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"PC-bang" Brought a "big-bang": The Unique Aspect of the Korean Internet Industry

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“PC-bang” Brought a “big-bang”: The Unique Aspect of the Korean Internet Industry

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INDEX:

.01 Abstract
.02 The Rise of PC-bang
.03 How PC-bangs Contributed to the Korean Software Market
.04 No Package, No Piracy, Huge Profit – The New Business Model
.05 The Synergy PC-bang Created with Related Industry
.06 Will PC-bangs Work in the US?
.07 References

.01 Abstract (return to index)
The Korean software market was extremely small, primarily due to the widespread practice of piracy (United States Trade Representative, 1996). There was an improvement with copyright protection since the early '90s, but the market still remained small because it did not get recognition from investors.

Since 1998, a new form of business called “PC-bang”, a unique Korean-style Internet café with an emphasis on games and chatting, became popular. With few, if any, households having broadband connection to the Internet in Korea, these PC-bangs were able to attract people with high-speed Internet connection and high-end equipments.

This PC-bang industry was the catalyst for pushing a quarter of the Korean population to have access to high-speed Internet at home, and helped to develop a new business model for online services and games.

What PC-bangs are and how they work, what role it plays in the new business model for online services, how it sparked growth of other markets it’s related to, and the current trend of the PC-bang industry will be discussed in this article.

.02 The Rise of PC-bang (return to index)

The Korean software market in 1993 was as small as one billion dollars (Korea Software Industry Association, 1997), and most of the sales were made from system integration service, not package software. Software piracy was still being practiced for package software – and this problem was even more serious for non-business software titles.

The Korean software market has exploded in the past five years – in 2002, it grew to an 11.2 billion dollar market (Korea Software Industry Association, 2003). The market for game software, which is an especially vulnerable type of software for piracy, grew from 500 million dollars in 1998 to one billion dollars in 2002.

Most people in Korea agree that a unique business called “PC-bang” was one of the strongest driving forces to raise Korean software industry and the information technology. From its name, PC stands for personal computer and “bang” (read BAHNG) means room in Korean. Recently, the name “PC room”, which is a direct translation of this Korean name, has been increasingly common in the United States for the same type of business.

While traditional Internet cafés have an emphasis on providing beverages and snacks to its customers and offer access to the Internet as an additional service, PC-bangs focus on providing access to computers (specifically Windows machines) and the Internet to customers. PC-bangs offer software titles without extra charge to customers, where most of the customers play computer games or use Internet chatting services (A small number of customers use business applications such as MS-Office or trade stocks over the Internet). Customers are charged by the length of time they stay (varies from 0.5 to 1.5 dollars per hour). A national survey shows that a
typical Internet user of age between 15 to 29 spend almost two hours at PC-bang per week. (Korea National Statistical Office, 2002)

This new business made a debut to Korean market in 1998. As shown in table 1, the number of PC-bangs dramatically increased from 3,000 in 1998 to 15,150 in 1999. Recent research found the number of PC-bangs in 2002 was 21,823 (Kim, 2003), which has shown a slight decrease of number compared to the previous year that suggests the market might be saturated.

Table 1. Increase of PC-bangs over the last five years

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number</td>
<td>3,000</td>
<td>15,150</td>
<td>21,460</td>
<td>22,548</td>
<td>21,823</td>
</tr>
</tbody>
</table>


.03 How PC-bangs Contributed to the Korean Software Market (return to index)

In the beginning, PC-bang customers were male adolescents who like network-based computer games. Starcraft, a strategy game that allows multiple players to team up and/or compete was the most popular title among them – allowing the public to think PC-bangs were a gaming center specialized to Starcraft. Because the PC-bangs had to provide a legal copy of the game to each customer who played it, and at the time most customers wanted to play this particular game, PC-bang owners were forced to purchase as many copies of Starcraft as the number of the computers they had, which is usually more than 20 and often more than 30. In 1998, a typical expected sales figure for a top-selling PC game title in Korea ranged from 15,000 to 25,000 copies, but thanks to the PC-bang industry, sales of Starcraft remained strong – accumulated sales figure surpassed two million copies in 2001 (Lee, 2001), which was thought to be an impossible sales figure for a country with a population of 47 million. Later, Diablo II, a game title with network gaming capability, sold more than one million copies in one year and four months since its release (Jang, 2001).

