟世界的发展也构成了巨大阻碍。

A local lawyer commented on this case: “Being a foreign defendant in Texas is not a pleasant thing. The juries are, many would say, biased towards American plaintiffs and have a propensity to offer high damages.”<sup>41</sup>

It is likely that more claims of patent infringement will come up as the market grows.

Similarly to Amazon's “1-click”<sup>42</sup> patent (a technique allowing customers to make online purchases with a single click) which put barriers to the development of e-commerce by preventing other sites to use this purchase process without licensing, such use of patents could put significant barriers to the growth of virtual worlds.

值得注意的是，2000年3月，也就是被授予“1-click”专利不久，亚马逊的首席执行官Jeff Bezos在亚马逊网站上就专利问题发表了一封公开信<sup>43</sup>，信中提出了多个有关改革专利体系的建议。

尤为重要的是，他提出了以下建议：

- 软件专利的寿命应从17年缩短为3到五年。“就互联网的发展速度而言，17年太漫长了。”他说。

- 软件专利的颁发期应短一些，以便给互联网社区机会来提供现有技术（prior art）。

他希望这些改变能够减少专利授予的数量，提高平均质量，缩短专利的寿命。

### 虚拟世界内的侵权

到目前为止，法庭好像尚未受理过虚拟世界内的专利侵权案件<sup>44</sup>。

Linden 实验室的服务条款中包含了以下声明：“你进一步同意，不会基于Linden实验室或服务内的其他用户侵犯了你（或任何其他用户）的专利权的主张，对Linden实验室或服务内的其他用户提出任何索赔要求。”这些服务条款是否能够得到法庭执行尚不得而知。

The result of these changes, he hopes, will be fewer patents issued with a higher average quality and a shorter lifespan.

### In-world infringement

The case of in-world infringement<sup>44</sup> of patents seems to have not been addressed in a court so far.

Linden Lab's terms of service include the following statement: “You further agree that you will not make any claims against Linden Lab or against other users of the Service based on any allegations that any activities by either of the foregoing within the Service infringe your (or anyone else's) patent rights.” It is unclear if those terms of service could be enforced in court.

<sup>39</sup> www.virtualworldtimes.com/files/complaintworldscomvnesoft6-08cv508.pdf

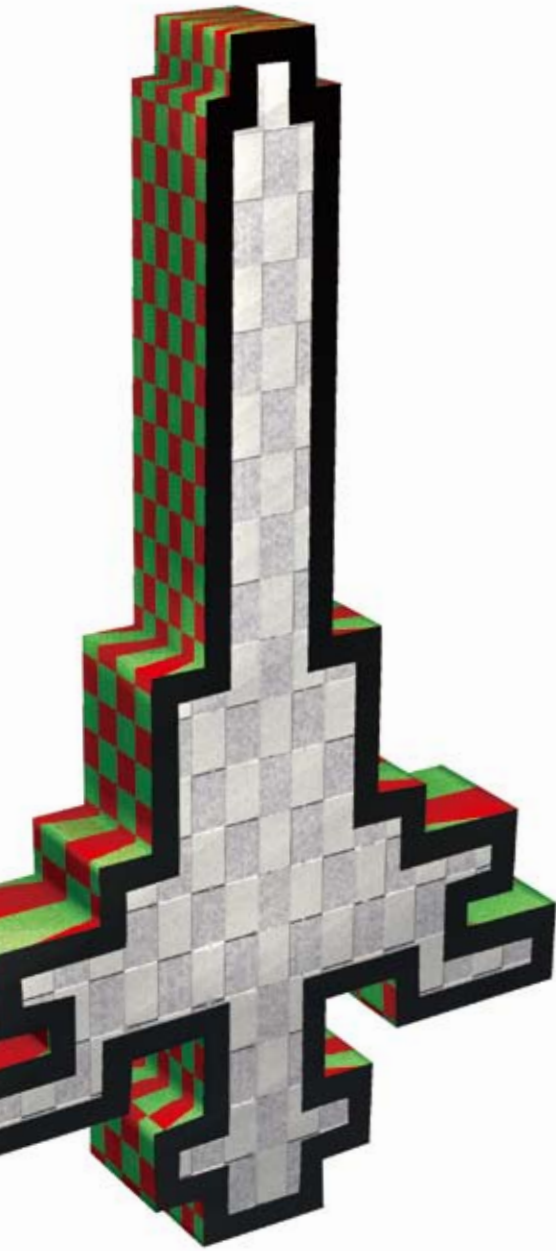
<sup>40</sup> www.google.com/patents?id=vw5-AAAAEBAJ&printsec=abstract&zoom=4&dq=7,181,690#PPA1\_M1

