

**The value chain
In the Asian online gaming industry:
A case study of Taiwan**

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Abstract

This research examines the changing nature of the Asian online gaming industry and the position of Taiwan in the regional market. The evidence used was gathered through fieldwork conducted in Taiwan, Beijing and Shanghai from January to October in 2007.

Firstly, it explores the situation from the perspective of political economy in order to understand the process of commodification, including production, marketing and distribution. The research establishes that the game industry operates within a highly competitive market requiring substantial investments. Since game production requires complex technological skills, there is a high capital cost, and the process is very time consuming. Today's online gaming business has segmented into different sectors with varying roles, i.e. developer, publisher, distributor and operator, controlled by different players in the business. The research shows that Asian game firms seek vertical synergies by expanding complex collaborative networks of production, marketing and operation in order to minimize costs and maximize profits. This implies that an international value chain has been established within the regional economy due to that the capacity of modern East Asian cities to accelerate the integration of the online gaming industry into regional economic activity.

Secondly, online gaming overall is a popular form of interactive entertainment in the intra-Asian market. The key theories used to understand digital games are debated between narratology and ludology. However, neither is capable of providing an explanation for the Asian gaming culture. On further examination, certain types of game genres, '*wuxia*' and 'cute' games, are found to have a particular appeal for Asian users. The *wuxia* genre is exclusively circulated in the greater Chinese cultural arena. The 'cute' game originates from the protagonists and themes of Japanese video games. This genre is well accepted by Asian users living in urban environments, and has become a force to unite city gamers in different Asian countries.

Lastly, the thesis explores the unique position of Taiwan's game industry, which has been transformed from a test-bed for games aimed at the Chinese market into an intermediary between China and the rest of the world. Before 2002, Taiwan was regarded as a springboard for foreign firms wishing to enter the big Chinese market. Now, China's game industry has emerged and Chinese games have been exported to other Asian countries. Currently Taiwan is the biggest export market. The sophisticated features of the Taiwanese market mean that it can act as a stepping stone for Chinese game firms wishing to expand into wider regional and global markets.

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Chapter 1. Introduction

1.1 Aim of research

The aim of this thesis is to study the changes in the Asian online gaming (OLG) industry and the unique features of Taiwan in the regional market through political, economic and cultural contexts.

Through investigation, this research aims to engage in the theoretical framework of the transformation of the industrial structure, the relationships of these Asian game industries, the position of the local firms in the regional market, and the implications of regional integration resisting global competition. This research concentrates on the features of Taiwan's OLG industry.

1.2 Research design

This research is structured into a dynamic global-regional-local network of analysis in accordance with its research objectives and theoretical concerns. The research uses two diverse approaches in a complementary prospective for mapping an overview research of the inherently cultural industry of OLG, a political economic study of media production and a cultural studies of media consumption.

The popularity of Asian OLG started in South Korea and expanded to other Asian markets. The growth of middle-class Chinese is playing an important role in the development of the OLG industry. Now, interactive online entertainment has been integrated into regional economic activities in the intra-Asian market. The research aims to find out whether Asian OLG industry plays a role as a locked-in hierarchical position to integrate into the global markets. Does the Asian OLG industry hold a unique role in adding value in the Asia Pacific markets? Does the regional market of South Korea, China, Japan, and Taiwan form a geo-linguistic market paradigm?

Currently, all four countries possess the competence to make and run an online game title. As a strong competitor, South Korea has become the corner-stone in the intra-Asian market. China has emerged as a bigger market than Korea, potentially the largest market in the world. Its market scale and government support continue to foster the strength of the nation's OLG industry. China's game industry has quickly built up its capabilities to develop oriented game products. Taiwan has experiences of creating different types of massive multi-player online games (MMOGs) circulated not only in the domestic market, but also in foreign markets. Japan is a consuming country rather than a producing country. Even so, Japan's video game industry has had a major influence on the Asian OLG industry. Examining the

relationships of the different Asian gaming industries and the formation of the Asian gaming culture may provide answers to the above questions.

In addition, this research focuses on the unique features of Taiwan's OLG industry, and the uses of global strategies for integration in the global market. One possibility is that Taiwan is simply an extension or a springboard of the Asian online game markets. Studies reveal the contrasting positions of Taiwan's OLG industry, as either being integrated into the global market, or having a specific role in the Asia Pacific market.

There are approximately 4 million online players in Taiwan, mostly aged 12 to 25 years. Before 2002, Taiwan's game firms made profits by operating domestically produced online game titles, in Taiwan and China. Now, foreign licensed games, mainly from South Korea, China and Japan, make up 85 percent of the market share. The high proportion of imported games in Taiwan shows that being both the game producer and the game operator at the same time makes it hard to earn high profits. The Taiwanese feared they must rely on the supply of other Asian game firms when they found that their gaming experiences did not apply to the new Internet environment. At the same time, other Asian licensed games of better quality or lower selling prices have threatened the development of the Taiwanese game industry. To understand the changing role of, and the competence of, Taiwan's OLG industry, by observing the strategies of its game firms will provide empirical evidence that would explain the genuine position of Taiwan.

This study covers the period 2002 to 2008. During this time, a series of changes have been ongoing in the cultural industry, involving business models, market segmentation, and structural changes. The major data used in this research were collected during fieldwork conducted from January to October, 2007.

The investigation mainly looks at the current Asian OLG industry, Taiwan's OLG business, the relationships of Taiwanese and other Asian game firms, and the role of Taiwan's OLG in the intra-Asian OLG market.

At the regional level, this study investigates the nature of the Asian OLG industry, its industrial structure, and the context of the game products. A political economic approach is used in order to understand the processes of commodification, including production, marketing, distribution, and operation. In parallel, cultural studies are used to analyse the constituents of the media content, such as text and discourse, which allows us to understand the various connotations within the cultural products.

At the local level, the study examines the unique features of Taiwan's OLG industry concentrating on strategies for integration into the regional market. Porter's Diamond model (1990) is used to evaluate the competitiveness of Taiwan's game firms. This research adopts a case study method to invest the importance of local operators. The cases chosen are two of Taiwan's major game firms: *Soft World* and *Gamania*. As the biggest game cooperation in Taiwan, *Soft World* started its business as a distributor, and then expanded to a game publisher. *Gamania* excels at operating Korean licensed games in Taiwan's market. The firm's overseas expansion is based on its successful business model.

1.3 Data collection methods

Two data collection methods, documentary research and semi-structured interview are employed in this research. Data from interviews, governmental publications, commercial reports by research institutions and internal organizational reports serve as the primary data sources. Data extracted from academic literature and mass media, including newspaper, industrial magazines, and the Internet, are used as secondary sources to critically cross-check data gathered from primary sources.

The majority of my data was collected in Taipei, Beijing, and Shanghai from January to October, 2007. Twenty-eight Asian games firms were investigated, spread throughout Taiwan, Korea, Japan, and China. Selecting Korean, Japanese, and Chinese game firms as my survey targets is due to the following reasons: Korea was the first country in Asia to develop an OLG industry; Japan has advanced skills in video game production, which have had a major influence on the OLG industry; Chinese game firms operate in a domestic market with the greatest global potential; and Taiwanese game firms have the best ability to be both competitors as well as collaborators.

The aim of the research design was to focus on 'elite interviews' to elicit information clarifying the complex relationships between the different game industries in the Asian market. Elite participants are more knowledgeable in the macro-level of industrial structure, and they are the decision makers on major investments and outward expansion. Their valuable experiences and visionary observations, in spite of their successes or failures provide insight into how the gaming industry has moved and developed under complicated conditions. This helps the research to compile a picture of the Asian OLG industry based on the context of globalisation.

Fifty-nine face-to-face semi-structured interviews were conducted during my fieldwork. Specifically, elite interview is used in this research. It is used when researchers seek highly specific information. A wide range of online game protagonists, including executives, general managers, spokesmen, and journalists, scholars, government officials and analysts, were interviewed. Interviews with the first three positions are primary sources, and the rest were used as secondary sources to provide indirect information and supplementary interpretation and explanation. In the context of the interviews, an interesting finding showed that the interviewees in senior management positions appeared to reveal important information and future plans. At the same time, the interviewees from the games firms possessing advanced capabilities in the gaming industry were more willing to disclose their business strategies and possible challenges.

1.4 Main findings of the study

The findings of the study are displayed into three parts. First, the research examines the Asian OLG industry from the political economic perspective in order to understand the development of the cultural industry in the intra-Asian market. The features of Asian OLG industry stand out: Asian game firms seek to consolidate their advantages through integration, buyout, outsourcing, and Intellectual Property rights (IP) games; and major game firms stand in a better economic position, controlling the sources and market, forcing the minor game firms to cooperate with the game operator or game publisher to create games based on market demands rather than originality. The Asian OLG industry has been formed by three factors: the changing environment of Asian OLG, the formation of an international value chain, and the approaching globalised competition.

1) The changing nature of Asian OLG. In the contemporary world, a new online game requires massive investment in technology, operations, and marketing. It becomes very difficult for a game firm to develop and run a game product. The commodified process of OLG has segmented into developing, publishing, distribution, and operation in the Asian market. The OLG business has developed a model, which involves a Korean game developer providing the game product and another Asian operator running the same game title with specialized localized content in the local market. The localized contents, including language translation, change of backcloth and the arrangement of events and festivals, are all designed to meet the demands of local gamers. The role of the game operator is important, as they know how to localize the game product to suit the demands of local users.

Online games have moved from a technology-leading product to a service product, while most games titles have become free to play.

2) A formed international value chain. Asian game firms seek vertical synergies by expanding complex collaborative relationships of production, marketing and operation in order to minimize costs and maximize profits in the intra-Asian market. Products sold out in advance means that game developers can complete their work without budget pressures and adjust the content to fit a bigger market during production. This cooperation lowers the investment risk, as well as helping both game providers and game buyers. In addition, an increasing number of production activities have been subcontracted from Korea and Taipei to China to lower production costs. This further implies that an international value chain has been established within the regional economy. To compensate for the inherent weakness within a commodity chain, each successive node involves the organization of inputs of labour, distribution, and consumption. Japan owns the resources to create a game, Korea's profits come from licensing its game products, Taiwan's game firms profit from the operational sector, and China has become a low cost labour factory. This provides the most profitable combination of capital, labour, and technology.

The Asian game market is distinguished as a demand and supply oriented marketplace formed by economic power rather than cultural forces. Innovative technology has brought the Asian nations together. Having similar socio-economic environments has contributed to the people of Asia, including Taiwan, South Korea, Japan, and China, readily accepting newly developed interactive online entertainment. Advanced internet techniques provide massive backend server support to construct a game world. If Eastern Asia had not successfully gone through similar modernizing processes, a regional economic activity could not have been constituted. All the strategy based on a globalized economic system has further formed an integrated industry in the regional economy.

3) Intense global competition. Global players have begun to enter the interactive entertainment software industry. These internationals are good at global strategies by using different types of alliances, such as *EA* and *Blizzard*'s horizontal integration, and *Sony*'s diagonal integration. The global competitors have dynamically broken into the Asian market, which has changed the ecology of the Asian OLG industry. At the same time, the Asian gaming industries display an unequal relationship when the game rules are overturned. Japan and USA have successful experiences in the gaming industry, controlling the scarce sources, and holding dominant positions in the regional market. These two examples show that the position of global players

will become concrete when the game industry has become a commodified process. A sign value, such as intellectual property (IP), could become more valuable when other sources, such as labour or technique, can be accessed more easily during the process of production. According to Scott Lush (2007), the establishment of a branded IP is design-intensive just as commodity production is labour-intensive.

Cultural studies provides an approach to analyse the constituents of communication content, such as text and discourse, which gives insights into the gaming culture and nature of the market for online games.

Online gaming, overall, is a popular form of entertainment in the intra-Asian market. Only USA's *World of Warcraft (WoW)*, based on medieval history, has gained any success in the global market and has more subscribers in Asia than in the western market. *World of Warcraft's* success may be due to product awareness and the significant investment in production and testing. Asian gamers have a preference for Asian oriented content. On further examination, certain types of game genres, such as Western fantasy, 'cute games' (predominantly anime) and 'wuxia games' (predominantly martial arts), have a particular appeal for Asian users.

The content of almost all the earliest Asian oriented massive multi-player online role playing games (MMORPGs) were based in the medieval age. Korea's *Lineage* and *Legend of Mir* have overwhelmed the Asian market, appealing to a mass of core users. These Asian MMORPGs, based on Western genre of medieval fantasy, rely on the habits of Eastern gamers who prefer intense combat and PK (player killing) rather than completing a quest. Cultural 'hybridity' can explain why these Asian cultural products adapted from Western epics into more localized forms, attract Asian core users. This has further prospered the development of the Asian OLG industry.

The 'cute game' genre originates from Japanese characters and themes in video games. The Japanese originally designed the delightful characters with unrecognisable cultural features to penetrate the Western market. Unexpectedly, this genre of MMOG attracted new groups of gamers, female and youngsters, differing from the core users targeted by the serious Western genre. Borrowing ideas from Japanese boys' games, the 'cute' game provides a naive adventure world which is easily conquered by younger audiences. Girls' cute games present a friendly world, stressing mutual aid and social interaction. Consequently, the cute game genre broadened the base of the audience by attracting users in the multitude of Asian metropolitan areas.

Wuxia themed games were first developed in the Taiwanese market. These have a special appeal to gamers in the Chinese cultural sphere. Most notably, these MMORPGs are a third-person version, where the players are part of the central character's combat skills, differing from the first-person mode of Western shooting games or Japanese 'beat them up' games. In Greater China, game titles based on specific topics, such as history, *Sangoku*, or popular culture, Jin Yong's novels, have become market triumphs.

In China, this type of genre attracts the mass of Chinese users who are residents in inner cities or rural towns. While Asian gamers in wealthier areas are looking for casual and relaxing content, the Chinese prefer combat games, which provide a virtual social competition through killing and fighting. Chinese audiences are motivated to select a role, pretending they are a knight fighting social injustice or a warlord fighting for territories. This encourages Chinese game firms to provide only simplified content to increase their market share. Now, China has become the biggest market to produce, consume, and re-produce wuxia themed games.

The overall Asian game market is defined as a sub-global market where it accepts a global master narrative with special local adaption. Different types of games operated in the intra-Asian market reflect the constitution of the Asian OLG market. Three relationships exist in the Asian gaming market: global, regional, and national. At the global level, USA based game products provide a global master narrative, which is circulated in the global market and at the regional level Asian-oriented game products are operated in the Asian local markets. The national cultural level produces games within the Chinese cultural form, whose primary audience is a culturally Chinese audience. These aspects reflect that language appears to be more important than geography, while the Chinese and the Chinese Diaspora populations in other Asian countries have a common interest in Chinese topic games. Although Japan, South Korea, Taiwan, and China are termed as broader Confucian-based influence markets, culture-oriented games still have difficulty crossing borders.

Finally, this research used Michael Porter's Diamond model (1990) explored the unique position of Taiwan's game industry theory. An earlier research hypothesis was based on Taiwan being a springboard into the Chinese market. The result of using Porter's model is that the role of Taiwan has developed into becoming an intermediary market.

1) The unique position of Taiwan. Taiwan has become integrated into the regional market, as the local industry cannot support an independent game industry.

Taiwan seeks cooperation with other Asian partners by establishing a relationship between game buyer and game provider. Taiwan is seen as a sophisticated market, with features of the demands of game products, such as diversified forms of game genres and high rotation of game products. Now, South Korean, Japanese, and Chinese produced online games comprise 85 percent of the market share in Taiwan. One hundred OLG titles run at same time. In 2008, USA's *World of Warcraft*, South Korea's *Luna Online*, and Taiwan's *Wulin Online* ranked as the top three selling game titles in Taiwan. Three different types of games appeal to mass gamers. Each of these games in Taiwan can appeal to 100,000 people accessing its server at any given time. For foreign firms, Taiwan can be seen as an extension of other Asian markets, rather than as a test bed for the Chinese market because these two markets share a similarity of cultural backgrounds.

In addition, Taiwan's geographically advantageous position, in terms of physical and cultural proximity, has shaped its uniqueness. The physical proximity with China, South Korea, and Japan has accelerated the speed Taiwan was integrated into the regional economy. Furthermore, modern infrastructures, such as the convenient transportation and advanced telecommunications, facilitated Taiwan in keeping frequent contacts with other Asian partners, decreasing the possibility of misunderstanding. In addition, Taiwan has a cultural proximity with China, which helps the Taiwanese easily transfer information to the local Chinese population. Taiwan's OLG can keep core development in the local OLG industry and make use of cheap Chinese labour as a production tool.

2) Taiwan's relationship with China. Before 2000, Taiwan was regarded as a springboard for foreign firms to enter the Chinese market. The failures of Taiwan's game firms in China show that China's game market has become a complicated market, despite the two markets sharing geo-linguistic proximity. Most importantly, the Chinese game industry has the capability to satisfy the demands of the national market and even expand into the overseas markets, and Taiwan has, indeed, become an important export market for Chinese game firms. The Taiwan market was the largest importer of Chinese game products when these games were circulating only in the Chinese cultural sphere. These Chinese games, with Taiwanese experience, are now attracting other Asian gamers. So Taiwan's gaming market has developed into an intermediary for Chinese game firms to expand into other foreign markets.

Taiwan can be seen as a niche in Chinese culture. While China has become a national market, Taiwan is close to being a sub-national one. According to Aphra Kerr (2002), cultural contents continue to be marked by specific 'market' boundaries

on the demand and consumption fronts, based around distinct national, ethnic and other identities, whatever the global reach of the new technologies of content production and distribution. However, the urbanity of Taiwan means the population has more sophisticated and highly developed features compared to mainland China's inner cities. When Chinese games are operated in Taiwan, specialized adaption is necessary to fit the demands of the wealthier market. Knowledge transfer takes place from Taiwan to China, which helps the Chinese to understand the trend of globalisation and the outside world. This research further reveals that not only cultural specialties, but also socio-economic differences discriminate against the locals in Asian OLG market.

1.5 Outline of the thesis

The thesis will consist of eleven chapters. *Chapter 1* introduces the aims, theoretical framework, analytical levels, and research methods of the study. The chapter also reveals major findings and outlines the thesis' structure.

Chapter 2 and Chapter 3 review existing Anglo-American research on game theories, digital games and game cultures. These chapters serve the purpose of setting up the background to the research and reveal significant issues and tendencies observed in the field.

Chapter 2 examines game genres, from the perspective of game theories. The chapter explores the correlation between a specific game genre and its specific technological support (i.e. how computer technology effects the development of a game story). Chapter 2 also provides a detailed explanation of the narrative, context, and game-play of MMORPGs. Furthermore, the research concludes that technology constructs a limited virtual world, rather than an infinite imaginary world. Computer technology, abiding by the rule that technology can make and retrieve any world based on real life or history acts, as a constraint on game designers, game players and games. Chapter 2 further discusses the evolution of the medieval epic game, from pencil-and-paper RPGs (role playing games) to today's 3D (three-dimension) MMORPGs with the features of complex engines, sophisticated graphic capabilities and advanced network communication.

Chapter 3 reviews the existing research on Western game cultures as well as Asian game cultures, and examines the differences between them. The chapter provides an explanation of the concept of militarised masculinity, a core aspect of Western games.

Chapter 3 explores certain types of game genres, which have been specifically developed for Asian gamers, such as western fantasy games, wuxia games and cute games. The Anglo-American games provided a concept for Asian game developers to follow. Asian MMORPGs based on Western medieval fantasies rely on the user habits of Eastern gamers who prefer intense combat and PK (player killing). The wuxia-themed genre, based on Chinese knight-errant fictions or historical stories, is exclusively circulated in the Chinese cultural arena. The ‘cute game’ genre originates from the protagonists of Japanese video games, such as *Mario Brothers* and *Final Fantasy*. This genre is well accepted by Asian users living in urban environments and has become a force to unite city gamers in different Asian countries.

Chapter 4 examines the arguments and theories developed in both Euro-American and Asian globalization studies, concerning the nature of media production, and the nature of the relationship between global influence and local media. Through drawing these theories and arguments together, a multi-level (global, regional, and local) theoretical framework is used to analyse the transformation of the OLG industry in Asian markets under intensive global competition. In addition, cultural studies are analysed in order to understand how the market conditions are influenced by what consumers want and gain from culture. It is necessary to understand the wider commercial and cultural forces that circumscribe and penetrate the material and practice of media organization and producers.

Chapter 5, the methodology chapter, establishes the investigative structure, including the scope, levels, locations and reference period of the research and identifies the data collection methods of the investigation in light of the research’s objectives. Chapter 5 also mentions why ‘elite interviews’ and case studies are used, including their strength and weakness in this research. The chapter also describes the limitations of data collection in Taiwan and China, and explains the necessity of documentary research to complement and cross-check the oral accounts.

Chapters 6, 7, 8, and 9 are the core of my research. *Chapter 6* reviews the existing research on the commodified process of a game title and concerns the nature of the Asian game industries, including China, South Korea, Japan, and Taiwan. The chapter also examines the process of game production, investigates the underlying factors of global competition, and explains initial implications of a value-added chain being established in a regional economy, the intra-Asian markets. The impact of globalisation is reflected on the trends of an increasing vertical integration, outsourcing, and using licensed IP.

Chapter 7 explores how a MMORPG is produced, marketed, distributed, and operated, and the negotiations and crucial factors influencing the game business. The focus is on the changing business model and how capital and technological systems structure and influence the process of commodities. *Chapter 7* discovers that the core of Taiwanese game firms have been transformed from game developers to game operators. These Taiwanese game firms have good marketing strategies to make quick profits from running a game in the domestic market. This Chapter also discusses the failures of Taiwan game firms in the Chinese market and shows that Taiwan is not a springboard into the neighbouring market. The Chinese market has become more complex than Taiwan's so Taiwan's experience cannot be used as a model.

Chapter 8 examines the collaborative relationships between Taiwan's game firms and other Asian partners in the regional market. The model of the governance of global commodity chain (Gereffi et al. 2005) is used to analyze how Taiwanese game firms have linked with other partners. Module value chains are established between Taiwan's game buyers and other game providers. Now, Taiwan seeks to co-develop games with other Asian partners, moving towards collaborative cooperation. The series of studies on the commodified process of OLG in the intra-Asian markets may shed some light that regional markets based on geo-linguist proximity have formed.

Chapter 9 discusses the competitiveness of Taiwan's OLG industry. Four influencers, including factor conditions, demand conditions, related and supporting industries, and firm strategy (structure and rivalry), are used to identify the advantages and weaknesses of Taiwan's gaming industry. Factor conditions and demand conditions distinguish Taiwan as a small market with insufficient manpower to support the gaming industry. Nevertheless, the sophistication of Taiwan's OLG industry helps to enhance the strength of game operators rather than game developers. In-depth case studies examine two major local players, *Soft World* and *Gamania*. *Soft World* concentrates on the big Chinese markets; *Gamania* is significant because the company maintains many popular South Korean MMORPGs in the Taiwanese market. The two cases show the uniqueness of Taiwan: *Soft World* adds value in foreign licensed games by providing suggestions to revise the content; *Gamania* maximizes profits by extending its business to other Asian markets. Further analysis verifies the position of Taiwan's OLG industry as an intermediary for Chinese game firms which plan to expand their overseas markets.

Chapter 10 analyses the study's major findings, content arguments, and theories, and explains the theoretical implications of the findings upon the study of global competition within the OLG industry, on the global-regional-local analytic framework in media globalisation studies. This chapter points out that the theories of simple globalisation are inadequate and discusses the necessary synthesis of global master narrative with local special content in media study. The research further finds the Asian OLG industry has formed an integrated economic activity in the intra-Asian market, which is based on the foundation of similar modern progress within the different Asian countries.