Once the PC-bang industry proved to be profitable enough for operation, it became an important customer to computer game distributors. Furthermore, unlike individuals, PC-bangs are easily accessed by copyright holders of software titles for inspection – the computer game industry took advantage of this situation and forced PC-bang owners to purchase their titles instead of providing illegal copies of the games to customers. Salespeople started to make trips to individual PC-bangs with promotional copies of their new game titles. Computer game distributors started to concentrate on finding new games with network-play capability, because stand-alone type computer games were rarely played at PC-bangs. Just after one year since its introduction, PC-bangs became the center of the Korean software market, an inevitable change considering the PC-bangs purchase six million dollars worth of game software every month (Park, 2001).
With the fear that Starcraft’s popularity may end at any time, the PC-bang industry aggressively searched for other sources that could attract more customers. Online chatting services turned out to be the answer for the industry. PC-bang provided access to female adolescents, who are stereotypically thought to be unfriendly with computers, and this brought even more male adolescents who wanted to chat with them. Although it has been accused of being abused for prostitution and adultery (Park, 2000), online chatting remains one of the most important reasons customers visit PC-bangs today.

Local online game developers were also able to profit from PC-bangs. Most online game developers experienced an increase of registered users purchasing their games, which meant increase with their revenue, and this led them to change the business model to further enlarge their income.

Table 2. Growth of the Game Software Market in Korea

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcade</td>
<td>376</td>
<td>496</td>
<td>410.32</td>
<td>404.8</td>
<td>232.84</td>
<td>291.44</td>
</tr>
<tr>
<td>Console</td>
<td>91</td>
<td>102</td>
<td>10</td>
<td>12.96</td>
<td>123.2</td>
<td>197.12</td>
</tr>
<tr>
<td>PC</td>
<td>28</td>
<td>33.6</td>
<td>92.96</td>
<td>155.12</td>
<td>132</td>
<td>119.2</td>
</tr>
<tr>
<td>Online</td>
<td>5</td>
<td>16</td>
<td>153.2</td>
<td>214.56</td>
<td>354</td>
<td>442.48</td>
</tr>
<tr>
<td>Mobile</td>
<td>N/A</td>
<td>N/A</td>
<td>2.16</td>
<td>11.44</td>
<td>80.16</td>
<td>200.4</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>647</td>
<td>668.64</td>
<td>798.88</td>
<td>1013.2</td>
<td>1250.64</td>
</tr>
</tbody>
</table>


04 No Package, No Piracy, Huge Profit – The New Business Model (return to index)

The new business model the online game (and online service) industry has adopted has PC-bangs at its center. A typical old model of an online game business was to create a contract with an ISP(Internet service provider) and provide service through the ISP. It could be a flat rate, or it could be based on the time the service has been used by the users of the ISP. Occasionally, the online game service provider will collect an extra fee from its users for using their service, but this has to be done through the ISP again. Naturally, ISPs enjoyed the power to control online service providers including online game service providers.

With more people having access to their services through PC-bangs, and decreasing number of users accessing the Internet with dial-up modems through ISPs, these service providers changed
the way they distribute their products and provide their service. They opened their service for free to the individual users, and started to charge individual PC-bangs for letting them have access to their service. Because most PC-bangs use T1 connection and have fixed IP addresses for their computers, it is easy to block access from computers in a PC-bang to the server of an online service provider. It is a transition from the B2C(Business to Customer) model to the B2B(Business to Business) model.

The successful online chatting service Skylove was the first to apply this model in 1999, and online games such as Lineage followed the trend. Because paying money to get service was not common for the PC-bang owners in the beginning, there was some resistance, but after they experienced seeing customers asking questions such as “is Skylove available from this location?” before their entrance, they eventually agreed to pay for popular online services.