<sup>41</sup> www.virtualworldsnews.com/2008/12/worldscom-vncsoft-update.html

<sup>42</sup> en.wikipedia.org/wiki/1-Click

<sup>43</sup> www.amazon.com/exec/obidos/subst/misc/patents.html/104-7016153-7376406

<sup>44</sup> www.linuxinsider.com/story/65194.html



## 版权

在美国，当作家的作品被固定在某种有形表达媒介上时，版权就自动存在了。这就意味着当图形设计师的作品被画在纸上或存储于计算机上时，这个作品就得到了版权保护。<sup>45</sup>

就在线内容的创作和分享而言，所有权是不明确的。

在线社区和虚拟世界通常能够使用户能够保持对自己创作的所有权，但一些服务要求用户将虚拟世界和游戏中创造的所有版权性资料归服务提供商所有。发生这种情况的原因是通常因为服务提供商力图避免该作品在另一用户的电脑上复制时所带来的侵犯版权责任。

在美国，版权所有者可以从每次版权侵犯中最高得到150,000美元的法定赔偿金以及律师费用和成本（只有当作品在出版三个月内及时在美国版权署注册后方可得到法定赔偿金和律师费用）

为了解决目前版权法中的缺陷问题，一个名为“创作共用”<sup>46</sup>的非营利性计划一直在促进创作者作品版权和许可架构的完善。

它使用户能够“合法地共享、重新组合、重新使用”。

虽然建议中的改变仍在进行当中，但它已得到互联网领域的普遍欢迎。

## Copyrights

In the United States, copyrights exist automatically upon fixation of an author's work in a tangible medium of expression. This means that a graphic designer's works are protected the instant they are drawn on paper or saved on a computer.<sup>45</sup>

In the case of content created and shared online, the ownership is often unclear.

Online communities and virtual worlds often allow users to retain ownership of their creations, but some require users to assign all copyrighted material they create in that world or game to the service provider. This typically occurs because the service provider is trying to avoid liability for copyright infringement when that work is reproduced on other users' computers.

In the US, a copyright owner can obtain statutory damages of up to US\$150,000 per infringed work, and recovery of attorney fees and costs (statutory damages and attorney fees are only available if the copyright is timely registered in the United States Copyright Office within three months of first publication of the work).

To try and fix the shortcomings of the current copyright laws, a non-profit initiative named Creative Commons<sup>46</sup> has been promoting a more refined structure of rights and permissions that authors could decide to associate with their work.

It allows users to “share, remix, reuse – legally”.

While still in progress, the evolutions proposed have been generally welcome by the Internet community.

## "创作共用"许可

### Creative Commons Licenses

 <b>Attribution</b>	 <b>Share Alike</b>	 <b>Noncommercial</b>	 <b>No Derivative Works</b>
You let others copy, distribute, display, and perform your copyrighted work — and derivative works based upon it — but only if they give credit the way you request.	You allow others to distribute derivative works only under a license identical to the license that governs your work.	You let others copy, distribute, display, and perform your work — and derivative works based upon it — but for noncommercial purposes only.	You let others copy, distribute, display, and perform only verbatim copies of your work, not derivative works based upon it.

<sup>45</sup> www.ecommercetimes.com/story/65279.html?wlc=1234679793

<sup>46</sup> creativecommons.org

## 法律权利

有这样一个有趣的案件，用户脚本产生的攻击性物件（这种行为被称为“表达不满”<griefing><sup>47</sup>）扰乱了“第二人生”内的一个采访。

受害者试图寻找到一种解决问题的途径。尚不清楚责任方是服务方（第二人生）、作者（不明）还是无处不在的媒体。

根据DMCA条款，受害者的丈夫拥有版权主张。

“遗憾的是，我不得不向你指出，你很有可能出于偶然，在未经我们的许可的情况下张贴了一个包含由我的妻子Ailin Graef和Anshe Chung Studios有限公司拥有艺术品版权的形象。我们不能授权在此情况下使用此形象及进行Anshe Chung形象化身艺术品和材质的复制。”

这一行动结果适得其反，导致了所谓的“史翠山效应”（以2003年涉及美国歌手芭芭拉·史翠山的一起事件而得名），即，使用法律手段保护个人隐私的做法导致事情变得欲盖弥彰。“互联网将审查解释为损害，并绕道而行。”