Chapter 11, the conclusion, reviews research objectives, the theoretical framework, the investigation structure, and data collection methods of the study, and summarises the research findings. The thesis ends by pointing out the original contributions the study made to the field of Asian online games, globalization studies and its theoretical implications, indicating the research's limitations.

Chapter 2.

Multi-player Online Role Playing Games: Narrative and Technology

This chapter examines game genres, from the perspective of game theories, explaining the relationships between a game, the narrative and the technology. First, the narratological approach is used to examine the development of the game genre. This chapter explores the correlation between a game genre and its specific technological support, such as platform, software, and the Internet. The research discovers that technology should be counted as a crucial element in deciding how a game story is developed. Subsequently, this study discusses the importance of new technology in creating an imaginary world and breaking down the boundaries between reality and fiction. In further analyzing the relationships between new technology, player's interactivity, and the back-story within the massively multi-player role-playing games (MMORPGs). The study concludes that widely held view that a fantasy MMORPG is a limited virtual world, rather than an unlimited world, constrains the game designer, the game and the player.

2.1 Game theories

Traditionally, the term 'text' in media studies is used to signal a focus on the conventions and physical form of a media message. Cultural studies, in contrast, provide a broader focus on the physical form of the message combined with the meaning, as interpreted by the user or audience. John Fiske (1987) points out that a programme is produced by the media industry and a text is produced by the audience during game-play. Gaming is not simply a cybernetic relationship with a machine, but game scenarios that carry social meaning (Fiske, 1987, p17). Following the established theories, other digital game researcher argues the necessity of extending the concept of 'text' when applied to 'interactive texts', including, not only 'the mechanical organization of the text' and the role of the audience or user, but also the medium (Aarseth 1997, in Kerr, 2006, p20). The role of the medium in structuring a media text is exercised, not only by the changing relationships between user, text and medium, but also by the instability of the digital game text (Kerr, 2006, p21).

However, because this is a burgeoning area of study we will have to import the main theories from other fields, such as the studies of literature and drama. The usefulness of narrative analysis is widely used in studies of digital gaming. Additionally, the key theories used to understand digital games are debated between narratologists (who use narrative theories to examine digital games) and ludologists

(who reject the narratological approach and look to play and game theory for inspiration).

2.1.1 Narratology. The narratological approach relies on narrative paradigms, whereas ludological studies focus on the understanding of the structure and elements of games (Apperley, 2006, p8). The most common narratological approach dates back to Aristotle. According to Aristotle, narrative has a beginning, middle, and end, which are sometimes called the crisis, the climax, and the resolution respectively. Aristotle also identified the strict causal and temporal relationship between events in a plot (Kerr, 2006, p22; Ndalians, 2004, p3). In addition, the classical approach to narrative is very much a product of the modernist era and post-structuralist theorists question some of the premises, including the supposed causality between events and the role given to the participant in the process. Ryan (2001) adopts a post-structuralist approach to narrative and suggests that new interactive literary forms demand that we rethink our understanding of narrative. She contends that there can be different types of narratives: conventional dramatic narratives, where a semantic structure accords with the Aristotelian principles; sequential narratives, where events are ordered in a temporal sequence; and causal narratives, where an interpretation of events invokes causality (Ryan (2001) cited in Kerr, 2006, p23). Murray (1997) identifies digital games as one new type of 'storytelling format' or 'narrative art', while seeing a loosening of boundaries between stories and games. For Murray, digital games are always a 'story', and can be seen as a new term, which provide an agency, a virtual world, for the player to make believe, termed in 'cyber-dramas' (Murray (1997) cited in Kerr, 2006, p24).

According to Marie-Laure Ryan (2007)¹, another possibility for categorising the game genres, from the narrative perspective are the embedded story, the emergent story and the pre-scripted, but variable story.

The embedded story.

This structure covers any attempt by the player to reconstitute events that took place in the past. It connects two narrative levels: the story to be discovered, and the story of their discovery. The prime example of this design is the detective story. The best-known game is *Myst*, in which there is a hidden story to discover. *Myst*

¹ In Ryan's research four modes of narrative are presented in the perspective of novel, film and game. The diegetic mode refers to telling somebody a happened story; the mimetic mode refers to creating a story in the present by impersonating a character; the participatory mode refers to creating a story in real time by playing a role in a story world; and, simulation mode refers to creating a story in real time by designing an engine that will implement a sequence of events on the basis of its rules. The diegetic mode is for novels, the mimetic mode for films, and a combination of the simulative and the participatory is for computer and console games (Ryan 2007, pp9-10)

depicts the saga of the wizard Atrus and his evil sons, Sirrus and Achenar. This story is revealed progressively, as the player visits the various regions (Ryan 2007, pp16-17). Sometimes, the embedded story is used as an instruction in game-play, containing not only the clues in the context of a quest but also imparting fragments of information about the game-world's fictional history. For example, the indicator in *World of Warcraft* provides fragments of information about the game-world's fictional history, and leads the player to understand the mosaic of the back-story progressively (Krzywinska 2007).

The emergent story.

In contrast to the embedded story, the emergent story is not pre-planned by the designer, but takes shape dynamically as a result of the interaction between the user and the game system. The game design exploits a narrative interest by offering the option of a 'story mode' through which players create comic strips by taking snapshots of the screen and then add their own context. Stories created this way are not necessarily the same as the stories created originally. The best-known example of the emergent system is *The Sims*, a game which has achieved reasonable success with users because it relies on the quintessential narrative theme of human relationships (Ryan 2007, pp17-21).

The pre-scripted, but variable story.

Within an interactive drama, the user impersonates a member of the fictional worlds, interacting with system-controlled characters through an Artificial Intelligence (AI) based dialogue system. To allow the plot to develop according to a relatively pre-defined script, the users should play the role as an active observer, rather than being cast as the main protagonist. This means that digital texts aiming at a dramatic effect will have to rely on a pre-scripted, top-down design. But in order to take advantage of the interactive nature of the medium, they should provide bottom-up input for the user to introduce variations in the script. The system uses pre-written dialogue modules that vary depending on the user's input. For each situation, the system maintains a list of discourse acts that constitute appropriate responses. The input of the user is parsed by the system and mapped onto one of the currently available discourse acts (Ryan 2007, pp21-25).

2.1.2 Ludology. Games are, at the least, not primarily textual. Ludologists, emerging towards the end of the 1990s, attempted to decode games and to extract meaning from games, because the narrative theory and other theories were proving unsatisfying to anyone who actually played the games. Aareth (2004) argues that theorists need to study the 'game-world-labyrinth' dimension of cyber texts which

consists of three aspects: rules, a material semiotic system (a game-world), and game-play (the events resulting from the application of the rules of the game-world) (Aareth 2004 cited in Kerr, 2006, p33). In addition, Eskelinen (2004) states games are under-theorised. For Eskelinen, two key aspects of digital games are markedly different from traditional narratives: 1) the time scheme or causality of events, and 2) the nature and the role of the character or user. Eskelinen stresses that the dominant temporal relation is the one between user time and event time rather than the narrative one between story time and discourse time. Characters in games are functional and operate in different ways to characters in traditional narratives (Eskelinen 2004, pp 33-34).

Jesper Juul is another key figure in this group. Eskelinen (2004) argues that games are non-narrative by exploring three important reasons. Juul (2001) contends that digital games are more game than just a story. The difficulties involved in translating a narrative from a film or novel into a game lies in the notion that narrative features are less important in digital games (Kerr, 2006, p34).

Juul (2001) focuses on different elements in game, of which narrative, time and player-game relationships are the most important.

First, games are not part of the narrative media ecology formed by movies, novels, and theatre. Games and stories actually do not translate to each other in the way that novels and movies do. Juul compares the case of *Star Wars* the game and *Star Wars* the movie. *Star Wars* the game cannot be said to contain a narrative that can be recognized from *Star Wars* the movie (Juul, 2001)². Most characters from the movie are missing; however, they can be found in the game world. Events in the game have become simulations where the player can either win or fail.

Second, time in games works differently compared to time in books or films. If we play an action-based computer game like *Doom II*, it is hard to find distance between story time, narrative time, and viewing time. We may find that players have to reconstruct some events from this representation. Clearly, since players can influence events, the events represented cannot be in the past.

Third, the relationships between the participant and the story world are different than the relationships between the player and the game world. The reader or viewer needs an emotional motivation for investing energy in the movie or book. The player is motivated to invest energy in the game because the game evaluates the player's performance, which is why a game can be much more abstract than a movie or a novel, because games involve the player in a direct way. In addition, the player

² Source: <http://www.jesperjuul.net/text/>

inhabits a twilight zone where they perform not only as an empirical subject outside of the game, but also in a role inside the game (Juul, 2001).

Nevertheless, the narrative turn of the last 20 years has seen the concept of narrative emerge as a privileged master concept in the description of all aspects of sign-production. Aphra Kerr (2006) concludes, in the following words:

Game theorists generally adopt one of three approaches to narrative: a narrow, formalist and classical approach; a broad, culturally and historically located, post-structuralist approach; or an outright rejection of narrative theories. Given both the diversity of narrative theories and the diversity of games, some of which are clearly more narrative driven than others, it would be unwise to dismiss narrative theory outright.

(Kerr, 2006, p26).

2.2 The genres of game

Grouping games together into genres, defined by core characteristics, might be a solution to the game theories. However, genre is quite-theorised in game studies. There have been some attempts to define what lies behind the generic categories. Game genres can be distinguished depending on the balance of narrative, game-play and simulation in a game (Kerr, 2006, pp 38-39).

Normally, the genres of video games are categorized into several types, including simulation, action, strategy, adventure, RPG (Role playing game), puzzle, sports, and other. Role playing themed content is one of the most popular online game genres. Herz (1997) identifies eight different digital game genres: action, fighting, sports, puzzle, adventure, role-playing, simulation and strategy; Poole (2000) lists nine. The main differences between these two categorizations revolve around defining action, simulation and strategy games. For Herz, action games are a fairly broad group, while Poole distinguishes between 'shoot 'em ups', racing games, and platform games. Poole admits that the term 'platform games' is probably outdated now and a more appropriate term might be 'exploration game' or adventure game (Kerr, 2006, p40). However, many game titles are genre hybrids, and hard to classify. A Japanese survey identified 22 game genres, including the following: simulation RPG, action RPG, strategic, simulation, nurturing/love simulation, rhythm-action, shooting, battle-type network games, and RPG type network games (Kerr, 2006, pp38-39). Generic categories are described in the following paragraphs:

Action, fighting and sports games. The types of action consist of first-person shooters and third-person games. This distinction is made along the lines of the mode genre. When tracing back the development of video games, the foundation of

video games based on arcade games and supports from the US military have been designated to the limited genres of shooting and fighting. Because these types of games at the arcade platform have always proved popular with young male audiences, game companies have a strong economic incentive to continue and amplify these genres (Kline et al., 2003, pp179-181). Famous games include *Wolfenstein 3D* in shooting games, the *Tekken series* in fighting games and *FIFA* in sports games.

Simulation games. A simulation game contains a mixture of skill, chance, and strategy to simulate an aspect of reality. Simulation games are intended to simulate real world activities. The games are designed to simulate the activities of driving, flying, and sports, as well as to simulate the geographical dynamics of towns, cities and communities. *The Sim*, one of the best-selling computer games in the USA, is a simulation of the daily activities of virtual people in a suburban household located near Sim City. Players live in a perfect consumer society wherein they have to make friends, find partners, and climb career ladders (Katsman, 1974; Rogers, 1986).

Strategy games. A strategy game is a game in which the players' decision-making skills have a high significance in determining the outcome. The word 'strategy' refers to military terminology. Normally, all strategy games can also be strategic or tactical in the military sense (Kline et al., 2003). Real-time strategy games request players to make their decisions and actions within the backdrop of a constantly changing game state, while the action in the game is continuous. This type of game-play is characterized by obtaining resources, building bases, researching technologies, and producing units, which focuses on operational aspects and control of warfare. Famous strategy games include the USA's *Age of Empire* and *Civilization* and Japan's *Dynasty Warriors*.

Adventure games. Adventure games are characterized by a process of investigation. Players inside the game-play must complete a series of explorations, puzzle-solving and overcoming obstacles along the way. Adventure games are based on the focus of narrative challenges, which need a detailed back(ground) story. Some adventure games rely equally on the common adventure elements, but also on the character building of RPGs. The main characters usually have a certain health meter (marked in points) and a chart of skills. Some puzzles and feats in these games need a minimum amount of skills in order to be solved so the player may have to choose one specific character to solve it, or spend time building the skills of the first character. Famous adventure games include Japan's *Legend of Zelda*, *Donkey Kong* and *Mario* and the UK's *Tomb Raider*.

Role-playing games. Participants in a role-playing game (RPG) assume the roles of fictional characters and collaboratively create or follow stories. Detailed back stories and different character identities are very important elements to construct RPG game-play. The RPG genre of computer games began with the publication of result from the *Dungeons and Dragons* game series in 1974; the seed of an immensely popular new hobby centred around face-to-face storytelling fantasy adventures. One of the players would take on the responsibility of the environment and minor characters (dungeon master), whereas the other players would create one or more characters to play within the world created by the dungeon master. The story took place in the imagination of the players as they each described their actions, and the Master, in turn, described the results of their actions.

Transformed into PC (personal computer) or video platform, playing an RPG involves the players creating a character in the game, based on a set of criteria, such as strength, dexterity, charisma, etc. Gamers embark on an imagined adventure, the details of which the dungeon master (or referee) would have prepared in advance. Characters in role-playing games are usually represented by a number of statistics. Statistics are an abstract measure of how successful a character is likely to be at a class of tasks. Famous PRG games include Japan's *Final Fantasy* and the UK's *Ultima Online*.

2.3 Technology within new media

Some established literary theories depend on media and the narrative rather than an interactive game world. Other researcher Juul reminds us not to forget the elements that games consist of (rules, goals, player activity, the projection of the player's actions into the game world, and the way the game defines the possible actions of the player), while the narrative forms are too excessively focused (Juul, 2001). A game story involves more than technology, inventors, players, and wider social and cultural contexts. Some scholars try to explain how technology makes the game-play different from other media, presenting a virtual world which was created by inventors and players collectively.

2.3.1 Milieu of game

When categorizing types of games, the specific design for particular game machines, the ability of the player to move, and the visual aspect of the game by using mechanical and structural rules should be taken into account. According to game theory scholars Geoff King and Tanya Krzywinska (2002), games can be categorized on four levels: platform, genre, mode, and milieu. This is the result of

the distinctive nature of games as both particular kinds of audio-visual entertainment, and as products of a particular industrial formulation (King & Krzywinska, 2002, p26).

Genre is a relatively classificatory term, for both producers and consumers. King and Krzywinska think genre distinctions should be used to designate different kinds of features that occur more frequently in the variety of media products.

The game 'platform' is the type of hardware system on which a game is played. This includes personal computers, various consoles, and hand-held settings. Some games are designed with the capacities of a particular platform. Some are licensed exclusively for one platform as a business strategy. In addition, the experience of playing the game may be different because of adjustments made to cope with a different style of controller or graphic interface.

Games vary in types and forms, including games that are played alone, played against the computer, and played against other players connected online, which are the modes in which the game world is experienced by the players. Modes of games may vary according to whether it is played with multiple players or single, while online game play is an interactive activity. The single-player version of the game centres on a linear narrative³. The multi-player version takes on a number of permutations in which the various players either chat with each other or group together to complete a mission (King & Krzywinska, 2002, pp26-27).

Milieu. Milieu is used to describe the types of virtual worlds within the games in terms of location and atmospheric or stylistic conventions. Several distinct established game genre of milieu exist, with science fiction, fantasy and war being prominent. The effectiveness of different milieu is enhanced by using particular mechanical and structural rules (King & Krzywinska, 2002, p27).

Different types of games require particular mechanical and structural rules. If the game world is based on the medieval world, for example, all the buildings look medieval, the music is medieval-sounding, the animals and trees look like they are fourteenth-century France. Even the other avatars look medieval, the fighters look like knights, the thieves look like street urchins, and the merchants look like cobblers and tailors (Castronova, 2005, p98).

2.3.2 Neo-baroque

According to Angela Ndalianis (2003), contemporary entertainment forms can be interpreted as 'neo-baroque', combining sight, sound, and text in ways that mimic the

³ *Wolfenstein 3D* was a first 'first person shooter' computer game, in which the player as an escapee from a Nazi concentration camp is sent to attack Hitler's headquarters. The revolutionary shooting game gives the illusion of occupying the vantage point of a protagonist who moved (Kline et al., 2003, pp143-145).

public entertainments of 17th century 'baroque' Europe. But today's use of technology expresses concerns of the late 20th and early 21st centuries. These entail that they are:

1. Polycentric. Neo-baroque entertainment forms are not susceptible to linear readings associated with traditional texts. Games are 'ergodic', structured in accordance with the branching algorithms that regulate behavior.
2. Labyrinthine. Contemporary entertainment involves a start from nowhere in particular and navigating a course to somewhere else equally non-specific. US scholar Ndalianis stresses the role of users in co-creating the artefact.
3. Repetitive. Modern entertainment forms involve repetition. The same actions are performed over and over until they are 'right' and a new way forward becomes available.
4. Demanding of technological virtuosity. When players construct an experience from the game, the complexity of skills is combined by the skills which are used by the players and the skills which are developed by the game designers. Therefore, the virtuosity of both player and author of the game is 'specifically technological' (Kirkpatrick, 2007, pp84-87).

Based on Ndalianis' notions of the 'neo-baroque', characters are yet undeveloped, the storylines are obvious and repetitive and the audiences have to work too hard to extract anything valuable in game play. The aesthetic, as the 'neo-baroque', is given to account for its broad re-emergence in contemporary culture and to delineate it from notions that place it as a particular artistic 'style' or periodization. Rather, the neo-baroque is a form characterizing the shape of culture texts, notably contemporary screen arts and new digital media, in particular, videogames (Surman, 2007, pp214-215).

This study will use narrative as a primary method to analyse the structure of MMORPGs, since the concept of narrative is commonly and broadly used in the study of storytelling media, such as drama, novels, film, and games. The study will examine the elements inside a MMORPG and further explore why the fantasy story has become a common embedded story for this type of game, even though complex technologies are capable of making an imaginary world constructed without limitations.

2.4 MMORPG

Multi-player online gaming allows a large number of players to interact with one another in a game world. Role-playing games are the most popular genre. These

are called massive multi-player online role-playing games. Multi-User Dungeon (MUD) was one of the first multiplayer games, in text-only representation. When technology moved to a more complex level, it helped the existing game genres to gain the fabulous images of today. Today's modern computer graphics have replaced the game world in the player's imagination with complex 3D landscapes, crowded cities, and miles of uncharted dungeon corridors to explore (Hartas, 2005, p142; Apperley, 2006, p17).

Interactive internet computer games host a large number of players in a single game world, and all of those players can interact with each other at any given time. An avatar is a computer user's representation of themselves in computer games. Increasingly, games offer a basic character model, and then allow customization of the physical features as the player sees fit. Players in the virtual worlds are encouraged to change and develop their appearance and identity, building their own virtual domiciles, acquiring personal possessions and collaborating with each other in development. Many gamer titles now consider their activities within the virtual space of the game as creative work, not simply leisure play.

In nearly all MMORPGs, the development of the player's character is a primary goal. Many titles feature a character progression system in which players earn experience points for their actions and use those points to reach more advanced character 'levels', which makes them better at whatever they do. Traditionally, combat with monsters and completing quests, either alone or in groups, is the primary way to earn experience points. The accumulation of material wealth, such as useful items, is also a way to progress in many game titles. Besides that, MMORPGs require the players to form teams. Guilds or communities form in MMORPGs, which help inter-player interactions and grouped activities cohere into a small community for the players.

2.4.1 A fantasy world

Most of the MMORPGs' game worlds reconstruct a pseudo-historical magical medieval realm, offering players a selection of characters, moods and atmospheres. Actually, the game world is defined by academics, writers, and game designers alike; the world should have a unifying consistency. Mythical structures, forms, and rhetorics frequently provide informative sources for the creation of the world and its concomitant history. Many myths are characterized by the creation of extended imaginary terrains, which either intersect with the 'real' world, or bear a mixture of familiar geographical features. These mythical worlds extend beyond a single story,

providing the basis for a range of stories over a number of years. World-creations within MMORPG footsteps are frequently forged into mythical systems such as Celtic, Greek, and Nordic.

Transferred from pencil-and-paper role-playing games into a computer-setting environment, Anglo-American online games first evolved into text-based games like *Adventure* and *Zork*, and, then into early graphical adventure games like *Wizardry*, in the 1980's. In addition, other Western medieval fantasies, such as *Might and Magic*, were at an early stage in the genre development adapted into computer games. The series of *Might and Magic* is considered one of the defining examples of early computer role-playing games, which has paved a way for the followers. The original concepts include intense combats and large groups of alien creatures. Monsters and situations encountered throughout the series of games tend to be well-known fantasy staples such as giant rats, werewolf curses, dragon hoards and zombies. These games provided the staging point for more complex real-time scrolling graphical 2D isometric games like *Ultima* and the *Baldur's Gate* series. A point worth noting is that the single player role-playing games were based on more complex engines, graphical capabilities, and social-networked text-based gaming environments.

All of these were developed into 2D graphical network games like *Ultima Online*. The *Ultima Online* series narrative-style added chivalric virtues encouraging the players to conform to the 'Eight Britannian Virtues', differing in form from the scenario of the straightforward logic of violent conquests. On the other hand, the players can purchase houses, run shops and banks, and build a social environment in which, over time, entire communities and populations form. The narrative style creates a chivalric romance based on the technical platform in which players can experience a society of commodities. The online activities are termed, by Kline et al., as an alliance of chivalric virtues and digital capitalism (2003, p161).

Eventually, during the early part of the 21st century, the technologies of 3D graphical games and massive multiplayer networked communications have been merged to make possible today's 3D MMORPGs, such as *Everquest*, *Dark Age of Camelot* and *World of Warcraft* (Stern, 2002, pp260-261). Since then *Ultima Online* (UO) and *Everquest* (EQ) have been two of the most successful games in North America. According to officially disclosed player subscriptions from late 2001, *Ultima Online* had around 250,000 players, and *Everquest* between 400,000 and 700,000 (Stern, 2002, p261).

This applies not only to spatial coordinates, style and physics but also to the past events that constitute the current state of affairs within the world and to which

the player-character is subject. As a form of narrative used to explain a state of affairs, myth is intrinsic to the creation of a particular worldview in all these cases, whether that worldview is to be taken as 'real' or as a form of 'make believe' (Krzywinska, 2006, pp385-387). Researcher Eddo Stern (2002) terms it as 'neo-medievalism', when describing the bonds of the magic age and technology in a game world. The following explanation is quoted in his words:

The internet-mediated arenas for the hugely popular gaming environments known as MMORPGs are prime loci of the new 21st century's version of 'neomedievalism'. The range of historical and cultural influences on the fantasy game, the medieval age stories, includes a wild amalgam of Celtic, Gothic, Medieval and Renaissance combined with a deep commitment to a Wagnerian, Tolkienesque, Camelotian, and Dugeon & Dragon'ish verisimilitude

(Stern 2002, p258).

2.4.2 Crucial elements within a MMORPG

Actually, to succeed with the structure of the digital world requires more than advanced technology and good machines. A number of overarching parameters are based on the particularities of the game's programming infrastructure, including back-story, character-play, AI system, and social interaction, which will be discussed as follows.