A typical online service will charge a flat rate for a PC-bang based on the maximum number of computers that can access the service at a time. The software for these services is either Java applets that can be downloaded and instantly executed in seconds, or files that can be downloaded and installed on computers free of charge. This eliminates the cost of distributing their products by traditional media such as CD-ROM, which allows the business to be even more profitable.

Today, no online service provider lays out a business plan in Korea without taking PC-bangs into consideration. It is usual for a new online service (especially games) to provide the service for free for a limited time, and once enough number of registered users has been gathered, will switch to paid service for PC-bangs.

After the B2B business model for online game business became a common practice, another source of income emerged: selling virtual items to individual users. With the growing popularity of online games, some services adopted this model. The game service allows a user to purchase items available in the online game world with real money. These items range from weapons to accessories that the avatar (character that represents the player in an online game) can wear. Accessories are especially popular among female players. Payments are usually made by credit cards or cell phone (the fee will be charged to the player’s cell phone account, which allows adolescents who cannot create a credit card account eligible for purchasing virtual items).

Figure 1. The growth of the PC game and the online game market in Korea
processing complicated 3D images at real time. Most PC-bangs upgrade its hardware every two years to catch up the trend – for example, 17-inch monitors were large enough for customers in 1999, but 19-inch monitors became the new standard in 2002. (J. Chang, personal communication, July 12, 2002) It is unquestionable that the computer industry as whole is the largest beneficiary next to the software industry.

With a large group of subscribers like PC-bangs, high-speed Internet service providers are another group who benefits. And with more and more female customers visiting PC-bangs, there is a strong need for an interior design that will attract these customers who have fastidious taste. PC-bang franchising that assists investors from picking locations to purchasing hardware and software and carpentry became another large business as well.

Bolch and Tang (2001) suggested that technical change is an important factor for economic growth of a country. PC-bang industry is a catalyst that accelerated the spread of broadband in Korea, which assists the economic growth by leading the technical change of Korean telecommunication (hardware, software, and Internet service) industry.

.06 Will PC-bangs Work in the US? (return to index)

Online gaming is very social in nature. When gamers gather they often describe it as “getting together” even if they don’t live in the same time zone. They talk about meeting other gamers even though they may never meet face-to-face. Being online is viewed as “being there.” In the US as of April 2003 “64.55% of home users in the U.S. connect to the Internet at 56Kbps or less” (Web Site Optimization, 2003). It is very difficult to feel like you are “there” on a 56K modem given the intensity of graphics in modern games. The response time is too slow and the latency kills the feedback. If PC rooms in the U.S. offer very fast connections on very fast machines and the cost of both hardware and software is amortized over time PC rooms could easily resurrect the video arcade of pre-PC.

Prior to the video arcade in the US there were pinball arcades – so there is a history of group arcades for entertainment in the US. The cost of hardware is dropping as it becomes more standardized. Revenue can be generated per hour and a franchise of PC rooms would mean a large audience that can be delivered to a software vendor for a price. It is not hard to imagine a “media center” a la Borders or Barnes and Noble complete with books, movies, games, and food. The center would be a place where one could “pick up” a game either with a group present or a group at a distance. The machines might be customized for game play but could also be used for just surfing the net. Some folks would play new game and some would play “classic” games, either by themselves or in a group. Human beings regardless of where they live or what culture they come from are social. PC rooms in the U.S. would provide a place to gather and play. What can be more human than this?

There is a growing concern that PC room operators in the U.S. are showing a tendency ignore the current game rating system by providing M (mature) rated games to young customers.
(Richtel, 2002), which is not a big problem in Korea because computer game rating system is
enforced by the law. However, with the nature of online game, the PC-bang business model can
be successful with the PC rooms in the U.S., with effort for self-regulation.