面对这种情况，起诉理由被改为性侵害。Guntram Graef认为“视频和照片显然损害了名誉，因而构成了性侵害。”

“电子边界基金会”（一个于1990建立的旨在捍卫公众数字权利的非营利性组织）的律师Jason Schultz认为，围绕着DMCA诉讼案的问题很清楚：“由于‘第二人生’中的总体原则是，你拥有自己所创造的一切，因此，她完全有权利阻止他人对自己‘第二人生’中的形象化身进行截屏或屏幕捕捉。”<sup>48</sup>

此案件在未产生进一步影响的情况下结案，但它集中说明了重要的两点：

- “如果在提出不断诉讼的方面所花的精力大于创建账户和重新发布视频方面所花的精力，那么毫无疑问是某些地方出现了问题。”（Guntram Graef）
- 受害人认为，Linden实验室无直接责任，但应该纠正此问题。“我希望Linden实验室能够迅速对此问题进行研究，关闭这一漏洞。否则人们就会怀疑‘第二人生’是否专业使用做好了准备。”

换句话说，如果此类事件能够发生，用户还不如去更安全的地方。这是问题有待解决，有可能被法规所涵盖，或成为服务提供商服务条款内容中的一部分。

## Legal rights

One interesting case is the disturbance of an interview within Second Life by offensive objects generated by a user's script (an action also known as “griefing”<sup>47</sup>).

The victim tried to figure out a course of action. It was unclear if the party responsible was the host (Second Life), the perpetrator (unidentified) or the media spreading the scene.

The victim's husband initially claimed copyright under the DMCA.

“Unfortunately I have to point out to you that you, most likely by accident, posted an image that **contains artwork copyrighted by my wife Ailin Graef and by Anshe Chung Studios, Ltd.** and without obtaining our permission to do so. We cannot authorize the use of this image and the replication of the artwork and textures of the Anshe Chung avatar in this context.”

This action backfired by causing what is known as the “**Streisand Effect**” (named after a 2003 incident involving American singer Barbra Streisand) in which the use of a legal process to preserve privacy causes the matter become far more prominent as a result. In short, “**The Net interprets censorship as damage and routes around it.**”

Facing this, the claim was changed to sexual assault. Guntram Graef stated that “The video and pictures are clearly defaming and constitute a sexual assault.”

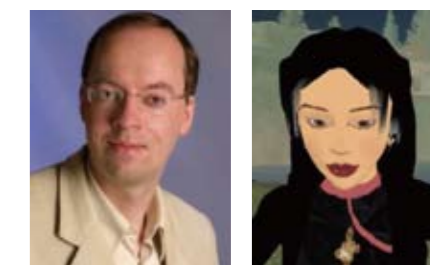
According to Jason Schultz, an attorney with the Electronic Frontier Foundation (a non-profit founded in 1990 to defend digital rights for the public interest), the issues surrounding the DMCA complaint are clear:

“Since the general theory (in Second Life) is that you own what you create, she completely owns the copyright in her avatar. But that said, she absolutely has no rights under fair use to stop people from taking screenshots or screen captures of her avatar in Second Life.”<sup>48</sup>

The case was closed without further known effect, but it highlights two important points:

- “If the effort it takes to file repeated claims is greater than the effort to create an account and repost a video, then certainly something is flawed.” (Guntram Graef)
- According to the victim, Linden Lab's responsibility was not directly in cause, but was advised to fix this problem. “My expectation would be that Linden Lab swiftly research that problem and close that loophole. Otherwise it would raise questions about how ready Second Life actually is for professional use”.

In other words, if such incidents can happen, users will just go to safer places. The question was left open and could likely be covered by **regulations** or simply be part of the provider's **Terms of Service**.



Guntram Graef (左) 捍卫“第二人生”中被攻击的妻子形象化身(右)的权利  
Guntram Graef (left) defending the rights and image of his wife's avatar (right), assaulted in Second Life.

<sup>47</sup>此类名为“griefspawn”的攻击是由能够生成自我复制形象的程序代码所引发的。  
Such attacks, known as “griefspawn”, are set off by programme codes that generate self-replicating symbols.