Back-story. Back-story is one of the core parts of the games. The back-story is likely to come into the foreground as a cue for players to adopt identities in the game that are in keeping with the game world. An embedded story must draw the players' interest first, and then invite them to engage in role-playing and make-believe and to perform roles, as part of the game world. The inside elements not only give clues for quests, but also to impart fragments of information about the game-world's fictional history. The intended function of the back-story in the diegesis⁴ of a computer game is to provide a contextual framework for the game narrative that will soon unfold in real-time. All players in a synthetic world generally share some notions of what is important there, and will therefore validate the actions one takes in that world. The game designs encourage players to participate more closely within the contextualising mosaic of the back-story that leads up to the state of the world in its present condition (Castronova, 2005, p112).

Most stories have an ending, but a MMORPG is never completed, and is a never-ending story. Previous research reveals that Western game developers prefer the topic of medieval age stories to be adapted into a large MMORPG. For example,

⁴ A narrative's 'time-space continuum'

World of Warcraft (WoW) presents players with an expansive, constant, and carefully structured 'world' with a well-developed back-story, of which Tolkein's *The Lord of the Rings* is a primary source. Advanced MMORPG systems are especially suited to story meaning. A sense of the game as a fantasy 'world' is comprised of several diverse parts, ranging from the inclusion of mythical material presented as familiar history, through the coherent audio-visual design of the game, the logic of which dictates the types of landscapes, character-types, objects, and quests found in the game (Hartas, 2005, p144; Krzywinska, 2007, p106).

Map and magic. Most fantasy adventure-based MMORPGs can be 'mapped'. The purpose of maps is to demonstrate graphically the relationships between spaces. The various maps available aid travel and effective play. They are part of the game's functional realm. The maps contribute a sense of the game within the world by locating the player spatially. The maps available are geographical but do not clearly show the effect of history or territory, which determines where a player can and cannot roam (Krzywinska, 2007, pp107-108).

Players are encouraged to travel the game world to undertake a task or raid a territory. The nature of *WoW's* quest system, for example, forces players to be 'nomadic', travelling the world to undertake the tasks required for progress. There is a strong sense of journey structure, a structure found in Homer's *The Odyssey*, within the games. According to Krzywinska, advanced graphic design breaks through the boundary between the fiction and reality and forms a key element of the journeying component of the hero's quest that forms the basis of the game through which the player is able to move quite freely. The spatial aspect of such fictional worlds, bearing in mind a three-dimensional space, lends itself extremely well to the creation multiplayer game environments (Krzywinska 2006, p390).

In addition, the world within a MMORPG is constantly changing, vastly expanding, and densely detailed. A player is promised the possibility of the infinite: infinite expansion, infinite detail, and infinite time. Actually, the question of traversing infinite space is a question of time and speed. The solution can be found in *UO* and *EQ* in the form of the ubiquitous magic portal. It allows the players to break the constraints of virtual materiality and instantaneously 'teleport' their avatar to a distant location. Portals either exist as permanent magical fixtures at specific locations, or are created by magic-using characters. When the game is based in the medieval-age setting, the magic portal is a logical design in game play to allow the players to instantaneously 'teleport' their avatar to a distant location (Stern, 2002, p268; Castronova, 2005, p98). According to Stern (2002), magic portals serve as

‘metaphoric patches’ allowing non-linear navigation to fit the demand of many post-industrial consumers because they are accustomed to navigating freely through their CDs, DVDs, databases, Internet sites and hypertexts (p268).

Researcher Edward Castronova (2005) terms the magic within games as a ‘magic circle’, which he explains in the following words:

The synthetic world is an organism surrounded by a barrier. Within the barrier, life proceeds, accruing to all kinds of fantasy rules involving pace light, fireballs, invisibility, and so on...The membrane is the ‘magic circle’ within which the rules are different. The membrane can be considered a shield of sorts, protecting the fantasy world from the outside world. The inner world needs defining and protecting because it is necessary everyone who goes there adhere to the different of rules

(Castronova, 2005, p147).

Artificial Intelligence system. The only factor lacking in the new MMORPGs, that differentiate them from pencil-and-paper role-playing games, is the Dungeon Master whose role is replaced by the programmed environment in facilitating the players’ actions within the virtual world. Game Artificial Intelligence (AI) is a feature of the software, not the machines that run it, and it operates in the virtual world for gameplay. According to Castronova (2005), the AI system will be designed in congruence to the following functions:

1. Some of the robots are known as mobile objects (*mobs*), an abbreviation that originally referred to all robots, but now means monsters. The role of a *mob* is designed to provide hunting adventures for players. When a *mob* and player meet, it’s a case of ‘to kill or be killed’.
2. Other robots are the non-player characters (NPCs) who do not seek to kill players but rather seek some kind of relationship with gamers. The functions of NPC here are to offer virtual items or provide services (e.g. fixing items or providing training).
3. AI appears in a third way when robots come under the user’s control. The newly controlled robots are now known as the user’s pet or riding creature. Players are allowed to give commands to their pets. As AI has advanced, the level of pet control and sophistication has risen accordingly.
4. A fourth function of AI involves mentoring. Certain NPCs are programmed to lead the users into the world and then spur them to activity. For example, a mentor robot gives tutorials on the interface and then sends the user out on missions, known as quests.

In a synthetic world, the AI has a direct effect on each avatar, and therefore, a dramatic impact on macro-level features in the avatar society. However, making programming believable AIs for NPCs still remains a challenge for game designers (Castronova 2005, pp93-97).

Characters. The play-characters are categorized into different professionals and classes when players enter a game. Each player is able to develop their character and therefore, determines certain aspects of play and player-character identity. Players can make-believe in the game, according to details the NPCs would have prepared in advance. The characters make progress and gain experience in the virtual world, according to the condition of the gamers, and increase their skills becoming stronger, cleverer, faster, more powerful and better able to take on tougher challenges. In addition, they participate in the acquisition of more tangible possessions such as better equipment, magical items, and wealth (Hartas, 2005, p142).

Players enter the game at an initial stage with the aim of becoming competent with the user interface. A number of factors are built into the game to aid this process, with tasks becoming progressively more complex. The RPG is successful in the creative ownership the player feels for their character, particularly if they have advanced it through several adventures. When players invest a great deal of time and money, the game system will offer a powerful experience in identity play. Transformative elements will make identity play more skilled at playing the game, acting as an apparent foil to the forces of determination. A player has to reach basic levels for upgrading, from a powerless minion to a powerful clairvoyant magician, or from an infantry trooper to a Special Forces general.

Through achievement, the avatar gradually accumulates powers, either through wealth, an increase in skills, an increase in attributes, or an increase in general experience. Once sufficient experience points are accumulated, the avatar will attain a new experience 'level'. The game mechanics reward players who attain a new level by enhancing their powers in some way, including increased power of spells, faster running, and so on (Castronova, 2005). A character gets better skills requiring more attempts to increase, as the skill system asks the player to repetitively practice activities. For example, players are required to practice their fishing or sword-fighting skills by standing in one place for hours, even days, performing the same repetitive task. The cycle produced by these conditions, e.g. combat leads to new weapons allowing for more combat with no change in the game-play, is sometimes referred to as the treadmill level or 'grinding'. Interestingly, a situation, common in Asia, is that players find supportive software available to download from other

websites (freeware and proprietary), which alter the game-playing experience. Although many game operators take direct approaches to prevent this type of activity, it is still hard to forbid players from using 'cheating' software.

In addition, the game system offers numerous assignable 'feats', 'powers', and the activities of collecting items. These game designs are contextualized within the game, and are assigned relative social and cultural values through the game-play. An important note is that the focus of character transformation in the game world is not on character development, but the acquisition of characteristics that are contextualized and valued through play. The activity of collecting value items is regarded as an important process that develops desires and emotions in players during game-play.

By engaging in role-playing games in this fantasy world, actions lead to practical and inherently desirable goals, like rescuing princesses and saving the earth from evil aliens, as opposed to goals made desirable by conventions, such as kicking a ball into a net or aligning three tokens in a row (Ryan, 2007, p13). In *WoW*, the player starts by selecting a character from the available range of different bi-pedal races as well as selecting their functional types (e.g. warrior, druid, rogue, priest and hunter). Each functional type has a role in creating a great sense of identity for players within the context of the game (Krzywinska, 2007). According to Apperley, the context comes not from the game itself, but by the process of the contextualizing play of many individuals who collectively form a discourse that assign a value to the various transformations (2006, p18).

Guilds. Online gaming provides a world in which any number from hundreds to thousands of game players can interact simultaneously. The devices of online gaming have networked interactivity. Generally, this is traditionally best accomplished via combat. Also in the genre is the eventual demand on players to team up with others in order to progress at the optimal rate. In many MMORPGs, player based character-identities must offer support for in-game guilds or clans. Even if players never join a formal group, they are still usually expected to be a part of a small team during game-play, and will probably be expected to carry out a specialized role. In combat-based MMORPGs, for example, the healer is a character responsible for maintaining the health of the party, and the trader has the role of providing gold and money for purchasing military supplies. These organizations will likely have further expectations for their members (such as intra-guild assistance). Many players will find themselves as either a member or a leader of such a group after playing in a

MMORPG for some time. As a result, all gamers have met in cyberspace and navigate the world they collectively inhabit.

The guild system potentially counteracts the more transient nature of passing inter-player interaction and grouped activities, and can help to bond players. Guilds have a dedicated 'chat channel' seen by all members. Furthermore, some guilds advertise for players to join, particularly in the early stages. Membership of a guild has the advantage of potentially providing a more stable social experience for players. When players get to know each other well, the functions of members are likely to help each other in a task, such as giving objects, passing on objects, or providing advice. The game provides a number of ways for the players to find a group. In the 'chat window' there are different channels dedicated to certain types of player 'speech', one of which is looking for group channels. Another 'window' can be accessed in the user interface, allowing the player to see which 'friends' are online (Castronova, 2005, p163).

Role playing games revive in a commercial form, bringing interactivity and open-ended gaming together in a winning formula. MMORPGs blur the boundary between game and community, which is an important shift as the social arena of the game is becoming the game itself (Apperley, 2006, p18). The social dimension of MMORPGs are largely composed of interactions between players who are represented in the game-world by a predefined game character. The social dimension of the game is given shape by the players as they create guilds.

2.5 A constrained magical world

According to Krazywinska, MMORPGs are presented in the following way:

Questing, gathering valuable items, taking part in raids, and becoming increasingly efficient agents in the game-world combine the striving to complete set game goals with the opportunity for make-believe and to playful in a social context; each has a role in creating a great sense of agency and identity for players within the context of the game... (2007, p112)

MMORPG, a constant game world, provides 24 hour server access with zero downtime, and committed online services, including live in-game tech support, creative narrative twists, and game balance research. Players can be make-believe characters navigating and constituting a high-fantasy world. The imaginary world allows hundreds, thousands, or even millions of players to have simultaneous access. Based on the above discussion, Internet technology, mass players, and a back-story can be found to play the key roles in maintaining a constantly online world.

Internet sites offering information on a wide variety of games get an exponential number of hits from gaming fans, and many Internet portal sites are online games that provide different entertainment activities for players. Online gaming is interactive entertainment played over computer networks. At the present, the expansion of OLG has reflected the overall expansion of computer networks from small local networks to the Internet and the growth of Internet access itself. Despite Internet techniques having been developed for a long while, it is a challenge to develop complex engines for running a successful MMORPG with tens of thousands of players.

Incorporating complex graphics and a virtual world is to create a back-story based on the pre-existing literature and the historical event. Even though games provide elaborate and complex back-stories, research points out that the significance of these stories in the context of game-play is minuscule. The inherent interplayer narrative dynamics of MMORPGs are so complex and compelling that engaging the back-story becomes redundant; it functions as an outer skin, deemed to be shed (Stern, 2002, p265).

The game-world is experienced by players. MMORPGs host a large number of players in a single game world, and all of those players can interact with each other at any given time, i.e. real-time. Online gaming must work on company servers. The size of the game world and its capability to support a large number of players are the aspects that should matter. Most MMORPGs can fit up to a few thousand players on a single game server at one time. Since a typical server can handle around 10,000 to 20,000 players, 4000 to 5000 active simultaneously, dividing the game into shards (servers) has up till now been the solution. To support all those players, MMORPGs need large-scale game worlds, and servers to connect players to those worlds. Sometimes a game features a universe which is copied onto different servers separating players; this is defined as a 'sharded' universe (Stern, 2002, p265).

MMORPGs rely more on technological supports, such as server architecture, Internet network protocols, and relational database design to construct an imagination world populated by players. Game developers had the capabilities to break through the limitations in the reality, to make an accessible imaginary world, and to allow a large number of gamers to participate in online activities, when advanced technology made it become possible. However, both game developers and game players have to obey the rules of technology. Designers set up a nomadic adventure by laying out story plots, different interwoven characters and assignable

online activities. Players have to follow the rules to gain values through repetitive activities, and attack the monsters designed by AI systems. Actually, the world is constructed under branching algorithms to regulate the behaviour of gamers. According to Kline et al. (2003), a 'technological circuit' within the game industry refers to the interaction between the programmers, users, computers or gaming consoles, and the underlying software. This interaction encourages the development of particular forms of subjectivity and embodiment particular to the networked telecommunications environment such as skill, speed, and textures of the computerized environment (Kline et al. 2003, p55).

In addition, games vary in type. Modes of game may vary according to multi or single-players. Internet computer games accommodate multi-players and a never-ending narrative. The variety challenges the designers to set game rules which can be followed by users and secure the running of an inside world. Western mythical structures provide sources for designers to compose an imaginary terrain which is familiar not only to the designers but also to the players. In the early text-only stage, the design expressed an unlimited world based on the player's imagination. Today complex graphic design and modern advanced technologies aim to replicate a fantasy world based on the pre-existing source of computer format of more than 20 years, which has constituted a historical fiction familiar by game designers and game players.

Advanced technologies help MMORPG construct a virtual world moving forward; however, it is not unlimited. Only when a back-story is based on a mythic world, performing the same repetition illogic activities, such as killing monsters, practicing fighting skills, or shuttling across different screen spaces, does the back-story become valuable in an imaginary world acceptable by game designers and game players. Actually, magic is ergodic, a tool to be used by designers for defining and protecting the inner world. On one hand, the features of new technology, polycentric, labyrinthine and repetitive, presented in a technological virtuosity, illustrate that technology helps the game developers, game players, and game itself to define reasonable game rules to follow. On another hand, technology creates a believable magical world constraining the imagination of the designer and provides limited activities for gamers because all of them have to follow a rule based on a feasible concept implemented by technology.

2.6 Conclusion

This research examines the correlation between MMORPG, its narrative and

specific technological supports. When defining the game genre and its narrative, we have to stress the role of technology with regards to software/narrative hybrids in game study. However, the study poses a different point of view: new technologies help to build up an imaginary world, which is to replicate a 'reality' pre-existing in history or a 'real' world.

First, there is no jump-start for game development. Most of the US games originated from the US military or defence industries. The US game industry, in conjunction with advanced military planning, computer simulation, and simulation-designing expertise from visual media, has been nourishing the power of new digital entertainment, evolving into different modes of game-play based on video, PC, or Internet PC platforms (Kline et al., 2003, pp179-181).

Different games are designed based on a predestined platform. Varied game genres have been developed based on specific technological backgrounds since they have first appeared. A first-person shooter or a racing game can be played on a console machine or computer. Multi-player option needs to be played on the Internet or on a local area network (King and Krzywinska, 2002, p26). At the same time, it is very hard to accommodate every possible function into a game genre. Each platform is only capable of developing certain game genres, because of the technological limitations. This is due to the previous foundational constraints, which the game designers get accustomed to in order to amplify the range of genres.

Second, the themes of strategy, simulation, adventure, and role-playing require a back-story to draw the attention of players. A story is extended in different ways depending on the technology system, platform, mode and milieu. Within a MMORPG, a player travels a virtual world, undertaking a task, gaining the level though performing the same action repeatedly. Players only have to manipulate the joystick or keyboard, and they can complete all the necessary actions, including flying, jumping, working, picking⁵, and fighting. When players construct an experience, they improve the proficiency of their skills in an imaginary world. Most importantly, the complexity of skill existing within a game reminds both the player and the designer that the game is 'specifically technological'. While this is an unreal, even surreal, experience for players, the goal of the new technology is to enhance a sense of reality during game-play.

Internet computer games provide an interactive environment for players. A MMORPG is connected with fragmented worlds, different territories occupied by

⁵ During gameplay gamers can be rewarded by *picking* up value items after completing a quest or defeating a monster.

different races. Players have to complete a quest by banding together as a group, and sometimes a range of player-character types is required. The large game requires more complex technologies for live in-game support, more comprehensive and expansive back-stories to entice players, and the most controversial element, to compose a variety of cultural experiences and social relationships. Through technological supports, designers supply a 'magical' world through servers to connect players and game engines to handle the vast numbers of game players. Outwardly, MMORPG provides an imaginary world allowing all those players to move freely. Actually, the 'neo-medievalism', based on a mythical structure familiar to players presents regularity for controlling all the online activities and making sure everyone follows the game rules in a virtual universe.

Finally, new technology helps a fantasy world break the boundaries of 'reality'. Researcher Ndalianis (2003) points out that the central characteristic of the neo-baroque in new media is lack of respect for the limits of the frame, when the new technologies persistently seek to blur the spaces of fancy and reality. Closed forms are replaced by open structures that favour a dynamic and expanding polycentrism. Stories inside the game refuse to be constrained within a single structure, expanding their narrative universe into further sequels and serials. Story development starts from nowhere in particular and progresses in a labyrinthine way. The narrative of MMORPG is not based on linearity, but polycentrism and labyrinths (Ndalianis 2003, p25).

MMORPGs do provide an open-ended structure and the face-to-face nature of the multiplayer environment, having much greater potential for a story to develop. Actually, the fantasy world has to be constrained by game rules, which are supported by different integrating technologies. Technology makes the elements inside a fantasy world, such as magic, AI system, and avatar systems, function appropriately. Most importantly, the supporting software maintains a world following a unifying consistency which must be accepted by designers, programmers, players, and academic researchers. Therefore, a pseudo-historical magical medieval realm offers game designers fertile ground for creation and offers game players a selection of moods and atmospheres that do not occur coincidentally. An imaginary world is constructed and constrained by new technology, and is constrained in the same time.

As for MMORPGs, the evolution started from the introduction of the IT-based creative service. At that time, technology-leading games became popular. Now, the online game industry in the Asian market has moved to the dominant design, which emphasizes the service sector (Choi, 2007). The emphasis of Asian

OLGs has moved from technology-oriented to market-oriented games and, recently, concept-oriented games, although the technology-oriented games have maintained their market position to some extent. The ensuing step in the development process emphasized the role of users, as innovative sources, which enables new ways for old-fashioned technologies to expand the life cycle of game products, rather than explore new technologies. Game producers normally consider technology and content to be the main aspects. A point worth noting is the most popular online games in the East Asian market have evolved into a new typology under the influence of variations in innovation characteristics. A variety of genres have been developed in the Asian market thus broadening the base of gamers. The Asian game world attracts not only the traditional core users but also other groups, including younger users and females. The research will discuss in the following chapter, the differences between the Western and Eastern game genres.

Chapter 3 The Difference Between Western and Asian Game Genres

This chapter reviews existing research on Anglo-American game cultures as well as Asian game cultures. The chapter serves the purpose of setting up a general background to the whole research, and reveals significant issues and trends observed in the field. In this chapter, the approach of cultural studies is used to analyze the constituents of digital content. This research also attempts a texture analysing approach to representation, examining the various connotations associated with images, while finding that cultural value plays a dominate role in aesthetic representations, textures, and formats. This chapter also examines the development of the Western and Asian games, discussing the prospective of technological support, art design and narrative. The chapter provides an explanation why militarized masculinity became the core of Western games and analyses the development of Asian MMORPG game genres, e.g. 'wuxia' and 'cute' games, designed specifically for Asian users.

3.1 Game culture

This chapter examines, from the perspective of cultural studies, the various connotations associated with images and narratives. Gaming is not simply a cybernetic relationship with a machine, but also a mediated cultural text that offers the gamers subject-positions and game scenarios that carry social meaning. Game culture is a form of new media culture that has been influenced by human computer interactions, game textures, and the representations of game artefacts (Kline et al., 2003, p161). As video games and PC games have increased their popularity among audiences, they have caused a significant impact upon popular culture. This form of entertainment has spawned many fashion trends. Cultural studies' researchers analyze how media texts give our experience of the world meaning through representations and patterns of narratives. They provide an approach to explain how things are in the world at large (Kline et al., 2003, p43).

Players are always limited by the game's underlying code, so the unequal conditions of the cultural practice of interactive games need to be examined. The game cultural circuit refers to the gaming environment as a semiotic domain in which game designers, players and games interact to produce a virtual world of meaning and identity. A note worthy of attention is that interactivity in game-play involves players within the game's environment not only created by developers, but also by players. Gaming is now a well-established art genre encompassed with the

introduction of many entertainment elements. The cultural code of today can be read through a performance that has as its motif an online game (Kline et al., 2003, p123; p183; p188).

3.2 Militarized masculinity

Almost all researchers agree that computer games and console games are technology that embodies game culture which presents excessive masculinity (Schott and Horrell, 2000; Kline et al., 2003; Dovey & Kennedy, 2006). Computer games incorporate 'fantasy and human violence' intended to maintain gender differences in play and limit the degree of female participation in computer play (Schott and Horrell, 2000, p37). According to Kline and other researchers, Western gaming culture is termed as 'militarized masculinity', ranging from shooting and fighting skills to strategic and tactical war games (2003, p254).

3.2.1 Military-entertainment-complex

US games have close relationships with the US military and the defence industry. Interactive gaming is regarded as a spin-off of the military-industry complex. For instance, two of the first digital games: a primitive *Pong*-like tennis-playing game was produced in the Los Alamos nuclear labs and *Spacewar*, a military simulation 'hack', was produced by defense-related workers at Massachusetts Institute of Technology (MIT). The US military provided defence contracts, underpinning the corporations developing computer equipment. Pentagon simulation makers constantly transfer technologies to commercial game production, which has prospered a civilian industry.

Violence is seen as a key element inside game-play. For example, first-person shooter games hold for equally formulaic martial arts games. *Wolfenstein 3D*, a first 'first-person shooter' is a game encouraging its player into the role of a futuristic soldier, male, muscular, white and Schwarzenegger-esque (Kline et al., 2003, pp143-145). From the view of scholars, the only significant way to differentiate these games from their competitors is to elaborate and intensify speed and violence inside the game-play. Interactive gaming, with the most persuasive military instance, is termed as a 'military-entertainment-complex'. The US game industry with the combination of advanced military planning, computer simulation, and the simulation-designing expertise from visual media, is creating a new configuration of virtual power (Kline et al., pp179-181; p249).

3.2.2 A Western-centred hegemony

Exploration and the mastery of space, especially in strategy game and simulation game, are important themes in games theory literature. The strategic game, also known as a 'war game', originates from the scenarios of Western colonization, containing the plots of either or both exploration and conquering other civilizations. Players have to consider situations that are analogous to the situations faced by leaders of historical battles. The strategic games interweave more complex ingredients, including magical spells of destruction, espionage, scenarios of exploration and the accumulating progress during which players need abilities to conquer alien civilizations. Usually 'war games' depend heavily on simulation elements. The simulation game, termed as a 'God game', provides players a 'god-like' perspective and views the main character from above. Many of these are designed in fundamental military subtexts of conquest and imperialism (Kline et al., 2003, pp254-255; Kerr, 2006, p116).

These Western strategic computer games, such as *Age of Empire*, *Glory of the Roman Empire*, and *Caesar*, are adapted from Roman Empire topics. The games have traced the histories of how the ancient Western Empire spread its intuitional systems and cultural influences further into Northern Europe and the Mediterranean. Taylor (2003) identifies the players in strategic computer games as 'power gamers'. While playing 'power games', gamers have to fully understand the structure of the game and tend to focus on efficiency and instrumental play, on setting and achieving goals and display high levels of technical and skill proficiency. This type of game does attract some female game players (Kline et al., 2003, pp254-255).