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40 THOUGHTS ON ““PC-BANG” BROUGHT A “BIG-BANG”: THE UNIQUE ASPECT OF THE KOREAN INTERNET INDUSTRY”

**Rebbeca**

**on January 30, 2014 at 12:32 AM** said:

Aw, this was an incredibly nice post. Taking a few minutes and actual effort to generate a good article… but what can I say… I hesitate a lot and never manage to get anything done.

**best toilet**

**on January 31, 2014 at 11:51 PM** said:

I seriously love your website.. Pleasant colors & theme. Did you build this site yourself? Please reply back as I’m wanting to create my own personal website and would love to know where you got this from or exactly what the theme is called. Kudos!

**selling coins gold**

**on February 1, 2014 at 8:34 AM** said:

Hello, I enjoy reading all of your post. I wanted to write a little comment to support you.
make extra money from home
on February 1, 2014 at 9:34 AM said:

I do not even understand how I stopped up here, but I thought this submit used to be great. I don’t know who you’re however definitely you are going to a well-known blogger when you are not already. Cheers!

cash out lyrics
on February 1, 2014 at 11:02 AM said:

Great information. Lucky me I discovered your site by chance (stumbleupon). I’ve book marked it for later!

Parthenia
on February 3, 2014 at 2:33 AM said:

Post writing is also a excitement, if you know after that you can write otherwise it is complex to write.

I constantly spent my half an hour to read this web site’s articles or reviews everyday along with a cup of coffee.
Hi to every one, the contents existing at this web site are genuinely awesome for people experience, well, keep up the nice work fellows.

Hello there! This blog post could not be written much better! Going through this article reminds me of my previous roommate! He constantly kept talking about this. I most certainly will send this article to him. Fairly certain he'll have a good read. Thank you for sharing!

Hi there, I enjoy reading all of your article post. I like to write a little comment to support you.

Ahaa, its pleasant conversation regarding this piece of writing here at this web site, I have read all that, so now me also commenting here.

Hi to every one, the contents existing at this web site are genuinely awesome for people experience, well, keep up the nice work fellows.
I believe this is one of the such a lot significant info for me. And i’m happy reading your article. But want to statement on few basic things, The web site taste is perfect, the articles is in point of fact great : D. Good process, cheers

**best recumbent exercise bike**  
**on February 3, 2014 at 8:08 PM said:**

Article writing is also a excitement, if you be familiar with afterward you can write otherwise it is complex to write.

**401k money**  
**on February 3, 2014 at 8:12 PM said:**

I’m gone to convey my little brother, that he should also pay a quick visit this web site on regular basis to get updated from most recent news.

**infrared grill reviews**  
**on February 3, 2014 at 8:35 PM said:**

Wow that was unusual. I just wrote an really long comment but after I clicked submit my comment didn’t show up. Grrrr… well I’m not writing all that over again. Anyway, just wanted to say great blog!

**Arnold**  
**on February 3, 2014 at 9:41 PM said:**

You actually make it seem so easy with your presentation but I find this topic to be really
something which I think I would never understand. It seems too complicated and extremely broad for me. I am looking forward for your next post, I’ll try to get the hang of it!

best folding bike
on February 3, 2014 at 9:42 PM said:

I’m gone to tell my little brother, that he should also pay a visit this website on regular basis to get updated from hottest information.

best espresso machine
on February 3, 2014 at 9:54 PM said:

This post is invaluable. When can I find out more?

induction cooktop reviews
on February 3, 2014 at 11:38 PM said:

Woah! I’m really enjoying the template/theme of this blog.

It’s simple, yet effective. A lot of times it’s very hard to get that “perfect balance” between usability and appearance.
I must say that you’ve done a superb job with this. In addition, the blog loads extremely quick for me on Firefox.
Outstanding Blog!

robotic pool cleaner reviews
on February 4, 2014 at 12:36 AM said:

Hi, i think that i saw you visited my website so i came to “return
the favor”. I’m attempting to find things to enhance my web site! I suppose it’s ok to use a few of your ideas!!
**best rifle scope**  
on February 4, 2014 at 3:37 AM said:

Highly energetic article, I loved that a lot.  
Will there be a part 2?