<sup>48</sup> www.eff.org/press/mentions/2007/07/18-6

## 虚拟商品的交易

虚拟世界和网络游戏销售的虚拟商品通常不能用实际金钱来购买。然而，已出现了众多平行的市场，使用户能够买卖虚拟物品。对买家来说最大的吸引力是能够节省时间、获得权力和地位。对卖家来说动机有很多，包括对物品进行循环以便在游戏中进行再投资，赚点零花钱，或作为一种全职生意。

虽然到目前为止，非游戏虚拟世界尚未形成规模经济，但多个MMORPG游戏已催生了巨大的虚拟商品市场。

除了个人以外，据说许多公司已雇佣了全职人员来玩游戏，赢得虚拟物品或人物成长，以期之后将此卖给其他用户。这种行为也称为“打钱” (gold farming)<sup>49</sup>。

中国和韩国是网络游戏非常活跃的两个国家，根据报告，两国活跃的“打钱者”超过十五万人。随着网络游戏和虚拟世界进一步普及，这一数字将很可能增长，法规也会涉及此价值链的多个部分。

## Commerce of virtual goods

Virtual goods sold in virtual worlds and online games generally cannot be sold for real money. However, a number of parallel marketplaces have appeared to enable users to buy and sell virtual objects. The main attraction for buyers is to save time, gain power and status. For sellers, the motivation ranges from recycling objects to reinvest in the game, making some pocket money or a full-time business.

While non-gaming virtual worlds have not created large in-world economies so far, several MMORPG have given birth to a sizeable virtual goods market.

In addition to individuals, several companies have been reported to employ a full-time staff to play games and earn virtual objects or grow characters later sold to other users, an activity also called "gold farming"<sup>49</sup>.

China and South Korea, two very active online gaming countries, were reported to be host of over 150,000 active gold farmers. It is likely this will expand as online games and virtual worlds become more and more widespread and regulation could concern various stages in the value chain.

## Identity and privacy

In the early years on the Internet, identity was already a difficult topic, as summarized by this famous cartoon published in The New Yorker in 1993: "On the Internet, nobody knows you're a dog"<sup>50</sup>.



## 身份和隐私

互联网发展的初期，身份问题已成为一个让人头痛的话题。正如1993年“纽约客”中发表的这个著名卡通所总结的：“在互联网上，没有人知道你是一条狗。”<sup>50</sup>

十年后的2005年，名为Wired的杂志发表了一份题为“在互联网上，没有人知道你是一个机器人”的文章<sup>51</sup>，文章中讨论了利用机器人玩儿网络扑克游戏来赚钱的问题。一般的用户很难判断出其他玩家是真人还是机器人。

类似的案例在魔兽世界<sup>52</sup>游戏中也是层出不穷，其创作者Blizzard禁止使用未经授权的第三方软件。

About 10 years later, in 2005, the magazine Wired titled "On the Internet, nobody knows you're a bot"<sup>51</sup> for an article discussing robots used to play online poker for real money. Regular users had a hard time figuring if other players were humans or automated.

Similar cases have been rampant in the game World of Warcraft<sup>52</sup>. Blizzard, its creator, banned the use of unauthorized third-party programs.

An additional case that emerged is the one of **shared management** of a single account. Several users take turns operating a single account.



在互联网上，没有人知道你是个机器人  
"On the Internet, nobody knows you're a bot"

另外出现的情况是多人共同管理一个账户，即多个用户轮流操作一个账户。

使事情变得更复杂的是，以上所有情况可以混合到一起：一个单一账户可由多个用户和机器人混合操作。

如果账户的法定所有权属于注册此账户的用户，由合作而导致的在线身份就是一个涉及人类和机器人的“集合体”。

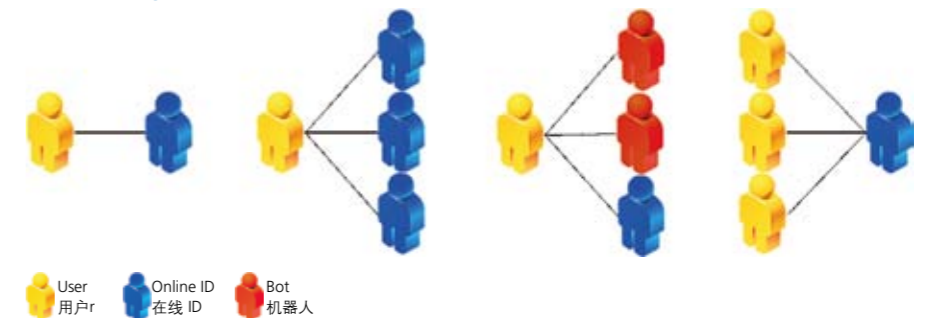
因此，确定网络身份可能会变得越来越复杂。

To make things more complicated, all the above cases can be mixed; one single account could be operated by a mix of users and bots.