From the view of Kline et al., strategic games, like *Civilization* or *Age of Empires*, still have fundamental military subtexts of conquest and imperialism. The interactive digital contents have been designed with the instruments of a Western-centered hegemony (Kline et al., 2003, pp254-255). According to Market Intelligence Centre (MIC), the US strategy game market in 2003 accounted for 27 percent of the market share and became the most popular genre for players (Lin, 2004). Hegemony provides a source of creativity for the Western game developers. Kline et al., explain the strategy game:

The world is organized according to a gendered logic: everyone is male, and 'progress' unfolds absent of female; reproduction occurs by clicking to generate peasants or soldiers as required (2003, p255).

3.2.3 Male dominating world

According to an observation by Helen Kennedy (2007), the process of commodified game culture, including game design, packaging, and marketing, all serves to demarcate games played as a specifically masculine activity. Male designers have traditionally preserved male dominance within the gaming industry based on their own tastes and cultural assumptions (Kennedy, 2007, p37; p124). Many protagonists in Western games, such as the USA's *Diablo* and *World of Warcraft*, are muscle-bound heroes. While examining the history of the muscled men, scholars find that the original character, the superhero in American comics, stretches as far back as *Superman* or *Spiderman*. The masculine game characters in a narrow perspective of the industry were designed to suit the standard of core gamers who were fascinated by plots of kicking, punching and flipping across the game-screen (Kline et al., 2003, pp143-145; Hartas, 2005, pp26-27).

In addition, Japan's most successful console game series, such as *Capcom's Mega Man* or *Nintendo's Super Mario Brothers*, are designed to target boys. These adventure games combine the iconography of multiple boys' book genres. Their protagonists struggle across an astonishingly electronic range of landscapes of deserts, frozen wastelands, tropical rainforests, and urban undergrounds, and encounter resistance from strange hybrid beasts (Dovey & Kennedy, 2006, p94).

Video and PC games have been designed-based on a limited number of themes. Japan's video games originate from the themes and charters of arcade games, and US games with a Pentagon sponsored inception. Once the existing genres adapted from the arcade proved to be popular with the young male audience, the game company had a strong economic incentive to continue and amplify the genres, rather than risk breaking new ground with new content. As a result, the pre-existing genres have been formed by male designers and proofed to draw its target users, different age groups of male audiences (Kline et al., 2003, p90; p249).

An account of violent representations in interactive games that focus only on the notorious 'shooter' and 'fighter' grossly understates its pervasiveness. Within the traditions of boy's play and male culture, there are lines leading in different directions. Game researchers define the genres of video and computer games as a combination: American superheroes, British neo-colonial nostalgia and Japanese anime cartoon styles (Kline et al., 2003, pp189-190; p254).

3.3 Asian online game

Based on Anglo-American literature, the above discussion analyzes the connotations and context of the computer games and video games. Differing from the Western game culture with a dominant "militarized masculinity" theme, Asian

online games involve in-game narratives, characters, and imagery in an Oriental style. Online gaming has become a popular form of entertainment in the intra-Asian market. The popularity is reflected by the commodity function of Asianness that is emergent in the intra-regional networked culture (Chen, 2006, p4).

Interactive online entertainment creates a virtual world for players to gamble, box, race, hunt, and participate in adventure. Gaming is now a widely disseminated, large-scale, and intensely marketed form of commercial entertainment, as gamers are split up by age, brand, and technological sophistication into a series of interlinked micro-markets (Kline et al., p170, 2003). Online gaming generally falls into two primary categories: MMORPGs (massively multiplayer online role-playing games) and casual games. Normally, MMORPGs form 60 percent of the market shares in Asia and casual games 40 percent of the OLG market. The genre of MMORPGs in Asia can be categorized into several types, including adventure, simulation, and strategy game. 'Casual game' is a generic term for games played competitively online without the existence of a persistent online realm. Some casual games can be as simple as online Mahjong or poker. Many casual game players are simply looking for quick entertainment and there are many casual games available. Casual games aim to provide a momentary escape from the daily routine. Many games and in-game lounges for cards (poker) and board games (checkers) offer players an opportunity to join chat rooms and find partners, while members registered with the company's instant messenger service can connect and play games through their chat agent. In the USA, there are more than 100 million regular casual game players whose demographic is more representative of Middle America. An equal number of women and men, with an average age above 35 years, play casual games (nytimes.com, 2006). The base of gamers is very different than that of video game players who are male and range in ages from 15 to 25 years.

When further examining the forms of game culture, certain types of game genres, such as Western fantasy games, '*wuxia*' games and 'cute' games appeal to Asian users. The Western fantasy games based on the game's Pentagon sponsored inception is regarded as a theme well accepted by gamers globally. The *wuxia* themed genre is exclusively circulated in the larger Chinese arena, including China, Hong Kong, Taiwan, and other Chinese Diaspora communities in Malaysia, Indonesia, Thailand, Singapore, and Vietnam. However, the *wuxia* themed games have difficulties in crossing international borders. They are unappealing to other Asian players with different geo-linguistic backgrounds. The 'cute' game originates from the protagonists of Japanese video games, such as *Mario Brothers* and *Final*

Fantasy. This type of genre is well accepted by Asian users living in urban cities, including Seoul, Tokyo, Taipei, Hong Kong and Shanghai. The ‘cute’ games have become a force to unite city gamers in Asian countries. Gaming cultures need to be understood within the socio-cultural context they are played; such notions as game play are influenced by the local culture. Certain games and certain types of game play are adopted by specific communities because they make sense within the cultural context (Hjorth, 2006).

3.3.1 Fantasy games

Hundreds of titles are released every year in the video game market, but the MMORPG market in East Asian is dominated by a few titles. The fantasy genre, in contrast to the *wuxia*, do easily cross the cultural borders, being accepted by Western and Asian gamers alike. Similar game formats have influenced Asian game developers, because the medieval topic appeals to a great numbers of Asian users.

3.3.1.1 Anglo-American fantasy massive multi-player online role playing games

The success of *World of Warcraft (WOW)* has reshaped the game industry around the world. This game has been ranked as one of the top three popular selling game titles in the Asian market, including China, South Korea, and Taiwan. Interestingly, *WoW* has more subscribers in China than in the United States. Additionally, this fantasy MMORPG is produced by *Blizzard*, a US-based company. This game was based on Western strategy-themed genre, and has crossed cultural borders. *Blizzard*'s product offers a fantasy world using a Western mythological storyline in terms of different fictional characters and the complexity of its design. *WoW*'s global success is a result of the 10 year old pre-existing source of video format, which contributes to product awareness, and the significant investment in production and testing allowing additional capital and time dedicated to Research and Development (R&D). *WoW*, based on a Western cultural background, is a unique example of the OLG industry, considering its acceptance by global players. While Sony's *Ever Quest* is extremely popular in Western markets, it does not appeal to Asian gaming tastes. *Ever Quest*'s failure may be attributed to the fact that online games need to cross cultural barriers and appeal to players with different cultural backgrounds⁶.

3.3.1.2 Asian fantasy MMORPG

a. Korean fantasy MMORPG. Korea is an expert at moulding MMORPG into a format of medieval age stories. *Lineage*, a fantasy MMORPG, released in 1998 by a South Korean game developer, features 2D isometric-overhead graphics similar to

⁶ Lan Yu, CEO of a local operator interviewed in Beijing on 13th May 2007

those of *Ultima Online* and *Diablo 2*. *Lineage*'s back-story tells how a prince rightfully reclaims the throne from the hands of a usurper. The game-play is based primarily upon a castle siege system which allows castle owners to set tax rates in neighboring cities and collect taxes on items purchased in stores within those cities. Player versus player combat (PVP) is extensive in *Lineage*. Players can engage in combat with other player characters at any time as long as they are not in safe zones such as cities. Different 'blood pledges', an association to unite the players, allows them involvement in castle sieges during the wars. The *Lineage* series has maintained a long-lasting popularity in the intra-Asian markets, including the greater Chinese market, ever since it was released. Evidence of the game's popularity, are numbers of monthly subscribers of 2.5 to 8.0 million (Stern, 2002, p261).

Besides *Lineage*, South Korea's *Mu Online* and *Legend of Mir* have become epic products in the greater Chinese market. Korean games accounted for more than 80 percent of the market share in China from 2002 to 2003. Stressing intense combat, *Legend of Mir* has recorded a consistently high number of 'hits': 600,000 players can access the server at the same time. Chinese enterprises *Shanda* and *The9*, two of the first tier game providers and operators, are significant because they introduced and operated *Legend of Mir* and *Mu Online* (www.koreanet.com; Economic Daily, 2005). Now Korean-produced fantasy games are appealing to not only Asian gamers but also to Western gamers as well.

b. Taiwanese and Chinese fantasy games. Taiwanese developers were among the first to create MMORPGs. *King of Kings*, a Chinese MMORPG released in 1999, was the first Taiwanese-oriented MMORPG. It tells a story with the background of European medieval fantasy. Based on the era of Chaos, players are encouraged to build their own kingdoms and unify the continent. The game provides a magical system, in which a magical stove provides the chance for players to win a large reward or lose their items because they forfeit their variety of armour and badges for melting in the stove⁷.

Compared to their Taiwanese counterparts, Chinese game firms have significant advantages in that they can easily clone popular content and develop game products based on the preferences of Chinese gamers. For example, *The First Myth*, a 2D Chinese-produced MMORPG, is based on Chinese mythology and literature. Characters in the game's system range from an armoured man and a clairvoyant to a Taoist, representing an Oriental imaginary world which is familiar to

⁷ Philip Chang, Chairman of Lager Network Technologies interviewed in Taipei on 19th April 2007

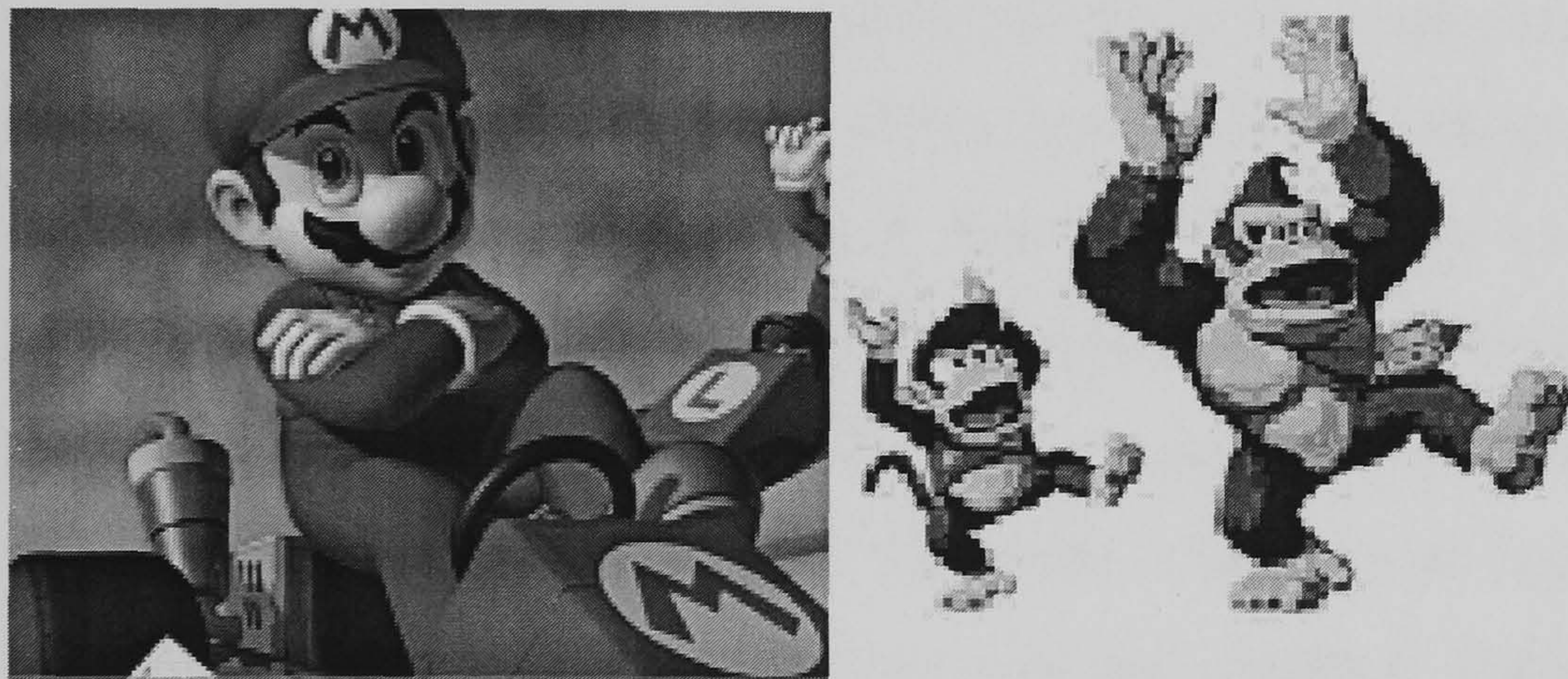
Chinese gamers. Although *The First Myth* did not have advanced technical support and sophisticated content, the game still appealed to a great number of Chinese users.

Perfect World is a 3D MMORPG originating in China in 2006; the game appealed to over 250,000 Chinese users who accessed its server at the same time. Although this game is based on an ancient Chinese story, the world of Pangu, leveraging a rich and diverse Oriental setting, the rules of the game are based on Western mythic format. The co-existing three major tribes of humans, winged elves and were-beasts are thought to follow the design of *War of Warcraft*.

3.3.2 Cute game

‘The ‘cute’ entertainment genre is seen as an aesthetic representation that was once identified with low-resolution, highly pixilated retro games at the time of *Mario Brothers*.

Figure 1. Japan’s *Super Mario Brothers* (left) and *Donkey Kong* (right)



(Source: Nintendo n and New York Times)

However, cute games appeal to young or female players who are different from the base of core users, males between the ages of 15 to 25 (Chan, 2006; Hjorth, 2006). For the game developers, cute games exploit a different market niche than violent games, such as shooting, ‘beat-’em ups’ and fighting. Cute games are designed for social interaction and relaxation. The cute aesthetic characters from simple games have become a pervasive consuming phenomenon within Asian communities. Larissa Hjorth (2006) identifies that the concept of cute games has evolved into one of the Asian online game sub-genres.

3.3.2.1 Japanese cute game

The nature of “cuteness” (kawaii) is apparent and pervasive in the Eastern-Asian market. Apparently, the cute representations are regarded as side-effects of the Japanese easy game. Cute aesthetic design is one of the important elements in these Japanese video games. *Mario’s* representation of innocent playfulness, wit,

and humour appears to come from different material than US designed games. In contrast to the USA' games and their deep affiliation with the military-industrial culture, the design of *Mario* is an attempt to recreate childhood experiences with a new game space, clearly a space for children (Kline et al., 2003, p118).

In addition, Japanese *Super Mario Brothers* and *Donkey Kong* introduced human and animal characters within scenarios and story-lines in games. These easy Japanese games provide enjoyable entertainment and encourage players to pick a character, go on an adventure, and experience a different life. It was a significant development innovation, differing from the previous US dominant 'war game' and 'ball game' types. The Japanese easy game design uses the skills necessary in video-game software publishing for creating absorbing stories and appealing characters. Game design had been largely within the realm of engineers, but is now the task of specialized designers with artistic talent (Aoyama & Izushi, 2004, p120).

The support of Japanese Manga. Differences between US games and Japanese games vary with game genre, aesthetic artefacts and graphic design. Many Japanese games specifically originate from Japanese *Manga* and anime cartoons, differing from the development of American PC games. Cartoons and animated films have provided an important foundation for the development of Japan's video-game industry. Japanese comics, known as *manga*, comprise over one-third of books and magazines sold. *Manga* are for adults with subjects ranging from romance to education, humour, sports, adventure, sex and violence. Comic books have boosted the popularity of animated films and TV series, further reinforcing the strength of *manga* as an integral part of popular culture in Japan. Most of the early TV animated programs in the 1960s and 1970s were based on characters and stories out of comic books. In the late 1970s and 1980s, animated films emerged as blockbusters in the Japanese cinema. The cinema has provided a concrete foundation of Japanese cultural production because of its diversified development in cartoons, animated films and manga (Aoyama & Izushi, 2004, pp121-123).

The fascinating aspect of *manga* is the way in which it works for every age group. Children's *manga* splits into substyles, one being the cute graphic design found in Japanese games. When analyzing *manga*'s visual style, researchers focus on the creatures' big heads that make it easy to show facial expressions. In addition, the big eyes and small mouth present essentially juvenile features when applied to a child or middle-aged made character. Indeed, Japan's *manga* influences virtually all of Eastern game design and a proportion of Western game design, which means

Japanese context deserves a special place in the annals of game-character art (Hartas, 2005, pp124-126).

The characters of the Japanese cute game. The Japanese are probably the best when it comes to creating cute characters originating from the foundation of *manga*. The stature proportion of head to the body size in Japan's games has two proportions: 1 to 2, as in *Super Mario Brothers*, and 1 to 8, as in *Final Fantasy*. For example, Japan's *Mario* is a moustached man wearing a red hat, just a common fellow from our daily life, rather than a muscle-bound hero often found in an epic. *Mario's* appearance of normality allows gamers to believe that the adventure of rescuing a princess from an evil dragon can be completed by anybody, just like *Mario*. At the same time, *Donkey Kong* is not designed as a Western style evil monster, but a gratifying character. In the Japanese game world, there are not any confrontations between either hero and dragon or justice and evil⁸.

In comparison with cartoon characters in Disney World, Japan's *Mario* does not have subtle emotional facial expressions. By contrast, audiences can easily figure out the 'personalities' of characters in Disney world, such as quick-witted *Mickey Mouse*, stubborn *Donald Duck*, or awkward *Goofy*. Japan's cute features present a friendly representation, easily approached by players⁹.

In another way, the stature proportion of 1 to 8 represents the perfect body shape of human beings. The type of game characters in RPG present a supermodel-like look, which is very appealing to Asian players. Players who want to make up for their own dissatisfaction of real life can play a perfect representation in the virtual world. They wish to identify with those 'perfect' looking characters. Western game protagonists, in disparity, present a more flawed appearance showing scars, or obviously unattractive features which would not be acceptable to players in the Asian markets. Generally speaking, Western players are more accepting of beast-like character in games than Asian gamers, according to an observation from Scott Lee, Vice President of *Webzen*¹⁰.

As a result, the Japanese dominance in console game manufacturing, combined with the popular youth culture, make them an integral part of the video game industry in global markets. According to one survey, *Mario* is a better-known character among American children than *Mickey Mouse*. *Pokémon's* penetration into global markets exceeds even that of *Mario*. More recently, the *Pokémon* phenomenon provoked an increasing Japanese interest in associating its global

⁸ Jim S. Tsai, Production VP/ CCO of InterServ International, interviewed in Taipei on 3rd May 2007

⁹ Jim S. Tsai, Production VP/ CCO of InterServ International, interviewed in Taipei on 3rd May 2007

¹⁰ Scott Lee, Vice President of Webzen interviewed in Shanghai on 22nd May 2007

appeal with Japanese symbolic power. Nintendo dominates the video game market through two star game products in the Western market (Akurosu, 1995; Kamo, 2000; Sakurai, 2000; Castronova, 2005). Japanese cute games have easily transcended borders and penetrated the American market. According to Joseph Tobin (2006), the fascinating *Pikachu* extends the study of contemporary Japan by taking seriously transnational media in reconfiguring the boundaries of 'Japanese culture'.

Koichi Iwabuchi (2002) poses an explanation of why Japanese cute game characters have become popular. Cute game features, such as those in *Pokémon*, are 'odourless', purposely designed and customized for the international market, and are easily adapted to cultural contexts, especially in the Western markets. While Western viewers devalue the 'cute' as some weird phenomenon particular to Asian techno-cultures, the use of the cute customization is explained as Asian modernity that seeks to make friendly the human coldness of new technology, in opposition to Eurocentric modernity (Morley & Robins, 1995; Bell & McNeill, 1999; Ma, 1999).

Figure 2. Taiwan's Love box (left) and Korea's Maple Story (right).



(Source: Chinese Gamer and Gamania)

3.3.2.2 Cute games: Children's games

Generally speaking, the popularity of Japanese game software is exemplified by the popularity of such games as *Super Mario Brothers*, *Sonic*, and *Pokémon*. Over 40 percent of US homes owned a video game manufactured by a single Japanese company, Nintendo which maintains the notion that its core market is youth. According to their analysis, loyal consumers are boys between the ages of 8 to 14. Nintendo's strategy is to avoid the most violent and provocative games, and to offer family-oriented entertainment, such as *Donkey Kong*, *Mario*, *Pokémon*, and later *Zelda* (Kline et al., 2003, p119). Provenzo's study (1991) indicates that Nintendo's top ten hits highlighted the pre-eminent role of the active boy-warrior hero and the invisibility or passivity of female characters (Provenzo 1991, p249).

Japan stands in a dominant position in the inter-Asian market and is a country with a modern western representation. Related research examining the relationship of Japan and East Asia has shown that Japan has been successful in exporting its popular culture to neighbouring countries in the region, including Taiwan, Hong Kong and South Korea (Su, 1999; Iwabuchi, 2000; Hu, 2004). In understanding the Asian game culture, the researcher needs to examine the history of Japanese game development. Japan's video games have a perceived sense of status with their history of console and computer game production, which have greatly influenced Asian OLG. Their formats became templates for the replication of online games. For example, *Maple Story*, a Korean online game, is inspired by *Mario Brothers*. *Project Wiki*, a *Webzen's* 3D cartoon rendered MMORPG, has characters that resemble the creations of Nintendo's *Zelda*.

The rise of the cute genre, such as *Maple Story* and *Kart Rider*, can be seen as no longer an aesthetic representation but a burgeoning subgenre that plays on the culture of nostalgia (Chan, 2006). *Kart Rider*, a Korean cute racing game, released in 2005, has become a sensational hit in the Korean market. The game is presented in a simple fashion: the goal of the game is to drive the kart as fast as you can to beat the other players. There are an estimated 15 million users of the Korean version of *Kart Rider*, and over 25 percent of South Koreans have played the game at least once. This was also the first game to outsell *WoW* in South Korea. *Kart Rider* has been consistently successfully in attracting new players under the age of 15 years to join online games (Hjorth, 2006).

Maple Story, a popular multi-player online games (MMOG) released in 2003, makes use of 2D capacity scenarios and scrolling story lines. To earn experience points, the avatar has to smash monsters designed in cute representations, such as mushrooms, rabbits, and snails. In '*Maple Story*', players can experience an adventure journey, where in they can defeat monsters and develop the skills and abilities of their characters, as in typical RPGs. Quests are comprised of varying tasks that players must perform in return for experience points and possible rewards¹¹. A large number of quests require the player to retrieve a certain amount of spoils attained from monsters or to traverse an obstacle course. Jump quests in games are a unique type of quest in which a character starts at one area of a map and uses timed jumps to get from one platform to another specific platform. The player can jump off the platform when attempting to avoid enemies and obstacles. The game has

¹¹ There are over a hundred different available quests, each with varying prerequisites; most quests may require the player to have attained a certain level or to have completed another particular quest.

successfully attracted new players under the age of 15 to join online gaming because it provides an easier way to play games. The cute game genre has been a hit in the intra-Asian markets including South Korea, Japan, Singapore, and Taiwan¹². The North American (Global) version of *Maple Story*, for players mainly in North America, Southeast Asia, and Europe, has over three million players. In 2007, *Maple Story* had a combined total of over 50 million subscriber accounts for all of its versions.