---

**closing techniques**  
on February 4, 2014 at 7:49 AM said:

That is a very good tip particularly to those new to the blogoshere.  
Brief but very accurate information... Thank you for sharing this one.  
A must read post!

---

**online profits system - official website**  
on February 4, 2014 at 8:49 AM said:

Article writing is also a fun, if you know then you can write or else it is complex to write.

---

**ira withdrawal rules**  
on February 4, 2014 at 9:37 AM said:

It is appropriate time to make some plans for the future and it is time to be happy. I have read this post and if I could I wish to suggest you some interesting things or tips. Maybe you can write next articles referring to this article. I wish to read more things about it!

---

**nigeria entertainment news**  
on February 4, 2014 at 10:30 AM said:
Whats up. Very nice world wide web site!! Guy .. Beautiful .. Amazing .. I will bookmark your website and eat the feeds additionally…I am satisfied to uncover plenty of helpful information the following during the article. Thanks for sharing…

---

gold eagle

on February 4, 2014 at 6:55 PM said:

I’m not sure exactly why but this weblog is loading extremely slow for me. Is anyone else having this issue or is it a issue on my end? I’ll check back later on and see if the problem still exists.

---

Guy

on February 4, 2014 at 7:12 PM said:

This post provides clear idea designed for the new people of blogging, that truly how to do blogging.

---

working home

on February 4, 2014 at 7:15 PM said:

When I originally commented I clicked the “Notify me when new comments are added” checkbox and now each time a comment is added I get several emails with the same comment.

Is there any way you can remove people from that service? Thanks a lot!

---

investing tutorial

on February 4, 2014 at 8:01 PM said:
Hi! I really like your writing very so much! percentage we be in contact extra approximately your article on AOL? I need an expert in this area to solve my problem. May be that is you! Taking a look ahead to look you.

social network streaming

on February 5, 2014 at 1:53 AM said:

Hi! I just wanted to ask if you ever have any trouble with hackers? My last blog (wordpress) was hacked and I ended up losing months of hard work due to no backup. Do you have any solutions to prevent hackers?

Wilton

on February 5, 2014 at 6:52 AM said:

I read this piece of writing fully regarding the comparison of most up-to-date and earlier technologies, it's amazing article.

Raquel

on February 5, 2014 at 11:58 AM said:

I'm really loving the theme/design of your site. Do you ever run into any internet browser compatibility problems? A couple of my blog visitors have complained about my blog not operating correctly in Explorer but looks great in Opera. Do you have any ideas to help fix this problem?

Madelyn Detting

on February 5, 2014 at 6:09 PM said:

One can gain a general idea of how the posters are coping with or accepting the issues
that confront them.

---

**Rene Kettner**  
*on February 5, 2014 at 6:21 PM said:*

I had some @#$%&* put a link to a post I had written on reddit (whatever that is), and then I had thousands of people flocking to my blog to leave nasty comments.

---

**Dotty Derosie**  
*on February 5, 2014 at 11:37 PM said:*

Je vous remercie de votre comment. Share votre sagesse et votre histoire avec nous dans les commentaires section. Leave un commentaire ci-dessous et déposez vos connaissances avec le reste d’entre nous! Si vous avez quelque chose à ajouter, ou si vous n’êtes pas d’accord avec quelque chose, puis déposer un commentaire ici.

---

**Amado Sweetland**  
*on February 5, 2014 at 11:50 PM said:*

¿Está seguro de que la información que usted dio es 100% correcto?

---

**Enrique Holstege**  
*on February 6, 2014 at 12:38 PM said:*

Sono nuovo di questo forum. Ho costruito diversi personalizzato costruisce nel corso degli ultimi anni, sono forse intenzione di costruire un nuovo impianto di questa estate (credit crunch in corso) Quindi sarà chiedere un sacco di domande stupide e probabilmente facile. Ma anche cercare di commentare e di aiutare gli altri pure. Heres per l’inizio di un grande forum di apprendimento e divertimento.