If the legal ownership of the account is likely to stay with the user who registered it, the online identity resulting from the cooperation is a "collective" involving humans and bots.

Hence, asserting identity online is likely to become more and more intricate.

## 拥有多个在线身份的用户，使用机器人和共享在线ID的所有权 Users with multiple online identities, using bots and sharing ownership of an online ID



"Glider是一个能够按照你想要的方式代替你玩儿魔兽世界世界的工具。没有你，它也可以磨刀，掠夺，剥皮，治愈，甚至分解灵魂裂片..."

"Glider is a tool that plays your World of Warcraft character for you, the way you want it.

It grinds, it loots, it skins, it heals, it even farms soul shards... without you."



真人与机器人共享一个身份-网络生活的新形式?  
Humans and bots sharing a single identity - a new form of online life?



B169.com, 中国的一个虚拟商品电子商务网站  
B169.com, a Chinese e-commerce site for virtual goods

<sup>49</sup> en.wikipedia.org/wiki/Gold\_farming  
<sup>50</sup> 发表于“纽约客”杂志，1996年7月15日  
Published in The New Yorker July 5, 1993

<sup>51</sup> www.wired.com/wired/archive/13.09/pokerbots.html  
<sup>52</sup> store.mmoglider.com

## 结论 Conclusion

随着浏览器能够提供令人满意的体验，2D世界逐渐向3D世界扩展，虚拟世界正迅猛发展。

从使用角度来看，虚拟世界正处于网络游戏、社区和电子商务的融合阶段。鉴于这些服务之间存在诸多交叉点，对它们进行区分会变得日益困难，因而需要一种更全面的方式。

从法规方面来看，虽然现有电子商务和在线服务法规以及提供商的服务条款中能够涵盖一系列问题，但目前的各自为政状况及知识产权和法律责任方面缺乏明确性说明有必要采取以下措施：

- 对问题进行重构：“虚拟”这个词是一种错误的说法，容易在此种服务与其他各种需使用在线身份的服务之间产生分歧。
- 由在线社区建议和通过与在线可辨认标志相关的行为规范，建立更高水平的用户信任度
- 澄清有关知识产权的问题，例如数字环境中版权，商标和专利的使用（包括合理使用）。互联网上“混合配搭文化”的发展要求制定全球范围的版权法，“创作共用”协议成为此争论中的焦点。

Starting with 2D worlds and gradually expanding to 3D as browsers become capable of delivering a satisfactory experience, virtual worlds are developing quickly.

From a usage standpoint, virtual worlds are at the convergence of online games, social networks and e-commerce. Due to the numerous overlaps between those services, making distinctions is likely to become increasingly difficult and a more holistic approach would be required.

On the regulatory side, while a number of issues can be covered by existing e-commerce and online service regulations as well as the provider's terms of service, the current fragmented state of affairs and lack of clarity of some points related to IPR and legal liability suggest the need for:

- **A reframing of the question:** the term “virtual” is a misnomer and induces an unnecessary dichotomy between those services and various others where online identities are used.
- **A code of conduct** suggested and subscribed by online communities, associated with recognizable marks for online to build higher level of trust from users
- **A clarification regarding IPR** issues such as copyright, trademarks and patents usage in digital environments (including fair use). The development of the “remix culture” on the Internet also makes a call for an adaptation of copyright laws globally, the Creative Commons initiative being at the forefront of this debate.

+8\* | Plus Eight Star 是中国、日本、韩国电信和互联网领域顶尖的跨市场咨询公司。

+8\* 的总部设在中国北京，公司与世界各地的大型企业、中小型企业、投资公司和政府合作，为客户提供战略建议及亚洲发达市场中的最佳实践。

联系我们：at [www.plus8star.com](http://www.plus8star.com)，或 [info@plus8star.com](mailto:info@plus8star.com)

+8\* | Plus Eight Star is the leading cross-market consultancy on telecom and Internet in China, Japan and South Korea.

Headquartered in Beijing, China, +8\* works with large companies, SMEs, investment firms and governments worldwide to bring strategic advice and the best practices from advanced Asian markets.

Contact us at [www.plus8star.com](http://www.plus8star.com) or [info@plus8star.com](mailto:info@plus8star.com)