3.3.2.3 Cute games: Girls' games

Cute games are also presented in a different texture: girls' culture. Users in a cute online game can live, work, fight, chat, raise a pet, cast magic spells and most importantly make friends with other avatars. The social interactivities and multi-aids activities inside cute games appeal to the girls who are not interested in violent fighting and military raids. This type of game provides friendly user interfaces, such as easy manual skills, for the new gamers who may not be familiar with new technologies. In addition, cute virtual items have been specifically designed to satisfy the demands of users who have a fetish for finery and delicacy of artefacts¹³. Now researchers have identified an intense level of cooperative interactions and community as key pleasures of digital games. While social activities may be thought of as feminine pleasures, and as such are more associated with female game players than male players, researcher Aphra Kerr (2006) argues that the growth of online game-play in all genres has confounded previous simplistic assumptions (Kerr 2006, p118).

A stereotype of video and computer games is that they are part of the male domain. Despite altered gender representation, game developers state that the inclusion of female characters is based upon the premise that they appeal more to boy gamers (Schott and Horrell, 2008, p39). Kristen Lucas and John L. Sherry's research reveals that female players are less likely to enjoy game-play situations that involve three-dimensional rotation or games played for competition. The main reason is because they gained a lesser sense of control than they did in other interpersonal or play activities (Lucas & Sherry 2004, p517; p519). In addition, according to Gareth Schott and Kirsty Horrell, girl gamers do have a preference for third-person role-play games containing animal/creature-based characters rather than

¹² Hank Su, CFO and Spokesman of Gamania Digital Entertainment, interviewed in Taipei on 3rd April 2007

¹³ Hsin Yu Lin, Manager of Investor Relationship Dept of Softworld of International, interviewed in Taipei on 12th March 2007

highly gendered human figures. To attract more female users, a game must be designed with different considerations, like a mystery to be solved, rather than a land to be conquered (Schott & Horrell 2008, p39; p50).

Cute games are regarded as popular interactive entertainment for female users in Asian urban cities. The newly emerging user group is different from the traditional core users. While the competition of the Asian game industry has become intensive, game developers are forced to appeal to the new users. Diversified forms of games, developed for different groups of users, have propelled a growing Asian online game market.

Ragnarok Online. *Ragnarok Online (RO)* provides 2D cute representations and a 3D virtual space for navigation and exploration. *RO*'s storyline comes from Nordic mythology. The cute game was developed to emphasize social interactions and mutual aids, as opposed to the violent fighting game, *Lineage*, where users are permitted to kill other players for upgrades during game-play. Teamwork was also encouraged during game-play, where users have to incorporate each other for upgrades. For example, a collective task is designed for the player's mutual aids. Sometimes, completing a quest may require swordsmen to kill monsters, magicians to supply energy, and merchants to provide equipments for battle¹⁴.

In 2003, *RO* was a success in Taiwan, with around 350,000 online users playing the game. Most importantly, 30 percent to 35 percent of users were females in their mid-20s; the structure of audience differed greatly from the traditional core users who are males between the ages 15 to 25. This is probably because the premise of the game was based on a friendly environment, while other games, such as *Lineage* and *Legend of Mir*, focus on violent activities, such as military raids and killing enemies. The cute game designs appeal widely to gamers not only in Eastern Asian markets, but also the US and European markets. *RO* has been exported to the largest number of countries.

However, *RO* was not successful in the Chinese market. Chinese gamers prefer muscular strategy PRGs because competition is more popular with their users than companionship. The core Chinese players are residents of China's 'second-tier' cities where the emphasis in lifestyle is the 'fight for survival' compared to the lifestyle of 'enjoyment' in the first tier cities¹⁵. While Asian gamers in wealthier areas are looking for casual and relaxing contents, Chinese prefer combat games

¹⁴ Marten A. Lee, Manager Marketing & Product Dept of Game First International, interviewed in Taipei on 18th April 2007.

¹⁵ Hsin Yu Lin, Manager of Investor Relationship Dept of Softworld of International, interviewed in Taipei on 12th March 2007

which provide a virtualized social competition through killing and fighting, satisfying the demands of gamers who cannot live according to their desires¹⁶.

Love box. *Love Box* is a popular Taiwanese cute MMORPG. The simulation MMOG is designed to appeal to young females. *Love Box's* game rules stress social interactivity. Players are encouraged to keep their experience points, evaluated by indications of beauty, attraction, quality of life, and passion. The avatar becomes bankrupt once any category of the experience points decrease to zero. The cute game is circulated among young female users in the Pan-Asian markets, such as Tokyo, Seoul, and Taipei. According to the game developer, the game concept was borrowed from the format of Japan's *Princess Maker*¹⁷.

Princess Maker was a series of nurturing and love simulation computer games. The Japanese series game provided a storyline based on fictional worlds, ranging from a medieval world to modern Japan, wherein gamers play the role of parents raising a mysterious girl. Numerous factors decide whether the young girl will become successful in her life, varying from making friends, finding partners, raising children, and selecting a job where she climbs career ladders. Various possible endings open up for players a fresh entertainment experience while other traditional console games or computer games only provide a few endings. Furthermore, the process of nurturing a child from a teenager to an adult inspires an inception of the genre of life simulation game in intra-Asian markets.

Japanese scholar Inuhiko Yomota (2007) explains the phenomena of girls' culture, by giving an example of *Pretty Soldier Sailor Moon (PSSM)*, Japan's console and arcade game based on the anime series in Japan. *PSSM* is generally credited with popularizing the concept of a team of magical girls, as well as the general emergence of the magical girl genre itself. The story of the various *PSSM* meta-series revolves around the reincarnated defenders of a kingdom, and the evil forces that they battle. The protagonist of *PSSM* is an ordinary middle school girl, depicted as a well-intentioned but underachieving crybaby. Interestingly, the evil side consists of grown-up females with well-rounded physical bodies. According to Yomota (2007), cuteness has become a subculture in Japan, in which a girl's innocence is highly admired as a unique form of beauty, delicacy, and refinement; this is in contrast to the adult world in which maturity is a symbol of impurity and complexity. Although cute representations appeal to young girls globally, Western females are never reluctant to bid farewell to *Hello Kitty* after reaching their

¹⁶ Wang Le, Section Producer interviewed in Beijing on 15th May 2007

¹⁷ Eric Chen, Marketing & Operation Dept. Manager of Chinese Games International interviewed in Taipei on 6th March 2007

twenties, while Japanese and other Asian young female adults still hug these cute figures.

The above examination shows that Asian online cute games have received strong influences from the context of Japanese console and arcade games. The Japanese influence can explain why cute MMORPGs easily cross cultural borders and are accepted by Asian gamers, including the youth groups, as well as young females, up to the age of 20 years. The politics of the 'cute' are no longer so simplistically categorized, as when they were linked solely to the stereotypical young and female users in the Asian market. As Hjorth (2006) notes, women have become more active players of games.

However, Japanese types of cute games are not well accepted by the Chinese market. From the view of some Chinese game publishers, cute design is not a key element to appealing to the majority of players. Likewise, quality of game-play (how well a game performs in technical and aesthetic forms) determines whether a game product will succeed in a market. For Chinese game developers, cute games are not regarded as a subgenre, but rather as a representation of aesthetic artefact¹⁸. Nevertheless, the empirical evidences in this research show that cute games actually have possessed the various socio-cultural connotations associated with images and narratives in the Asian-Pacific market. 'Cute' originates from Japan, is designed for global markets, and has eventually been widely accepted by Asian users, especially in wealthier metropolitan areas. Cute is a burgeoning subgenre, while a great number of new users are attracted to join the imaginary worlds. Most importantly, Japanese game culture does shape the Asian OLG industry, which provides a great influence both in art design and game genre. Asian online computer games with deep Japanese contexts reflect on the contents and images of Korean or Taiwanese produced MMOGs¹⁹.

3.3.3 *Wuxia*

According to one report, Chinese *wuxia* themed games (martial arts game) constitute one-third of the online games played in China (People's Daily Online, 2004; China Busy, 2004). South Korea's Actoz Soft created *1000 Years*, an Asian Martial Arts MMORPG, which presented a great civilization referring to a familiar topic from classical Chinese literature. Versions of the game are distributed simultaneously in South Korea, Taiwan, and China. The game has consistently ranked among the top five most popular online games in China from 2001 to 2003.

¹⁸ Marketing manager of Shanda, interviewed in Shanghai on 20th May 2007

¹⁹ Angus Huang, Assistant to President and Company Spokesman of Softstar Entertainment, interviewed in Taipei on 27th March 2007

Such versions of Asian martial arts games have become a territory-specific genre that exists among East Asian cultures, especially in Chinese communities.

Martial arts genre (Wu shu) subdivides into kung fu dramas and sword-fighting dramas (*wuxia*). The action is usually set in the distant past, reaching back to as early as the 7th century Tang dynasty, or even earlier. *Wuxia*, literally meaning 'martial heroes', is a sub-genre of the quasi-fantasy and martial arts genres in literature, television, and cinema. A martial artist who follows the code of *xia* is called a swordsman. Swordsmen seek justice. Japan's samurai *Bushido* tradition, England's knight chivalry tradition, and America's gunslinger Western tradition all share some aspects of China's swordsman *xia* tradition. *Wuxia* figures prominently in the popular culture of Chinese-speaking areas by way of novels, *manga*, films and TV series. Characters wear period costumes and use period props like horses, paper lanterns, ink brushes, talismans, incense sticks and ancestor plaques. Sets are filled with Chinese architecture, and include such places as inns, markets, temples, castles within towns, cities, and the wilderness. Social classes include farmers, merchants, tavern and inn keepers, tradesmen, scholars, government officials, royalty, and swordsmen. *Wuxia* is based on true-life martial arts, and the gaming genre elevates the mastery of this art to fictitious levels of attainment. Sword, bow, and staffs are the weapons most commonly used by combatants (Curtin, 2007, p144).

Bolter and Grusin (2002) coined the term 'remediation' for the process in which a medium 'appropriates the techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real' (Hunt, 2002, p196). Fight games rely on remediation of four media forms: Kung fu films, anime, *manga* and wrestling. But this is not simply a successive linear process, because media cannot employ remediation on each other. An apt analogy is to think of the interface between kung fu and beat-'em-up games as 'remediation'.

Martial arts pervade a number of gaming genres, most notably third-person role-playing games, where the central character's combat skills have become part of the game-play, the genre is the beat-em-up, and narrative is largely relegated to the extra-textual back-story. The game itself comprises a series of fights within a tournament structure, culminating in a battle with the main leader, usually a malignant patriarch (Hunt, 2002, p198). In contrast to Chinese *wuxia* games based on a storyline, Japan's *Tekken*, one of the most popular fight game series, provides a range of fantasy characters who thoroughly know one variety from a range of Japanese, Chinese, Thai, and Korean martial arts. The focus of fight games is on the notion of authenticity and the aesthetic (Hunt 2002, pp201-202). In addition, the

meanings of Chinese *wu shu* (martial arts), with graceful sweeps and wide, extravagant stances, is more difficult for outsiders to learn. Researcher Leon Hunt (2002) argues that such principles, fundamental to Chinese martial arts, mean very little in digital space except as aesthetic surface (p202). Chinese *wuxia* in the game world presents a narrative texture rather than a fighting game, where the gamer creates a role with a special identity based on Chinese historical and social cultures.

3.3.3.1 Taiwanese *wuxia* game

For Taiwanese game developers, the *wuxia* topic provides a unique back-story for game creation. Either popular fiction or a widespread storyline is seen as an important element in developing *wuxia* themed games. Taiwan's game developers were the first to adapt knight-errant martial arts tales into computer games in the 1990s. *Royal Sword* was Taiwan's first *wuxia* themed RPG in a romantic narrative. Another *wuxia* PC game, *Fighters of the Enchanted Sword*, is based on originality and is the most successful throughout the entire Chinese-speaking world, including Taiwan, Mainland China, Hong Kong, Malaysia, and Singapore. *Fighters of the Enchanted Sword*, released by Taiwan's Software in 1995, is known as the first computer game based on a *wuxia* romance. As there was not at the time any serious competition,, the game sparked a 'craze' of monumental proportions in Mainland China, where 600,000 copies were sold, in addition to the 200,000 sold in Taiwan. In addition, Chinese Hunan TV also produced a series TV drama series based on this martial arts game. Before 2007, *Fighters of the Enchanted Sword* was also the most used online game title among Chinese users (Lui, 2000; Chan, 2006). The intellectual property of *Fighters of the Enchanted Sword*, ranged from comic, music and novel, has become a brand for Software, creating profits of at least US\$ 30 million from licensing by-products in the past 12 years (Commercial Times, 25th July 2007).

Wuxia games are also developed with themes of fighting simulation. It has become a source for developing genres of beat-'em-ups or fighting games. From a different perspective, Taiwan's *Interserv* developed a restored *wuxia* world by referencing Jin Yong's fictions. Its game focused on character identity and brought special effects of fighting during game-play, where role characters have their own combat manoeuvres and powerful superman abilities, measured in strength and agility. Gamers' fighting pleasure is drawn through action and performance delivering virtuous special moves²⁰.

²⁰ The view is supported by Jim S. Tsai, Production VP/ CCO of InterServ International, in Taipei on 3rd May 2007

Likewise, game titles based on popular *wuxia* novels, such as Jing Ying and Haung Yi's books, capture the market more easily. Taiwanese game developers are apt to pick up *wuxia* themed topics, originating from popular novels. In 2001, Taiwan's *JinYong Online*, based on Jin Yong's *wuxia* tales, gained great popularity in Chinese market as well as in Taiwanese market. According to data compiled by Chinese Gamers, a Taiwanese game publisher, the subscribers in these two markets consisted of 1.8 million in Taiwan and 2.5 million in China. The success is due to Jin Yong's work which has a great reputation in Chinese-speaking society. Jin Yong is widely regarded as the finest Chinese *wuxia* writer, a reputation based on some 15 *wuxia* novels and short stories he wrote between 1955 and 1972.

Figure 3. Japan's Sangoku PC game (left) and Taiwan's wuxia MMORPG based on Jing Yong's work (right).



(Source: Koei and Chinese Gamer)

In Jin Yong's books, several types of martial arts are repeatedly featured, with many of these also existing in real life, such as the *Shaolin* and the *Wudang*. Based on the foundation of the game industry, Taiwan's game developers are in the unique position of having the sophistication and advanced skills to deploy a Chinese fantasy world, filled with swordsmen, Buddhist monks, and Taoist priests. Taiwan's developers have the reputation of being able to create an Oriental imaginary world with Chinese characteristic elements, such as classic historical novels, *wuxia* (chivalric) novels, and Chinese ancient legends, differing from Western medieval adventure-based fantasy MMORPGs. These advantages help Taiwan's game firms maintain their competitiveness in the East Asian market.

3.3.3.2 Chinese *wuxia* game

According to Philip Chang, Chairman of Taiwan's *Larger*, Taiwan and China have very similar structure of gamer base, although the sizes of the two markets, 4 million users and over 400 million users respectively, cannot be compared. The *wuxia* game, the subgenre, constitutes at least one-third of online games in each of

the two markets²¹. When further analyzing the top ten selling online game titles in the Chinese market in 2006, we see that almost half of them are based on Chinese topics or *wuxia* stories. The core of Chinese gamers does have a preference for these particular contents, providing a huge market for the game industry. These Chinese-produced games have been formed by Chinese tastes and Chinese user habits.

If game-play had been developed without being embedded with the tastes and preferences of its targeted market, it would have been impossible to make profits in the greater Chinese market. *Wuxia* games easily appeal to the Chinese male players, because it creates a virtual world, where everyone is seeking to be the martial arts champion whose skills can knock out other avatars. Chinese players prefer pretending they are swordsmen in ancient China seeking justice, in contrast to Western gamers who play games normally just for fun. In the Western game world, a player in a game such as *The Age of Emperor* can hold a decisive advantage once he gets technology faster than other gamers who may stay in the age of stone or the age of bronze. Also in the context of gamer mindset, Chinese gamers believe that traditional ancient two-handed swords, such as the Heaven Sword and the Dragon Sabre (from Jin Yong's *wuxia* novel), are much more powerful than arrows and bullets in their imaginary world²². The popularity of a game in the Chinese market depends on good storylines borrowed from Chinese literature or popular *wuxia* themed stories; however, the preferences of gamers are also one of the important elements to be considered.

China has become a market shaped by the preferences of the gamer. We examine *Fantasy Westward*, the case of how a 2D Chinese-produced game appealed to over 2.5 million users. The game, referring to the ancient travels along the Silk Road, has been remodeled twice. The game's success shows that Chinese game developers have caught onto the fact the function of social interaction is very important for Chinese users. This realization stems from 2003 when Chinese people were limited in their mobility due to the outbreak of SARS. Therefore, the Internet café became a good access point for Chinese people to maintain social interaction. Since then, games have provided chat windows for players enabling them to call for groups and seek online friends. In-game chat boxes, normally seen as a small window in other games, are magnified to the same proportion as the virtual adventure world. Easy to use chat window caused online use to peak in the summer

²¹ The interview conducted in Taipei on 19th Apr 2007

²² Personal interview with Eric Chen, manager of the Marketing & Operation Department of Chinese Gmaers, in Taipei on 2007

of 2005²³. The chat function appealed to a large group of users who prefer online chat and social interactions to killing monsters and fighting with enemies, in contrast to the core players who exhibit a competitive character²⁴.

Using 2D technology, Chinese produced games provide MMORPGs with a range of Chinese cultural artefacts and storylines. The scenarios with an insertion of profound cultural elements are well accepted by a mass of Chinese users. For the players, it is much easier to follow an indigenous game in narrative, functional and experiential terms. In 2005, *Zhengtu* was significant because it introduced a new in-game system which caught the preference of Chinese gamers, fighting and combating. Players can pay for gaining higher experience points, normally earned from an accomplishment, including player killing or completing a quest. The new game rules have overturned old in-game systems, which have caught up with Chinese players' willingness to pay for higher positions within a hierarchical *wuxia* virtual world.

China has become a major market with the success of its emerging industry based on the growing number of users. More importantly, China has been transformed, since 2005, from an importer into an exporter of game products. However, Chinese-produced games are only accepted in the Greater Chinese market, including Taiwan, Hong Kong, and the Chinese Diaspora communities in other Asian countries. The burgeoning *wuxia* game exclusively exists among Chinese game producers, Chinese/Taiwanese operators, and Chinese/Taiwanese gamers. It is a process of production, reproduction, and consumption, which simply exists in Chinese communities. Tsai's research (2005) poses an explanation that the specific genre generates a social construction of creative capital interlinking interactive relations of production, consumption, and reproduction.

3.3.3.3 Sangoku.

Romance of the Three Kingdoms is a story familiar not only to the Chinese but also to other East Asians. In 2008, two films based on this ancient historical novel were released. One is Daniel Lee's *Three Kingdoms: Resurrection of the Dragon*. The other, *Red Cliff*, directed by John Woo, is the most expensive Asian-financed film to date, with an estimated budget of US\$80 million. At the same time, *Red Cliff*, as a Chinese-produced MMORPG, is circulating in the Chinese and the Taiwanese markets.

²³ The view was supported by Frank Xing, Senior editor, conducted via Skype, on 27th May 2007

²⁴ A personal interview conducted in Shanghai on 20th May 2007

In the past twenty years, more than 100 different types of games from Japan, Taiwan, and China have been adapted from these series of stories, varying in levels of historical accuracy and loyalty to the original novel and popular tradition. The best-known games titles related to Sangoku are the works of *Koei* (Japan), which released *Romance of the Three Kingdoms* Strategy 11 series. Most of their games products target the Asian market. *Koei's* version has become a model for the Sangoku genre which other Asian game developers follow. Besides that, *Koei's* strategic and role-play games have been long-lasting and popular among the East Asian gamers²⁵.

In July 2007, *The Legend of the Three Kingdoms Online*, a Taiwanese-produced tactical MMORPG, ranked number 1 in the top 10 best-selling game titles in the Chinese market (17173.com). The *Sangoku*-based game title is popular both in the Chinese and the Taiwanese markets. In August 2007, the game appealed to 60-70,000 current users whose average age is over 25 years in Taiwan, despite its 2D game design. This game provides a unique war system in which players, with one another, lead troops to fight against the hostile side for control of fortress-like strongholds and even entire cities. Based on an ancient chaotic time, players experience a realistic war in game-play, forming their own armies, purchasing armour and weapons. The player is encouraged to raid any of 48 cities, setting up their own nation and experiencing a large-scale battlefield. As expected, the game appeals to a great number of war-fanatic male players²⁶. From the viewpoint of South Korean game firms, *Romance of the Three Kingdoms (Sangoku)* is a good source to be adapted into game-play. In addition, South Koreans understand Chinese topic games easily appeal to a great number of Chinese gamers. In 2007 and 2008, Korean game firms, *Wemade* and *Webzen*, aiming at the Greater Chinese market, separately released 3D rendered MMORPGs based on the topic of *Sangoku*, *Changchun* online and *Kingdom of Warriors*. *Sangoku*, based on Chinese historical stories, is popular in East Asia where countries and regions are influenced by Chinese and Confucian culture. The narrative has been adapted into different cultural products, ranging from TV drama, comic, cartoon, movie to games.

Why has *Sangoku* become a popular topic for Asian game firms? According to the observation of a Taiwanese developer, there are two good reasons: First, the

²⁵ Its top four strategic games are *Romance of the Three Kingdoms*, *Nobunaga's Ambition*, *Bandit Kongs of Ancient China*, and *Genghis Khan*. *Koei's* most popular role-play games include *Uncharted Waters*, *Jorney West*, and *Dynasty Warriors*. Other than *Nobunaga's Ambition*, which originates from the background of Japanese samurai, most of the game titles are adapted from Chinese historical novels.

²⁶ The view was supported by Jacky Chang, Vice General Manager of second division of Userjoy Technology, in Taipei on 1st Aug 2007

Chinese historical novel is studded with numerous ‘mini-stories’, many of which could be developed into full-length novels. The plots involved in the historical battles happen among three kingdoms and provide vivid and comprehensive depictions. *Sangoku* contains 50 to 60 characters, each of whom performs a different role in the battles, ranging from warlord to general to military advisor. *Sangoku* is a good source for creating a large game. Second, the story is based on the scenarios of the Chinese Song Dynasty around hundred years ago. The plots and the characters have become a familiar topic for the Chinese, further shaped by the influence of the Confucius value sphere, including China, South Korea, and Japan. The well-known narrative topic provides abundant material for game developers for creating a unique platform of scenario writing and drawing to deploy a virtual world, just as *the Lord of Ring* is the source in Western MMORPGs. The topic of *Sangoku* has appeared throughout the East Asian market²⁷.

3.4. The geography culture within Asian online gaming market

When dominant OLG players, such as *Blizzard* and *Electronic Arts* (EA) enter the global market, Asian game firms face intense competition. American MMORPGs, with heavy investments attract a mass of Asian users, challenging the ecology of the Asian OLG industry which has long struggled in 3D game production. Simple content with localized revision immediately overwhelm these Asian core users who enjoy Western militarized entertainment where an adventure has to be completed through fulfilling quests and killing enemies. At the same time, Asian fantasy MMORPGs borrow the Western storyline, providing the content preferred by Asian core players who crave killing and capturing territories. These are a big successes in the regional market. These Asian games are presented as ‘remediation’ with combinations of American game format and Asian popular culture.

Japanese adventure games have successfully attracted Western male juvenile players who have become its loyal consumers. Unexpectedly, cute games have created a new market niche, appealing to young females living in wealthier Asian areas, while it has successfully captured the interest of male juveniles in the US and European markets. Originally, Japanese cute characters were designed to be culturally unrecognisable in order to cross the borders between the geo-cultural markets. Gamers cannot detect that these playable contents are Japanese designs since they have been adapted to other cultural contexts, especially for the Western

²⁷ Personal interview with Eric Chen, manager of the Marketing & Operation Department of Chinese gamers, in Taipei on 6th March 2007

markets. Within the East Asian market, girls' games, with the features of modern elements, attract young females who enjoy modern life through playing the role with good looks and having frequent social interactions in a virtual world. While Western game developers develop Barbie games and heroine adventure games only for girls, Asian developers design cute games to encourage the young female to make friends, decorate their homes, and engage in happy hours of leisure activities. In contrast to the serious games, which are offensive, competitive and complex, the lovable virtual world filled with cute design, warm friendships, and pleasant tasks is well-accepted by Asian urban females who seek an enjoyable time. Cute games have been circulated throughout the Asian markets, becoming a common interest of gamers and further uniting Asian urbanities.

However, the cute game for girls is a genre that does not appeal to the mass of Chinese gamers living in Chinese rural areas. The games based on Chinese topics or *wuxia* stories have been the best-sellers in the Chinese market. For meeting the fashions of Chinese young males, game developers reformulate the content of *wuxia* games with specific designs of deep cultural influence. Now, China has become the largest market to produce, circulate, and consume these specific types of games. *Sangoku* has become a popular topic for Chinese game developers. The storyline provides an abundance source for game creation. The historical stories have been imbedded into the lives of Chinese people for many hundreds of years, and are interwoven deeply into Chinese culture and tradition. Differing from fantasy games and cute games, which are designed to be market oriented, Chinese topic games are based on the preferences and tastes of Chinese gamers and has formed a Chinese market in the Chinese cultural sphere. The Chinese market has distinguishing geo-cultural features, shaped by a 'Confucian' cultural influence. Chinese audiences express different attitudes toward the cultural products, such as the appeal for topics based on knight-errant martial arts tales (Hungtin, 1993; Curtin, 2007).

3.5 Conclusion

Upon examination the developments of game genre and format in Western and Asian two different markets, we see that OLG industry's integration into a global market has presented a different model than that of the video game industry. The particularities of console game products can be recognized as a transnational cooperation in the formation and development of its production with a complex hybridity of Japanese and Western cultures (Consalvo, 2006, p117). However, the above discussion associated with the contexts of Asian game culture shows the Asian

OLG industry exists in an active intra-regional flow of games between South Korea, China, Japan and Taiwan, existing as a geo-linguistic market paradigm.

First, according to Kline et al. (2003), the US games have a close relationship with the US military and defence industries. These institutions have deeply influenced the digital game culture, evolving the concept of ‘military-entertainment-complex’. Although different genres have been developed, the market targets male users between the ages of 15 to 25 years. Related research implies that game developers ignore female audiences on purpose, because the game market is large enough without them. When facing the heavy cost of investment, it is not necessary for these game firms to develop a new genre with a possible higher market risk, but to amplify the existing genres, such as fighting and shooter, to secure the market. Undoubtedly, the fantasy games based on medieval age story and relying on stereotypical narratives of conquest and combat have no cultural barrier to the Western and Eastern core users.

Second, many diversified forms of OLG, whether a male-centred or a modern life-based or Orient-oriented virtual world, are created for the Asian market. With an inception of Japanese game cultures, Asian cute games with casual or easy content with delicate artefacts attract a great number of new users, such as women in their 20s and teenagers of 10-15 years, while the Chinese *wuxia* themed games are exclusively circulated in the Greater Chinese market. This implies that the commodity function of Asian-ness is emergent in the intra-regional networked culture.

While further examining the structure of audiences in the Asian market, the preference and taste of users residing in wealthier Asian areas and the users living in Chinese second-tier cities are divergent. These urban audiences have sophisticated tastes of game products, ranging from a man’s nomadic journey in a medieval age, to a boy’s adventure and a girl’s nurturing and love simulation games, further breaking the markets into a fragmented structure of audiences who are regarded as diversified and changing. Chinese gamers prefer those games based on Chinese topics, such as the *wuxia* novel or historical classics, which presents a homogenous base of gamers. At the same time, the cute game, stressing concepts of mutual aid and social interaction has difficulty evoking the interests of Chinese users.

Finally, Chinese OLG presents particular content based on Chinese cultural elements, including histories, legends, social customs, and literature. Martial arts games have become the mainstream of MMORPGs in the greater Chinese market. In addition, specific Chinese topics are constantly being adapted into games. This is

due to the narrative topics based on popular *wuxia* fiction and Chinese classics which have become a market guarantee.

Following successful experiences, Chinese game developers continue to provide content exclusively targeting Chinese gamers in inner cities or rural towns. On the other side, Chinese oriented games strongly shaped by cultural force have hindered the penetration of the non-Chinese-speaking audiences, while Korean games with complex mixing, western narratives and Japanese artefacts, have an appeal to gamers not only in Asia but also in the US and European markets.

Further examination of the structure of the Asian OLG market shows that it is under a global-regional-local analytic framework. The case of *WoW* implies a global master narrative media system is operated in different Asian markets. Generally, the majority of Asian OLG, such as Western fantasy games and cute games, is market-oriented. They were originally designed for the Western market, and then spread to the Asian market. Only the *wuxia* game is regarded as a product based on Chinese popular culture distinguishing a different national cultural market. Chinese topics and *wuxia* games based on the preferences of Chinese users have formed the Chinese cultural market. Three types of games reflect a complex framework of a three-level set: global, regional, and national in the Asian online game market. At the global level, there is simple game content in the global market; at the regional level, game titles with special localized content compete in the local market; and at the national level, Chinese topic-based content of games in a national cultural market. It is worth noting that a national cultural market here does not mean local in this research. The role of a local market in the regional market will be discussed in subsequent chapters.

Chapter 4 Theoretical Framework

4.1 Introduction

This chapter examines the issues and arguments concerning the nature of media production, the nature of the relationship between global influence and local media in media and international communication studies. Through drawing these theories and arguments together, a global-regional-local theoretical framework is used to analyze the transformation of the OLG industry in Asian markets under global competition. The chapter aims to establish a coherent theoretical approach to analyze the research subject.

My research examines the processes of commodification in the media industry from political economy approach. The institutions of cultural production, harmonious or hierarchical, and the creative personnel, independent or dependent, are all examined according to the context of established Western researches. The political economy approaches provide a way of analyzing the dynamics of the industry in relation to cultural production. This approach has produced many influential analyses of the forces of corporate concentration and conglomeration that are today producing media empires. Different forms of corporate concentration in media industries, both growth and concentration, are central features of the contemporary communication map. The recent waves of mergers and alliances across media have expanded both vertically and horizontally. This approach is applied to examine the newly developing OLG industry, especially in light of the intense competition that has emerged in the intra-Asian market.

In addition, much scholarship regarding labour agglomeration and transaction networks is written in response to the successes of various cultural industries. Cultural industries are highly networked and operate in geographic clusters. An important reason for this is that innovative concepts are always linked to the idea of place-based advantage. Economy and sociology research has already paved the way for researches on how globalization and agglomeration processes are complementary under specifiable social and economic circumstances.

Secondly, the theoretical accounts are based on globalization in terms of economy and sociology studies to explain the nature of social and economic transformation in Eastern Asia. When global production networks are fundamentally incorporating new organizations and territories, key components within this process are the outflow of capital from old industrial centers into newly industrializing countries and the growth of transnational corporations. At the same time, the trend

of capital mobility has led the transnational enterprises to look for vertical synergies to minimize costs and maximize profits, which has expanded into a complex collaborative relationship between buyers and suppliers.

Finally, political economy is often used as a shorthand term to examine ‘studies of production’, ignoring the huge differences between attitudes toward production taken by cultural and media economics. Specifically, cultural studies approach provides a way to consider the manner, in which consumers want and get from culture, shapes the conditions of the cultural product they are consuming. It is necessary to understand the wider commercial and cultural forces that circumscribe and penetrate the material and practice of media organization and producers (Cottle, 2003, p4; Hesmondhalgh, 2007). Therefore, cultural studies approaches to media production may downplay the question of how cultural industries affect game production to act in a mediating way between the private and the public.

4.2 Media production

When discussing the business processes of media, creating, producing, marketing and distributing, different forms of corporate concentration are central features of the contemporary communication map. Some literature has tried to focus specifically on media organizations, media production environment and practice. This reflects a study within media production research. In contrast to previous production studies, more recent studies shift to a differentiated understanding of new ecology, the dynamics and relationships between its organization’s cultural forms and associated practices. Most importantly, intense market competition, corporate conglomeration and convergence, new technologies, digitalization, and globalization are necessary points of discussion for understanding the operations and the structure of today’s organization structures, workplace cultures, and professional practices (Cottle, 2003, p6).

4.2.1 The power of institution

Research into media organization and production provides a perspective of how organization and production at global-levels involves complex constraints and influences (Cottle, 2003; McChesney, 2003). From the perspective of media production, the issue of an overarching definition of “cultural industry” is raised. Nicholas Garnham (1990) contends cultural industry refers to those institutions which employ the characteristic modes of production and organization of industrial corporations. The cultural industry produces and disseminate symbols in the form of cultural goods and services, especially in the form of commodities including

newspapers, periodicals and book publishing, record companies, music publishers, commercial sports organizations, etc (Garnham, 1990, p156).

Researcher Justin O'Connor argues that workers within the culture and media industries become ever more significant in contributing to social change, in what he calls "an area of post-scarcity", when "the cultural hierarchies are much more fragmented and plurals" (O'Connor, 1999, p7). Keith Negus's study (2006) concerns the contribution of those personnel who derive their livelihoods from involvement in the production of music, film, art works, theatre, poetry, and novels, and who claim a particular mediating role in 'the creative process'. There, certainly, exist arts and entertainment corporations occupying a significant position between artist and audience (Negus, 2006, p201). Nevertheless, while cultural products become a commodity in the market, a different interpretation of creativity is posed in the cultural industries. Creative practice can be subtly or overtly shaped by commercial agendas, production routines, and market routes (Hesmondhalgh, 2007, pp56-57; Negus & Pickering, 2004).

Keith Negus and Michael Pickering explain the process of commercial creativity:

Songs, movies and novels do not, in general, appear carrying definitive commercial qualities or characteristics. A process occurs whereby they are made commercial and this is why modern economies employ so many people in marketing, publicity and public relations...(Negus & Pickering, 2004, p57).

It is hard to ignore the truth that creativity is about to bridge the ideological divide between rationality and intuition, when creativity enters the processes of commodification. Actually, creative personnel are always constrained by media organizations or institutions which practice under the influence of social and economic dynamic power, when they shape cultural resources to a new purpose. If media organizations and institutions gain any advantage from their initial skill, it keeps on imitating the model so as to apply itself in different ways in different contexts to maximize the profits. These have themselves to be understood for their relevance and value to the process of adaptation.

Also, the hierarchy can be found within media organizations. Creative personnel are organized hierarchically, in terms of pay and status, in the following way: owners and executives, creative managers, marketers, then most primary creative personnel, technical craft workers, and unskilled and semi-skilled labour (Hesmondhalgh, 2007, p65). Although primary creative personnel have come to be recognized as taking a creative role, owners and executives, who have the power to 'hire and fire' personnel and set the general direction of company policy, still have a

role in the conception and development of texts. Therefore, creative freedom or professional autonomy are not pre-given entities of absolute value rigidity set against media organizations, operational routines, or market criteria. For example, Negus' research (2006), a case study of rap music (a successful African-American music genre), shows that media organizations tend to reinforce existing patterns of ethnic inequality in the US society as a whole, by marginalizing rap as compared with rock (Hesmondhalgh, 2006, pp75-78). Researcher David Hesmondhalgh (2006) also questions the power of independence or autonomy as media producers claim they have, due to the fact that economic and ideological filters really play important roles in the process (Hesmondhalgh 2006, p86).

Furthermore, the attainment of competency in the creativity industry, a process of creativity similar to commodification, has to be conformed to the form of value judgment of the social context (Negus & Pickering, 2004, pp17-18). Likewise, market forces also play an important role in the process of media production. Raymond Williams (1981) reminds us that the movements of the market cannot be separated from movements of social and cultural relationships, when the media producers try to balance between the market demand and the creator's intention. It means that the cultural market is effectively moved by social change, in which new social classes, new age-groups, and new minorities have emerged. Even so, the market is still profit-governed, no matter the types of production with the notion of high culture or the notion of plural culture (Williams 1981, pp106-107).

In Pierre Bourdieu's theory of cultural consumption, certain goods tend to be favoured by the dominant fraction of the ruling class. The dominant fraction, Bourdieu argues, has high levels of economic capital but lower levels of cultural capital. Cultural consumption is influenced by the relationship between small-scale production (restricted production) and large-scale production (better translated as mass production). Small-scale, or restricted production, is described as having a relatively high degree of autonomy, but never full autonomy; mass production is heteronomous, subject to external rules. Bourdieu often writes of small-scale production as oriented toward the production of pure artistic products, and mass production as oriented toward the making of commercial cultural goods (Bourdieu cited in Hesmondhalgh, 2006, pp212-214).

In aggregate, when examining the creative stage of making cultural products, we see that output of media production is hindered by social, economic, technological and ideological forces. Research supports the argument that creative

personnel reproduce creative forms and content unconsciously and routinely in predetermined ways (Hesmondhalgh, 2002; Cottle, 2003; Negus & Pickering, 2004).

4.2.2 Cultural artifact production

As culture is industrialized, the production of culture tends increasingly to reside in teams of specialized workers that substitute for the individual artist in the traditional sense of the term. 'Cultural industries' encompasses not only the heavily industrialized and commodified industries, but also the more craft-based activities and media industries. Hesmondhalgh (2002) argues that the 'culture industry' refers to a type of industrial activity and invokes a certain tradition of thinking about the activity, and connects the relationship between culture and economics, texts and industry, meaning and function. The core activities of these theories are no longer science and technology but marketing and design (Hesmondhalgh 2002, p14; p34). Furthermore, the process in the business of cultural production is complex and contested largely because certain problems are derived from how the creative and innovative ideas link together by the organization of production.

4.2.2.1 Creative class

Bernard Miège (1987) offers a variation on an analysis of the connection between the type of media product, the structure of corporate control, and the nature of the labour process. Miège's analysis contains three different types of products: Type I products are characterized by a simple process of production and little intervention of creative workers, e.g. mainly hardware like TV; Type II products are not easily reproducible and are produced by skilled manual labour, , e.g. art paint, Type III products are both easily reproducible and requires some degree of artistic contribution. In the production of Type III products alone is there a monopoly of control and a tension exists between capital and labour (Mosco, 1996, p160). Mosco affirms that Miège poses an important analysis by providing detailed accounts of labour commodification in the media industry. Miège's analysis is important because it offers a general political economic process and a process contingent on the relationship among products industry structure, and the demand for skilled and unskilled labour (Mosco, 1996, p160). In the cultural industries, Research and Development (R&D) is the primary activity, while production is secondary. In the context of game production the process involved in producing a game is arguably design and product development, i.e. R&D; whereas reproduction of the end product of R&D is in reality the process of production (Lush & Urry, 1994, pp122-123).

According to Hesmondhalgh (2007), the work in the cultural industries can be categorized hierarchically as creative managers, professionals, symbol creators and

craft and technical work, , . This last category is further sub-divided into unskilled and technical workers. Unskilled work includes routine manufacturing work and wholesaling in the cultural industries. Technical workers provide complex technical aspects of execution in cultural production, such as game programmer, art designer, or camera operator in the film and television industries.

Creative managers are also professionals. The creative management function has become established in the 'mature' cultural industries, and is carried out in teams. Creative work has created internal divisions of labour and hierarchies. For example, a senior manager in a record company takes responsibility for dealing with artists or the process of signing up an expensive act; a game producer takes the schedule and controls the budget to produce the game in-house. Others include symbol creators who engage in symbolic creativity, mainly writing, sounds and image brought into being (Hesmondhalgh, 2007, p206; p313).

Richard Florida (2005) categorizes the creative class into two components: the super-creative core and creative professionals. The super-creative core of this new class of worker includes a diversity of skills scientists and engineers, university professors, poets and novelists, artists, entertainers, actors, designers, and architects, as well as those people who modern society views as having leadership material: non-fiction writers, editors, cultural figures, think-tank researchers, analysts, and other opinion-makers. These professionals fully engage in the creative process, producing transferable, widely usable new forms (Florida, 2005, pp130-132). Beyond this, the creative class also includes "creative professionals" who work in a wide range of knowledge-intensive industries such as high-technology sectors, financial services and business management. These people engage in creative problem solving, drawing on complex bodies of knowledge to solve specific problems.

Today, much work, once standardized mass production, has been increasingly characterized by customisation and flexible specialization. The process commonly benefits the younger, educated generations of any given population, who possesses the necessary technological skills to participate in the global web of commercial activities. The creative class consists of at least 38.3 million Americans, roughly 30 percent of the entire US workforce, (up from 3 million in 1890, an increase of more than ten-fold over the past century). In identifying the new emerging class as an economic function, Florida (2002) points out that the rise of the creative economy has had a profound effect on the sorting of people into social groups or classes.

4.2.2.2 Outsourcing

As cultural industries become major businesses in developed countries, cultural production is moved to locations with cheaper labour, just as in the manufacturing sectors. This trend represents part of what Miller calls the New International Division of Cultural Labor (Miller et al., 2001, cited in Hesmondhalgh, 2006, p71). According to Waterman (1990), the growth of the international division of labour in communication has sparked an interest in labour internationalism. Specifically, this involves making use of the means of communication and new technologies to forge close links among the working-class and trade union interests across national borders (Mosco, 1996, p161). The commodification of labour in media study, from the perspective of political economy, means that labour has to be transformed into part of a commodity which accumulates ever more capital value (Negus and Pickering, 2004, p58).

Much of the early political economic work in this area concentrated on the spread of hardware (Southeast Asia) and data entry (the Caribbean) businesses into the newly developed or undeveloped countries, where companies were attracted by low wages and authoritarian rule. Research shows that capital had maintained an interest in looking towards the less developed world for sources of relatively low wage but skilled labour, such as software development, as well as to the developed world (Mosco, 1996, pp160-161). Hesmondhalgh's research (2006) shows that the US and European animation production has been carried out in Asia. Disney contracted for many years to Japanese subsidiaries and by the 1990s, Disney Japan subcontracted most of its work to South Korea or China (Hesmondhalgh, 2006, p206).

The pressure to rationalize production gets resolution in cultural industries, when advanced technologies, such as telecommunication and transportation systems, provide possible opportunities to overcome space and time constraints. The development of global labour markets is one consequence; business can take advantage of different wages, skills, and other important characteristics on an international scale (Mosco, 1996, p160). More evidence supports that outsourcing is not about sending jobs to low wage countries. Vincent Mosco's research implies that labour cost may not be the key factor to attract outsourcing jobs. Developed nations like Canada, especially in film and video, and Ireland, in new media and IT, have benefited from outsourcing jobs. It signals a transformation in the international division of labour which means location and culture could play more important roles. On one hand, employees located near their market would be more aware of

information at the local level. On the other hand, these developed countries, such as Ireland and Canada, have been key participants in the outsourcing industry due to the fact that their language and culture are close enough to the major knowledge industry forms to make them reliable locations for the work, even when they are not the lowest cost alternative (Mosco, 2006, p777-778).

4.2.3 Creative cluster

Cultural products now account for steadily rising shares of modern business activity and international trade. Changes in the spatial patterning of business activity also prompt a rethinking of business concentration. Communication, information technology, and transportation systems have been central to these processes of media business. On one hand, major media enterprises have given the management tools to control the form of integration. On the other hand, rapid and efficient communication systems are essential for a company to manage the multiplicity of exchanges that flow within an integrated, multi-divisional corporate form whose success depends on timely assessments of relative performance (Mosco, 1996, p177). This line of spatialization research suggests the value of breaking new ground in the analysis of media concentration. Spatial agglomeration, as well as ownership agglomeration, is a significant form of business concentration. It brings companies together, whether connected or unconnected by ownership ties, in dense networks of producers, suppliers, and customers whose mutual dependence, consolidated geographically in global cities and dispersed electronically across the globe, creates significant forms of concentrated economic power (Mosco, 1996, p177).

4.2.3.1 Metropolitan areas

Hemondhalgh (2007) argues that creativity is presented as the key to urban regeneration and that 'the industries of the twenty-first century will depend increasingly on the generation of knowledge through creativity and innovation matched with rigorous systems of control' (2007, p142). In addition, cities have always been markets, and at the same time, culture has always been firmly based there. 'Place' in the cultural industries is frequently meant to be as the city, where city is seen as the key resource for cultural industry clusters. Therefore, selected cities, such as London, Tokyo, and New York, have roles in the global cultural industry which is a mix of local and global levels, large and small enterprises, innovative and routine functions; all of which has a profound effect on the potential for growth and the scope for local initiative and intervention (O'Connor, 2004, p139).

The French film industry is a prime example of spatial agglomeration. Almost all the enterprises are located in the Paris metropolitan region, and a significant

proportion of these are concentrated in one particular district close to the centre of the city. Production companies are particularly transactions-intensive in their modes of operation. The French film industry exhibits a strong disposition towards spatial convergence and centralization within the wider metropolitan environment. That the element of the creative energies develops in some cultural-products industries can be seen as an endogenous property constrained by procedural routines of production (Scott, 2000, pp100-105; p111).

In addition, multinationals based in the USA's big cities have led the race to control the global market for nearly all types of cultural products. In an overall view, the new media industries in the US are agglomerated in New York and California. The lower Manhattan multimedia clusters consist primarily of content providers and enterprises in related industries, such as publishing, broadcast media, and graphic and visual arts. Upon further examination of the geographic distribution of these content providers, we see the emerging new media businesses, located in SoHo and 55 Broad Street, are surrounded by the advertising, marketing, entertainment, publishing, and TV, film and video producers and publishers (Potter, 2000, pp261-262; Cooke, 2006, p279). According to the analyses of Heydebrand (1999) and Pavlik (1999), the corporate giants in New York are up-scaled versions of the new media enterprises. A three-level structure exists in the industry with (i) corporate multinationals with investment needs, (ii) Silicon Valley corporations representing creativity and (iii) 55 Broad Street business representing innovative capability. In addition, clusters within New York function as horizontal and vertical networks, based on trust, exchange and competition of theoretical and technical know-how (cited in Cooke, 2006, p279).

California's multimedia industry also draws extensively on the resources and capabilities of both high-technology industry and the media industries in general. Specifically, it combines elements of both Silicon Valley and Hollywood by depending on computer technology and a well-developed capacity to present visual, verbal, and aural material in dramatic and imaginative forms (Scott, 1998, p130). Although the multimedia enterprises make their products globally they interact at a highly local level in production. The San Francisco cluster can be seen as 'associative' (Morgan & Cook 1998), based on an important finding that over half the value of sales is accounted for by inwardly and outwardly subcontracted activities, more than two-thirds of which is local (Cooke 2006, p280). When describing the cause and effect between spatial concentration and new media, Philip Cooke states:

Geographic proximity is the more important from a creativity or innovation capabilities point of view....Both of them are conceptually important as one another, constituting a global capabilities relationship that is fundamental to a given new economy sector. In the largest cities, geographic and functional proximity may coincide

(Cooke 2006, p278).

Andy Pratt (2004a) signifies that 'depth' is as important as 'breadth' in the cultural industry. The former includes intangible untraded linkages, consisting of informal exchange of skills and knowledge, materials and labour; the latter includes traded linkages, representing the links between key buyers and sellers of inputs, partially-finished and completed products and labour. Those activities, including back and front-of-house staff in theatres, cinemas, and music venues, are necessary and important for cultural outputs. Such an approach brings into view a range of institutional structures to consider how interlined systems of employment are necessary to get cultural products to audiences (Pratt 2004b). Furthermore, culturally embedded structures of power continue to play a role in cultural industries. Open trust networks are found in cultural ecosystems. They help to keep skilled creative workers connected as a means of keeping access to current labour-market trends and opportunities to find collaborators, customers and employers (Scott, 2004, p6; Scott, 2000). This is why successful cultural-products agglomerations, such as London, Paris, and New York, continually attract the talented individuals who are pursuing professional fulfilment (O'Connor 2000; Scott 2000; 2004, p6; McRobbie 2004; Rantisi 2004). These cultural producers are always on an endless search for the competitive advantage while seeking to intensify the design content, styling and quality of their outputs. Therefore, the agglomerations of design-intensive industries may benefit the outputs that are rich in information, sign value, and social meaning (Power & Scott, 2004, pp4-7).

4.2.3.2 A hierarchy agglomeration

Creative clusters exist in large and small economies, at different geographic levels (e.g., national, metropolitan regions, cities). A power dimension of cluster creates a hierarchy and rules of dominance and subordination within an agglomeration. This stereotype does not automatically encompass a coherent group of enterprises which cooperate harmoniously with one another to achieve a common set of goals (Bathelt, 2004, pp153-155). Bertelsmann, a worldwide leading media company, is an example of geographic accumulation. The Headquarters are located in the administrative district of Gütersloh in the Detmold region of Germany. Bertelsmann became the biggest employer in Gütersloh. The company units cooperate exclusively with one another to a high degree, having very few business

relationships with other regional enterprises. Knowledge transfer from Bertelsmann to other enterprises in the region rarely occurs. The result is a result that the regional major player's impact on fostering the development of a regional multimedia cluster is considered to be weak (Fuchs, 2002, p320).

Japanese console games industry is seen as another example of cluster in this research. Japan's domination of the global game market is derived from a unique feature, the game industry centres on the synergies of hardware and software (Hesmondhalgh, 2007, p244). Japanese game industries, vertically and horizontally linked, have led to the formation of large loose groups with shareholding connections. These group ties are important principally for their role in functioning as a cluster. Companies consult each other because of their 'special' relationship. They cooperate on technological development and send clear signals to each other about market demands. This has formed cultural proximity, which provides a unique example of a well-functioning cluster. Nintendo, the game machine manufacturer, works closely with manufacturers of game cartridges (Hudson) and with independent game developers, (Namco). The existing cultural proximity in all cases acts to reduce the communication barrier and facilitates flow of information, which helps to shape clusters. A similar situation can be found when Sony decided to develop its game business. Sony leveraged the cluster by offering some 4,000 game development tools to make it easy for developers to come up with new titles quickly (Porter, 1998, p153; Porter et al., 2000, p117; Aoyama & Izushi, 2004).

4.2.3.3 Spatial agglomeration and globalization

Likewise, there is a close correlation between clusters and the efficiency of the multinational enterprises where management of risk, innovation and R&D is increasingly sophisticated. O'Connor (2004) argues that for these media companies in a cluster, those exogenous clients, i.e. the multinational enterprises play a key role by providing the main motivation to learn (2004, p132; p139).

Under the influence of interwoven links of globalization, the trend of global commodity chains moves toward the processes of cultural production. Spatial agglomeration and globalization are complementary processes under specifiable social and economical considerations. It is now becoming possible for given activities from the centripetal agglomeration to decentralize to low cost labour sites. The formations of alternative, or satellite production locations, exist in Toronto and Vancouver (Canada) and Sydney (Australia) to serve major film-production enterprises in Hollywood (Power & Scott, 2004, p11; Coe & Johns, 2004). Denis O'Hearn concludes that the global production networks are essentially hierarchical,

incorporating new organizations and territories into unequal exchanges (O'Hearn 2001 cited in Riain, 2004, p643).

Brail and Gertler's (1990) analyze the multimedia industry in Toronto, Canada, revealing that locational preference was determined by flexible and affordable space, and downtown ambience. Their clients were mainly Toronto based with links developing with the California cluster. Confidentiality clauses and secrecy on competitive bid prices are normal even though there are few competitors, who have a competitive ethic and low-trust relationship at horizontal level, with whom to contract (Brail & Gertler 1990, cited in Cook, 2006, pp280-281). A similar case can be found in Vancouver (Ceo, 2000). The film and TV market in Vancouver is dominated by US producers, distributors, and exhibitors. However, Vancouver producers are able to use established relationships with US studio and television networks to generate funds for their own products. As a result, Vancouver local producers have to compete with each other for all kinds of resources, when they need to use long-established relationships to mobilize resources for US production (2000, p405).

When the notion of cluster is linked to the idea of place-based advantage, it means that creative industries gain competitive advantage from the resource of location in order to compete in the global market. Selected cities and regions find it increasingly possible to prosper on the basis of their ability to build a competitive advantage in cultural-products sectors. Clusters are now linked in a highly efficient manner to the larger global companies whose management of the processes of risk, innovation, and R&D is increasingly sophisticated. Successful clusters are increasingly predicated not on 'creativity', but on the access to a range of formal knowledge, such as global market, the larger companies, clients, and distribution (O'Connor, 2004, p131).

4.2.4 The structural trends of media business

Currently, major media companies have exploited their activities globally, through the use of buying and merging consistently with other companies, to create ever larger media conglomerates. An evident trend is that corporate concentration and profit-maximization have similarly affected media products, including music, radio, television, and film. This has helped the dominant Western enterprises to aggressively control new technology, making global systems cost efficient, and successfully expanding to become a global commercial media system in the global markets (McChesney, 1998, p19).

David Croteau and William Hoynes (2001) argue the basic structural trends in the media industry have been characterized by four developments:

1. Growth. Mergers and buyouts have made media corporations bigger than ever.
2. Integration. The new media giants have integrated either horizontally by moving into multiple forms of media such as film, publishing and radio or vertically by owning different stages of production and distribution, or both.
3. Globalization. To varying degrees, the major media conglomerates have become global entities, marketing their wares worldwide.
4. Concentration of ownership. As major players acquire more media holdings, the ownership of mainstream media has become increasingly concentrated (Croteau & Hoynes 2001, pp64-73).

First, larger size means more available capital to finance increasingly expensive media projects. Upon examining the changing social significance of cultural industries, researchers in the perspective of Marxist political economy stress industrialization and commodification. Industrialization involves significant capital investment, mechanized production, and division of labour; but commodification involves a more encompassing process of production and service into cultural commodities. A phenomenon that commerce and creativity have become inextricably bound together in the modern economy is hard to ignore. Large media enterprises enjoy economies of scale and will tend to be more successful than smaller enterprises which in taking on the risk of high investment and will often be merged with other competitors. Larger enterprises make greater profits by diversifying their range of products and services in a value chain (Downey, 2006, p27).

Second, media corporations deal with risk and the need to ensure both audience and profit maximization by using strategies including horizontal integration and vertical integration. Mergers and acquisitions are often carried out to bolster a company's holdings in an attempt to become more powerfully integrated, either horizontally or vertically, or both. Owning properties across media allows one type of media to promote and work with another type of media. Normally, companies integrate horizontally due to enterprises believing that they can use their diverse holdings to promote their media products and gain a better market share (Croteau & Hoynes, 2001, pp87-95).

Vertical integration involves owning assets involved in the production, distribution, exhibition, and sale of a single type of media product. In the media industry, vertical integration tends to be more limited than horizontal integration, but can still play a significant role. When examining the Hollywood organizational model, the studio giants act as financial investors to independent producers in return

for the right to distribute the end product at cinemas and subsequently in television and video. Superficially, a network approach has brought an increasing number of smaller enterprises into the industry. However, Rifkin's research clarifies the roles of the major studios and entertainment companies which still exercise control over much of the process by expanding their ability to partially finance production and to control distribution of the products (2000, p363). These forms of integration are essentially means of controlling uncertainties when a company has to rely on external markets to complete the process of production, depending on the interpretation of corporate, managerial, organized, or monopolistic capitalism. Therefore, when a major Hollywood producer controls distribution, the process is referred to as forward integration because it expands a firm further along the circuit required for the realization of value (Compaine & Gomery, 2000; Croteau & Hoynes, 2001, p177).

Third, growth in size and integration of companies has been accompanied by the globalization of media conglomeration. According to Croteau and Hoynes, media giants are often in a position to effectively compete with the local media in other countries, especially when a global market is covered by the spectrum of media crystallizing with very high barriers to entry. These corporations can draw on their enormous capital resources to produce expensive media products, which go beyond the capability of local media. In addition, by distributing existing media products in foreign markets, media companies are able to draw extra sources of revenue at no additional cost (Croteau & Hoynes 2001, p96). McHesney contends that the global media oligopoly will gradually evolve into a far broader global communication oligopoly over the next one or two decades (1998, p23).

Fourth, when individual media companies grow, integrate, and pursue global strategies, ownership in the media industry becomes more concentrated in the hands of these new media conglomerates. If the cultural industry enterprises have become oligopolistic corporations, they will inevitably come to dominate capitalist forms of production and can use their resources to campaign on behalf of their interests (Hesmondhalgh, 2006, p187). In addition, all major media mergers (into conglomerates) hold a higher position and take the form of a new company, which gives greater substance to the alliance in the way of limited contractual arrangements. These advantages also benefit the biggest enterprises as they set the standards for newly developing enterprises to carry out their business. One way to approach this is to examine the size of cultural industry corporations in relation to the biggest corporations in general. The global media market has come to be dominated

by nine transnational corporations: General Electric, AT&T/Liberty Media, Disney, AOL-Time Warner, Sony, New Corporation, Viacom, Vivendi, and Bertelsmann. These eight companies own the major US film studios, the US television networks, 80 to 85 percent of the global music market, the majority of satellite broadcasting world-wide, a significant percentage of book and commercial magazine publishing, and most of the commercial cable TV channels in the US and world-wide (McChesney, 2004, pp9-10).

Mosco (1998) argues that corporate size and concentration are just starting points for understanding the transformation of the communication business. The chief requirements may include controlling central points in the production, distribution, and exchange process, and responding to the currently changing markets and technologies (Mosco 1998, p198). While we are trying to find out the answer to how media businesses are encountering an entirely new mode of production, a global structuring based on the breakthrough of information technology and the flow of international capital must be taken into account this research.

4.3 Globalization and information revolution

Media industries have been transformed partly by the changes of global economy, the emergence of telecommunication and new technology, and economic agglomeration. The influence of multinational co-operations with huge capital reserves, ranging from the manufacturing sector to the service sector, has interwoven the local economies and politics in the global market. Most importantly, technology breakthrough makes global media empires feasible and lucrative in a previously unthinkable manner (McChesney, 2003, p30). In addition, selected cities and regions have found it increasingly possible to prosper on the basis of their abilities to build competitive advantages in the service sector. Spatial agglomeration is a significant form of concentrated economic power (Mosco, 1996, p199). Although this argument cannot provide an overall account of how media business has become integrated, concentrated, and globalized, the opportunities offered by new technology and the trend of the global economy play decisive roles in forming a global media system. This can be reflected on when researchers discuss the current trend of media globalization, from the perspective of political economy, ranging from the size of the media institution, to market exploitation, and vertical and horizontal integration.

4.3.1 Global production network

Industrialization has experienced a significant shift in the past twenty years. The process that once produced and exported manufactured goods from one location

is being dispersed into an expanding network between peripheral and core nations. Economic globalization can be seen as very complex processes, including international trade, flexible manufactory systems, and highly specialized cooperate services, when analyzing how multinational corporations try to maximize their profits (Piore & Sabel, 1984; Block, 1990). Global production networks have come to profoundly shape opportunities for mobility within the contemporary global economy. A commodity chain, clearly defined by Hopkins and Wallerstein, is 'a network of labour and production processes whose end result is a finished commodity' (1986, p159).

In today's global factory, the production of a single commodity often spans many countries, with each nation performing its task in flexible specialization with a cost advantage. Specific processes and segments within a commodity chain can be linked together within networks. And each successive node within a commodity chain involves the organization of inputs, labour, distribution and consumption. Within a commodity chain, profitability shifts from node to node according to competitive pressure. A global commodity chain exposes the distribution of wealth within the chain as an outcome of the relative intensity of competition and innovation within different nodes, when discussing how it is developed and interlinked (Gereffi et al., 1994, pp1-5).

4.3.1.1 Place and labor

Commodity production is subdivided into fragments, which also can be assigned to places, where it provides the most profitable combination of capital, labour and technology. Global economic cooperation has formed a pattern, where enterprises shut down manufacturing plants in developed countries and invest in poor countries. New technologies have inevitably given rise to a new kind of capitalist system with global assembly lines, an international bourgeoisie, and free mobile capital which can go to any part of the world where labour is cheap, captive and plentiful, bypassing the nation-state and leaving in its wake an essentially powerless working class (Wood, 1998, pp41-44).

This qualitative development in the world economy is called the new international division of labor (NIDL). Because of the economic pressure of the world-wide labour market, the world market for industrial sites has been forcing companies to undertake a global reorganization of their own production process (Fröbel et al., 1980, pp169-171). The pattern of NIDL helps multinational corporations focus on profit maximization, as opposed to the previous perception of cost minimization (Maki et al., 1996). Gerald Sussman and John Lent (1991)

conclude that the formation of NIDL supports flexible manufactory systems to reach the demand of multinational corporations, which provides the benefits simply for the very small group of people who control the capital and the technologies in the global markets.

Global production networks are fundamentally incorporating new organizations and territories into unequal exchanges that keep them in a subordinate position, even when growth occurs (Hite & Robert, 2007, pp9-10). This leads to networks between peripheral and core nations forming a hierarchical position when resources are extracted from the region rather than drawn into it. Regarding international political economy, dependency theorists critique the current term of economical globalization, a long-term exploitation of the people and resources of Africa, South America, and Asia by wealthy countries in Europe and North America. The pattern of exploitation goes back to the colonial era starting from four hundred years ago (Hite & Robert, 2007, pp9-10).

Nevertheless, Roberto Korzeniewicz and William Martin's research (1994) challenges the point of dependence, arguing that NIDL minimizes the extent of industrial upgrading that is occurring within newly industrial countries that are moving to high-value-added products within specific industries (1994, pp74-75). By way of new transportation and communication technologies, small enterprises can build partnerships with foreign producers and tap into overseas expertise and markets (Dicken, 2003, p89). Gereffi et al. (1994) explain the significant shift of industrialization on a world scale as:

Capitalism today entails the detailed disaggregation of stage of production and consumption across national boundaries, under the organizational structure of densely networked firms of enterprises (Gereffi et al. 1994, p1).

A successful regional economy in peripheral area must possess more sensitive global ties and make use of its own advantages such as low-cost labour or sufficient production (Gereffi, 1989, 1994; Porter, 1998; Fuch, 2002). Foreign direct investment (FDI) led policies are perceived as great opportunities to shape the flow of finances to sustain high levels of productive investment (Johnson, 1982; Wade, 1990). Therefore, the way in which the local economic node is integrated in the global network will be an important issue for the policy-makers. In addition, empirical research corroborates that undeveloped countries get opportunities to make promising economic progresses from the spill-over of multinational corporations (MNCs), which provide quality jobs, superior skills and technology and opportunities for local linkages and exports (Dicken, 1998; Grimes, 2003; White, 2004). The processes of globalization in East Asian countries, confirmed by Gloria

Davies and Chris Nyland (2004), have also promoted important changes to these requirements as local economies and workers adjust to new market demands.

4.3.1.2 Polity force

Globalization, in this respect, signifies new forms of capitalist integration and cooperation across national boundaries. However, the trend of globalization has driven a growing number of emerging national and regional capitalists into active competition with each other. As national economies become more open to capital from the outside, domestic enterprises are drawn into new forms of competition with each other, over the benefits to be derived from internal investment. A persistent discourse is that the global economy has weakened the nation-state or reduced local and regional particularities (Wood, 1998, pp41-44). There has been a succession of increasingly formalized international regimes that establish rules that define certain state actions in this realm as legitimate and others as illegitimate (Keohane & Nye, 1997; Block, 1994). Mann's research (1997) further entails that global production networks may challenge the nation-state and the salience of national identities in developing countries when peripheral countries are depended on the core countries in hierarchical production processes (Bresnahan et al., p857, 2001)

Gereffi (1994) poses a different view challenging the above theories. Gereffi confirms the active roles of state of semi-peripheral nations, i.e. the Latin American and East Asian NICs, in the world economy system. The roles reflect the mix of core-peripheral capital in carrying out these development efforts. First, these roles are not mutually exclusive. Their importance for a given country or set of countries may undergo fairly dramatic shifts over time. Second, it is essential to note, from the perspective of world-systems theory, that these roles in the world economy are largely determined by their domestic conditions, such as the pattern of economic, social and especially, political organization within the NICs (p129). A state policy must concern the openness of these regions to the world economy that has allowed success in the market-end model, rather than seek to offer enterprises a protected domestic market, when a developing country is looking to integrate into the global commodity network. Gereffi's research (1989/1994) analyzes the case of the East Asian countries, including Hong Kong, Singapore, South Korea and Taiwan, and reaches the conclusion that the rapid economic growth in Eastern Asian is not only due to the prospering labor-intensive industry, but also their governments pursuing policies of outward-oriented industrialization.

4.3.1.3 The emergence of the Internet

The economic transformation at the turn of the 21st century, driven by the diffusion of modern electronic-based information and communication technologies (ICTs), has shifted the industrial economy into an information economy that has affected the global commodity chain. On one hand, the Internet is able to deconstruct both established producer-driven and buyer-driven global commodity chains because a new form of info-mediary driven commodity chain possesses the ability to create a market on a scale and with a level of efficiency not previously possible. On the other hand, the Internet has reshaped the global commodity chains and is leading the global economy into a new reality: it is an economy whose core, strategically dominant activities have the potential to work as a unit in real time globally (Gereffi, 2001, p154).

Research identifies that differences exist between nodes located in core and peripheral areas. High-value commodities are exhibited within a greater degree of clustered nations (Jussawalla, 1985; Appelbaum et al., 1994). Now, ICTs are at the heart of corporate capital in the late 20th century. When mapping Internet content providers to make sense of their spatial pattern in the world, Matthew Zook (2000) found that the US accounted for the majority share of Internet domains, with about 50 percent of the total, followed by Germany with 8.6 percent, and the UK with 8.5 percent. Canada (3.6%), South Korea (2.5%) and France (2.1%) were in the middle. The other 180 nation states globally share less than 25% of the Internet domain profile. The data reveals that Internet domains are highly concentrated by country, suggesting a growing asymmetry between production and consumption of Internet content. South Korea and Japan show an interesting phenomenon in that South Korea displays one of the highest penetration rates in the world both in the production and consumption of Internet content, compared with the fact that Japan consumes more than it produces (Castells, 2001, p214).

The causal dynamic of globalization is multifaceted with rational knowledge, capitalist production, and technological innovations, an international regulatory measure taken as basic requirements for participation. Under such conditions, a new knowledge gap in digital usage between the developing countries and others is increasing (Katsman, 1974; Rogers 1986). The bulk of new Internet users live in developing countries. Key urban centres, globalized activities, and higher educated social groups are being counted into the Internet-based global network. East Asian countries are the fastest growing area in the world in terms of use of the Internet (Castells, 2001, p262). In the contemporary world, the information city, defined by Manuel Castells (1996), cannot be seen as a form, but rather as a process,

characterized by the structural domination of flows, while the business centres in the US, seen as the economic engine of a city, have interlinked with the global economy. The networks interacted by the new managerial, technocratic and political elites do create exclusive spaces (Castells 1996, pp333-335).

4.3.2 New technology and new media

The new economy is not just the Internet economy, but also an economy that works through, by, and with the Internet and with those things that the Internet represents. The features of the new economy, defined by Castell, is based upon information technology-based knowledge and innovation, new forms of performance characterized by information technology-based networking, and networking capability (1997, p140; 2001, p154). In addition, the emerging business is newly formed or re-formed industries that have been created by technological innovations, shifts in relative cost relationships, emergence of new consumer needs, or other economic and sociological changes that elevate a new product or service to the level of a potentially viable business opportunity. The new economy has been expanded to fields regarding financial and currency markets, advanced business services, technological innovation, high technology manufacturing, media communication (Porter, 1980, p215).

What is the relationship between innovation and new economy? The concept of innovation, explained by Hal Varian (2004, p12), does not come from the basic building block, but rather presents a way in which they combine. The key concept of economic development, based on Schumpeter's interpretation (1912), is the notion of 'new combinations', including the innovative reallocation of economic resources and changes in organizational forms. When the entrepreneur tries to bring innovation with knowledge into the market, the entrepreneur may cause considerable problems, as well as the challenge of uncertainty. There is usually a great deal of uncertainty about technology in an emerging industry: what service will ultimately prove to be the best and what kind of standard-setting will be fair, reasonable and non-discriminatory? Therefore, Internet businesses with sufficient capital and advanced technologies face more than ever, greater global competition.

While discussing the relationships of new technology and new media, technically, the Internet and new techniques bring about clustered convergence among media development, ranging from cultural forms, communication systems, and corporate ownership (Hesmondhalgh, 2006, p.262). First, convergence of cultural forms brings a diversified combination of content, where the major components of cultural expression are together in one place. Second, the

convergence of communication systems and new technologies ensures all the data of information and entertainment convert into digitalization. A number of electronic devices (e.g. iPods and mobile phones) are available to the audience receiving digital content from multiple sources, especially in the wealthier areas. Third, and most important, the increasing convergences of corporate ownerships make telecommunication and computer corporations merge in anticipation of further convergence. When new players enter the broadcasting market from consumer electronics, computing and telecommunications origins they have, among themselves, become involved in the purchase of minority stake, alliances, and joint ventures (Hesmondhalgh, 2006, p.262).

Information technology is at the heart of corporate capital in the late 20th century. Further integration can be found in the emerging industry, both in vertical and horizontal directions. From the perspective of horizontal integration, technology developing enterprises look for an alliance, a process to lock-in users to gain a dominant market share or the enlarge market size. Innovation becomes a leading competitive weapon, as the leading companies have the dominant market shares in each segment of the Internet organization (Gereffi, 2001). This battle for market share often leads to two outcomes: the number of companies adopting each technology and a group of small enterprises adapting to the leader's standards. Consequently, a new form of competition is spreading across the markets: group versus group. Ben Gomes-Casseres (2000) identifies the type of alliance networks helping contending companies promote their technologies and gain the critical mass required to persuade more businesses to use their design. In the multimedia field, an array of alliance groups has sprung up in the US recently as the computer and communications industries have converged. Computer companies have joined with consumer electronics companies, cable TV operators, telecommunications providers, and entertainment companies to develop new products and services (Gomes-Casseres 2000, pp127-130). From the perspective of vertical integration, a hierarchical cooperation exists between large enterprises and small firms or start-ups. Likewise, Chesbrough (2003) indicates that large enterprises have outsourced even their R&D functions. This is due to the intrinsic rigidities of the hierarchical corporate organization having difficulties in implementing rapid learning and accommodation to change. Small, knowledge-based firms are further up the technological learning curve, gaining knowledge transfer from outside. The above process, a knowledge transfer from a big company to a small firm, is called as 'open innovation' (Cooke, 2006, p272).

In addition, the linking of information world-wide provides new working opportunities for specialists and professionals in the most developed nations. Bell (1973) first defined this trend as ‘the emergence of a new economic order’, characterized by the central importance of information and theoretical knowledge, and by a shift from a goods-producing society to a service society (Bell (1973) cited in Golding, 2000). In 1970, more than half of all industries could be classified as manufacturers, and the material goods comprised at least 80 percent of the total values of inputs. Ten years later, by 1980, only 27 percent of industries could still be classified as manufacturers. This implies that the growing share of corporate capital is expended on non-material inputs (Kumar, 1995, p108). The empirical evidence support Bell’s previous ‘social forecasting’, revealing that the growth of white-collar service sector jobs and of jobs of higher levels of education and training has sorted people into new social groups or class in the post-industry economy. Robert Reich (1991) terms these types of workers as ‘symbolic analysts’, who are continuously engaged in managing ideas and who are in possession of the ‘intellectual capital’ crucial for success in the 21st century (p178). Also, Castells (1996) has defined informationalism as ‘knowledge working upon knowledge’. The key figures are no longer inventors and entrepreneurs, but teams of scientists and engineers working in university departments and R&D labs of corporations.

Knowledge and information are the essential materials of the new production process, and education is the key quality of labor, the new producers of informational capitalism are those knowledge generators and information processors whose contribution is most valuable to the ...economy

(Castells, 1996, p345).

When observing the rise of new classes in the advanced industrial economies, Bell (1973) optimistically believes that power of social control will also move to a new meritocratic class who understand the new technology and complex knowledge needed to lead political and social change. At the same time, the process of globalization has promoted change, as local economies and workers seek to adjust to new market demands (Davies & Nyland, 2004). Based on the above research, it seems the network-oriented and adept ‘information labour’ is responsible for managing contemporary capitalism. Even so, optimistic theories, such as the knowledgeable worker coming to predominate in the economy, are still argued and tested among the scholars (Webster & Robin, 1986; Webster 2002).

It is hard to deny that most information workers are still subordinated in the marketplace as the working class. In response to the earlier thesis of the post-industrial ‘service society’, Harry Braverman (1974) mentions that much of the services work are termed as ‘tailorized-like work’ in manufacturing industries. A

great deal of white-collar work was subjected to the same routinization, fragmentation, and de-skilling as blue-collar work. In an overall view, this new flexibility tends to predict more part-time and temporary jobs. The rise of the creative class is reflected in powerful and significant shifts in value and social norms; more part-time jobs and temporary jobs, on the other hand, have been created to fit the trends of new flexibility (Kumar, 1995, p109). Furthermore, an unequal social hierarchy has been formed. In stressing the expansion of low-wage jobs as a reorganization of the capital-labour in relation to new economy, Saskia Sassen (2006) reminds us,

No matter how high a place a city occupies in the new transnational hierarchies, it will have significant share of low-wage jobs, often viewed as irrelevant in an advanced information economy, when they are actually an integral component (Sassen, 2006, p157).

4.3.3 New technology and spatial agglomeration

Although transportation and communication technologies have improved, geographical distance and location still matter, when production networks interact in dynamic ways globally. Production networks do not float freely in spacelessness; on the contrary, they are grounded at a specific location. Such grounding is both physical, such as building environment, and intangible, such as localized social relationships and cultural practices. In addition, economic activities have to be geographically localized when producers, as well as consumers have significant influences. Production networks are configured in a multiplicity of geographical scales, from global to local. It is hard to ignore, the growing spatial concentration that exists among the broad variety of old and new industries. Many researchers have come to understand how a new geo-economy is formed and what kind of industrial enterprises affect formation of geographic concentration, such as clusters or urban cities (Porter, 1990, 1995; Sassen, 1995; Bathelt, 2004; Dicken, 2007, pp8-18).

4.3.3.1 Cluster

The concept of clusters, first posed by Michael Porter (1990), is a striking feature of virtually every national, regional, state, and even metropolitan economy, especially in more economically advanced nations. A growing cluster can more easily attract entrepreneurs and individuals with ideas. This developing process will broaden to encompass related industries, when one competitive industry helps to create another in a mutually reinforcing process. The forming of a cluster requires a decade or longer to develop depth and real competitive advantage. There exists a functional relationship in the cluster-economies among the entrepreneurs, a deeply

personalized relationship to process knowledge that is impossible to communicate to others through a formal mechanism. Geographical proximity enriches the depth of a particular knowledge reduces the risk and uncertainty of innovation. Spin-offs become a tendency near the parent company when entrepreneurs have established relationships. The processes of entry further encourage the formation of concentrated geography (Porter, 1998, pp149-157; 2000, p214; Oakey et al., 2000; Dicken, 2003, pp115-119).

Many theories regarding clusters of innovative activity focus on external effects and the resulting agglomeration economies. A local external effect is anything that raises the return to particular enterprises located in a region as a result of the location of other enterprises in the same region. External effects can be direct as well as indirect. It occurs when enterprises are in a closely related industries service, customers or suppliers who help their managers or technologists learn about market or technical developments from colleagues in neighbouring enterprises. These indirect external effects come from increasing returns to scale in the supply of key inputs with venture capital to support the entrepreneurial enterprises, a labour market of available technical personnel, or commercially-oriented activities in universities. America's Silicon Valley, for example, is a prototypical model. The external cluster linked with a particular production network, such as the ICT related activities, which supported collaboration and stimulated experimentation. Doubtless, the timely new information leads the entrepreneurs to communicate quickly, to make decisions quickly, and to make the new product rapidly (Bresnahan et al., 2001, p839; Dicken, 2003, pp22-23; Bathelt, 2004, p153).

Although there is a tendency for enterprises in the same or closely related industries to locate in the same places to form what are sometime termed 'industrial districts' or 'industrial spaces', other research may argue that a cluster cannot fully unfold its growth potential if its enterprises rely exclusively on internal markets and local knowledge. A cluster has to be open large enough to allow for maximum external innovation and growth impulses (Dicken, 2003, pp22-23; Bathelt, 2004, p153).

In discussing the important factors for new economy to nourish a growing cluster, jump-start clusters do not exist. The ingredients to form a successful cluster include firm building capabilities, connection to markets, and the supply of skilled labour. Research also finds that the new clusters, such as in India, Ireland and Taiwan appear to share similarly easier potential interactions with the US market. These transnational entrepreneurs in the new clusters, formed in newly developed

countries, have been able to take great advantage of the significant US demand for ICT products. Many of their returning emigrants are US educated ICT engineers who play a key role. On one hand, these emigrants build independent centres of specialization and innovation, which provide critical contracts and cultural know-how to link dynamic but distant regions. On the other hand, transitional communities provide a direct mechanism for transferring tacit knowledge that can dramatically accelerate industrial upgrading in their own developing countries (Saxenian & Hsu, 2001, pp900-901; Saxenian, 2002, pp184-186; Chen, 2002, p264; Sands, 2005).

Castells and Hall's earlier research (1994) reveals that dense spatial concentrations of major companies and innovative start-ups, as well as their ancillary supplies, all tend to be located in a few technological nodes. These companies, even in the periphery of large metropolitan areas, usually link up with each other by telecommunications and frequent use of air transport. The innovative potential of cities is not restricted to ICT industries but extends to a whole range of activities dealing with information and communication (Castells, 2001, p 213; pp226-227).

The geographies of innovation consist of regional and local clusters now operating within and across spatial scales, from global, through national, regional and local. The development of regional and local economies reveals that some of the actors may be both 'insiders' who play based upon the place-specific networks, and 'outsiders' who play a distinctive and important feature in structure in the global economy (Dicken, 2003, pp115-119). Research indicates that regions with both distinct regional and global ties are predestined to take part as worldwide forerunners. While regional ties facilitate competitive production clusters, global ties provide input of external know-how and access to new markets, and prevent a cluster from becoming inflexible. Therefore, a combination of regional and global ties offers the most favourable condition for an enduring ability to develop for regional economic systems (Fuchs, 2002; Ohmae, 2005).

4.3.3.2 Big cities

Economic globalization has contributed to producing spatiality for the urban area which has benefited from territorial location with massive concentration. Finance and specialized services have become the dominant components of international transactions in the global economy, while entrepreneurs need the facilitation, i.e. high skilled labour, advanced technology and communication system, and well-developed infrastructures. Therefore, the role of big cities in a world system, in economic terms, has become a combination of the global dispersal of factories, offices and service outlets, and global information integration.

Big cities reap the benefits more easily, and they have become sources of wealth from the information age when knowledge generation and information diffusion need the facilitation, such as producer services. The importance of major cities has been renewed and strengthened. Big cities provide complexities of service, and become the production centres and headquarters for producing strategic global inputs (Sassen, 2001a, p201; 2006).

In examining the transformation of urban cities, Sassen (2006) identifies the importance of time, replacing the component of weight as a force for agglomeration. Today, the combination of added complexity and acceleration of economic transactions, different from the weight of input, such as iron ore or unprocessed agricultural products, has created new forces for agglomeration. This is due to the fact that high-level professionals require face-to-face interactions when a product process needs multiple simultaneous inputs and feedback. Enterprises with highly competitive and innovative lines of activities and a strong world orientation appear to benefit from being located at the centre of major international business centres. Therefore, time can be also explained as speed of time (i.e. a short duration). It can be used to explain why the high-tech industry requires to concentrate in large cities in which knowledge and innovation continue to emerge from the interactions among talented and experienced professionals who are brought together (Sassen, 2006, pp95-96).

Besides that, Porter's research finds out that identifying strategic locations across the US has become one of the advantages of the inner city. Inner cities are located in what should be economically valuable areas, because they can offer a competitive edge to companies that benefit from proximity to downtown business districts, logistical infrastructures, entertainment or tourist centres and high concentrations of enterprises. Most importantly, the economy of the inner city lies in capitalizing on the nearby regional cluster. For example, Boston's inner city is next door to world-class financial services and health-care clusters. South Central Los Angeles is close to an enormous entertainment cluster and a large logistical services and wholesaling complex (Porter, 1995, pp277-278).

4.3.3.3 New technology intensifying the concentration of power

Spatialization holds special significance for the political economy of communication. This refers to the growing power of capital to use and improve on the means of transportation and communication, to reduce the time it takes to move goods, people, and information over space, thereby decreasing the significance of spatial distance as a constraint on the expansion of capital. Mosco (1996) identifies

spatial agglomeration, as well as ownership agglomeration, as a significant indicator of concentrated economic power. This development is based on those occasions communication technologies benefit the service sector which is primarily responsible for contemporary spatial agglomeration. Spatialization reflects a trend: the rise of concentrated economic power in the spatial agglomeration of business (Mosco 1996, p199). At the same time, communication and information processes, and the industries in which they are organized, contribute fundamentally to a principal form of economic restructuring in the global political economy.

Economic restructuring and spatial agglomeration are central features of a resurgence of interest in the discipline of geography. Increased mobility brings about new forms of locational concentration in which are much a part of this mobility is geographic dispersal. Sassen (2001b, p34) further explains that the new forms of agglomeration are associated with new forms of dispersal, which responds to a new economic logic, rather than a persistence of older forms of agglomeration. Through the mix of core-peripheral economic activities in the global economy, the dynamics for agglomeration are operated at different levels of the urban hierarchy, from the global to the regional. Sassen contends the role of city as a centre has been profoundly altered by telecommunications and the growth of a global economy, both inextricably linked; they have contributed to a new geography of centrality. At the inter-urban level, binding the major international financial and business centres are New York, London, Tokyo and others, such as Hong Kong, Seoul and Singapore (Sassen 2001a, pp200-201).

Although information globalization has impacted differently on the well-being of individuals and communities, there are some fundamental common features in the transformation of the world cities with the phenomenon of the concentration of power, information, and knowledge. A global control has further formed in the processes of the concentration of ownership and profit appropriation when geographic dispersal is taken place under management of a global production system and a global marketplace. Therefore, power is not diminishing, but is rather more essential in the organization of the world economy, especially for the large corporations (King, 1995; Sassen, 2006, p112). It also implies unevenness of the process where most of the benefits are accrued to the professional in the world's key metropolitan areas (Castells, 1989; Harvey, 1989; Sassen, 1991; Mosco, 1996, p199; p171).

4.4 Media globalization

In this part, a wide range global-local media organizations, production domains, media, and genre are examined through a variety of theoretical and conceptual frameworks. Globalization is a phenomenon with dimensions that are revolutionizing arenas as diverse as the media, culture, and nations. Globalization has further brought the unevenness of economic development, local cultural and social changes invoking a conflicting environment. In this section, we are try to find out the answer to how the market of cultural products is formed by examining the possible factors of technology, capitaland culture and the key features of media market in East Asia.

4.4.1 Western hegemony

Globalization affects not only trade, and finance but also culture and other activities. Hamelink (1993) contends that the globalization process undeniably affects the communications industry as it extends its activities geographically to reach toward 'statelessness'; an oligopolistic market of a few global media enterprises is developing (Chen, 2004, p168). From the view of global media researchers, the West as the dominant power in the cultural industry has formed a 'West *versus* the rest' model (Robertson, 1997; Hamelink, 1999). When examining the popularity of American movies, music, and TV programs in global markets, cultural globalization is simply a synonym for Americanization (Hall, 1997; Toynebee, 2000). Mainly due to the advent of ICTs, Western media enterprises are able to overcome regulatory barriers, penetrate foreign markets, and build their own transnational media empires by creating and distributing cultural artefacts efficiently (Gershon, 1993).

US cultural products are well situated to succeed as exports because they have already achieved a kind of universalization by the absorption of various elements to appeal to diverse audiences in the domestic market. The US has become the base of an Anglo-European culture, and much of its audiovisual products are successful in the global markets because of their hybridization of cultural roots with other cultures as represented in late 19th and 20th century immigration to the US (Straubhaar, 2002, p692). For example, Disney's cartoon *Mulan*, a Chinese legend, was Americanized by way of the Disney treatment, although this product evoked arguments about original authenticity and commercialization. This cultural product was produced to target the US home market, a developed country, and then, later, became a successful global commodity (Sparks, 2007b, p146; p181).

The global market encourages corporations to establish equity joint ventures in which the media giants all own a part of an enterprise. The global market helps

media enterprises to reduce the influence of competition and increase the chance of profitability. The complex webs of joint ventures and ownership include links with foreign companies to avoid 'arousing the ire of local governments' (Auletta, 1997, p225). StarTV, a pioneer of transnational satellite television in Asia, has adopted specific strategies of each regional market under its footprint, and tailors its programming accordingly. Even so, this transnational satellite television in Asia was originally not only part of a global media corporation owned by Western interests, but also owned by business family from Asia. Thomas (2006) explains that transnational satellite channels are often carried by locally-owned cable operations in the various countries of Asia, ranging from neighborhood entrepreneurs to large domestic enterprises with political affiliations. In China, StarTV formed a joint venture called Phoenix Chinese with two Hong Kong partner enterprises to provide multiple channels with programming attractive to Mainland Chinese audiences and acceptable by its government (Thomas, 2006, p51; p151).

Under global competition, second-tier media enterprises in developing countries admit they can barely resist the trend of the global system. However, these enterprises still dominate in their own national and regional markets. For example, Mexico's Televisa, Brazil's Globo, Argentina's Clarin, and Venezuela's Cisneros Groups are among the world's 60 to 70 largest media corporations. At the same time, with the aid of the extensive ties with the US corporate giants, the second-tier media enterprises have also established global operations, especially in nations that speak the same language (McChesney, 2004, p14).

John Sinclair (2004) confirms that a trend of a two-tiered global system has emerged. According to a CBS executive's observation, Latin America is more attractive than Europe for global media enterprises interested in regional ventures, because the whole region requires products in only two languages, compared to the several languages needed for regional ventures in Europe (p136). This is the same in the Chinese market, as the development of Chinese-language programming is even simpler since it requires only one language. Recognizing this potential, US-based companies have ventured into producing Chinese-language television programs, and not just in Hollywood, but in-country. English is the language of the international blockbuster, but lower-budget cultural productions can be made in almost any language for the home market and the nearest cultural-linguistic market, with the occasional unexpected global hit. Hollywood attempts to control both tiers in a strategic allocation. US based and other global media conglomerates attempt to position themselves in the technological vanguard in other cultural-linguistic

markets, and to challenge the content issue by producing programs in local languages. This may provoke a hypothesis that the current configuration of a global, polycentric, media scene sporting multiple established and emerging cultural linguistic markets might be undermined (Zhu, 2008, pp74-75; p76). Furthermore, the model of cultural production export from the US to the global market has been established: a strong producer in a global city can first dominate the local or national market, then export programs, then export technology and know-how, and finally shape channels carried by satellite to cultural-linguistic markets that are similar to the domestic market (Sraubhaar, 2007, p224).

4.4.2 The global and local

Several authors have raised the need to consider modernity as a crucial aspect of globalization (see Giddens, 1991; Friedman 1994; and Robertson 1995; cited by Strabahaar, 2002, p687). The basic understanding is usually a 'neutral formulation', a term coined by Giddens (1990). According to the explanation of Peitese (1994), globalization can be defined as the intensification of worldwide social relations, which began in the first migrations of peoples and long distance trade connections, and subsequently accelerated under particular conditions. In the later stages of the process, the modernity of globalization can be thought of as the time of the accelerating formation of global social relationships, and as a specific global momentum associated with a particular condition (Pieterse, 1994, p661). In addition, the outcome is often a strongly localized adaptation of what is considered modern in global patterns. Robertson defines the process of hybridization of the local and global as 'glocalization' (Robertson cited in Straubhaar, 2002, p688).

The globalization of local cultural products takes place in a social context and involves agents at various levels. The state power still plays an important role in supporting their national level media, as Western-centred cultural content is exported to developing countries. Annabelle Sreberny (1994) illustrates the global and local from a capitalist point of view: the 'global' means the actor of the North, rather 'universal'; the 'local' is 'national'. Another point of direct relevance to the 'localism' claim is that the level of media production is at the level of the nation, either through state supported or national corporate networks (Sreberny, 1994, p621; p651). Carey (1989) supports the theory that TV plays a role in creating and imposing meaning within the society. He calls it a 'ritual' model of communication and defined it as 'the maintenance of society in time as well as the representation of shared value' (Carey (1989) cited in McQuail, 2002, pp54-55). In the 1990's, Fadul, Mitra, and Kottak, individually conducted their researches on the content of soap

operas in Brazil and India. Their findings reveal that soap operas in the developing countries became prime vehicles for creating elements of a 'national' culture and spreading them among localized and regionalized audiences that had not always shared a great deal of common culture between them (Fadul,1993; Mitra, 1993; and Kottak, 1990; cited in Straubhaar, 2002, p691).

In for the instance of StarTV, transnational television in Asia began expanding each channel's offerings varied by language, culture, or region. In its 24-hour music channel, MTV Asia, most of the content was US in origin since the early 1990s. However, Asian content has grown from 5 percent to as much as 50 percent within two years. StarTV's regionalization strategy also included splitting the channel with the northern beam servicing the Chinese, Taiwanese, and Philippine pop music markets, and the southern beam servicing the Indian and other South Asian markets. Based on the consideration of Asian audiences with cultural disparity, sports program broadcasting was been split in Asia. For example, Asia Set 1 focuses on table tennis, baseball and basketball for the predominantly Chinese and Japanese audiences of the northern footprint, and on cricket and badminton for the South Asian and Indonesian audiences of the southern footprint. The case of StarTV shows the global system in the media industry comprising of a set of three interlinked levels: economic, political, and cultural-ideological all associated respectively with transnational corporations (TNCs), a transnational capitalist class, and global consumerism (Thomas, 2006, pp49-50).

With full integration into Fordism in a modernization process, the developing nations go experience the promised development which emancipates the populations from want but destroys local cultures. David Harvey (1990) explains that the progress of Fordism internationally aided the formation of global mass markets and the absorption of the mass of the world's population into the global dynamics of a new kind of capitalism. The new internationalism brought a whole host of other activities in its wake: banking, insurance, service, hotels, airports, and ultimately tourism. The process carried with it a new international culture and relied heavily upon newly founded capacities to gather, evaluate, and disseminate information (Harvey 1990, p137). Marshall Berman provides a detailed description:

To be modern is to find ourselves in an environment that promises adventure, power, joy, growth, and transformation of ourselves and the world- and at the same time, that threatens to destroy everything we have, everything we know, everything we are. Modern environments and experiences cut across all the boundaries of geography and ethnicity, of class and nationality, of religion and ideology; in this sense, modernity can be said to unite all mankind. But it is a paradox unity, a unity of disunity... (Marshall Berman 1982, p15)

Even so, Kai Hafez (2007) argues the global media system is ill-considered. Media markets are by no means characterized by complex interdependence, even if specific transnational linkages from the geo-cultural area of Europe and US are far advanced. Local and regional capital continues to set the tone and is shielded by a protectionist media policy (Hafez 2007, p165). The new global cultural economy has to be seen as a complex and disjunctive order. Appadurai (1990) argues there are five dimensions of global cultural flows: ethnoscaples, mediascaples, technoscaples, financescaples, and ideoscaples. On one hand, de-territorialization in the process of globalization has become one of the central forces of the modern world. On other hand, it creates a new market for the de-territorialized immigrants binding to their homeland, when people are coming and going. The cultural-linguistic markets model may demonstrate that this 'ethnoscape' should be considered the strongest dimension of cultural alliances (Sraubhaar, 2002; Curtin, 2007; Zhu, 2008, p72)

4.4.3 Modernity in East Asia

The Pacific Rim is a loosely defined region of countries that border the Pacific Ocean. In addition to Japan's established economic strength, East Asia has three of the so-called 'Asian Tigers', newly industrialized territories that have experienced rapid economic growth that has lifted them from the periphery of the world-system to the semi-periphery. These are Hong Kong, South Korea, and Taiwan. All of them have developed specialized roles within the world economy and have become highly interdependent with places and regions throughout the Pacific Rim and in Europe. In addition, a 'New Asia' is defined as a new era in Asia characterized by rapid economic growth and political democratization with its own value system (Asia Week, 1995). In this new era, most Asian countries have adopted the western free market economy, formed a middle class, and carried out some kind of political reform. In these processes, mass media and telecommunication, especially the broadcast media equipped with the most advanced communication technologies, are among the most rapidly growing industries (Melody, 1992).

The emergence of new technology, such as satellite TV, has brought about a new contour in global, regional, and local markets. Korea used to face the challenge of the spill-over of satellite broadcasting, such as NHK satellite and Star TV, posing a serious confrontation to cultural integrity (Shim, 2006, pp31-33). The recent influx of new channels in Taiwan, delivered by satellite and cable, has served to increase the proportion of imports from Japan and South Korea, besides the western programs. Taiwanese audiences have been able to access five Japanese cable channels since 1997. Apart from NHK Asia, which simultaneously broadcasts most programs from

Japan by satellite, four other channels Video Land Japanese, Gold Sun, Po-Shin Japanese, and JET (Japan Entertainment Network), buy their programming from Japanese commercial TV stations. These channels broadcast exclusive Japanese programming 24 hours a day. The popularity of Japanese dramas in Taiwan suggests that the global diffusion of empty 'form' not only creates diversity, but also re-activates intra-regional cultural flows and cultural proximity through the consumption of popular consumer cultures (Iwabuchi, 2002, p140; p153).

Likewise, the export of Japanese popular culture to other parts of Asia is interlinked with that of Japanese consumer commodities. Sony pushed Asian singers in those markets in order to promote sales, not only of CDs, but also of the CD player and Karaoke. The strategy of the audition-based star system, combined with consumer technologies, was also the vehicle for promoting consumerism in Japan, especially in the 1970s and early 1980s. In the 1990s, the same strategy was deployed in the Asian market. The industry tried to exploit and produce desire among the people to be members of the middle class in a modern capitalist society (Iwabuchi, 2002, p103). In the Inter-Asian region, inexpensive Video CDs (VCD) of Japanese dramas can be easily purchased and copied. VCD can be seen as an 'Asian technology' with globalizing significance, while pirate versions were produced in different Chinese-language locations (e.g. Taiwan and Hong Kong) and these organizations have become alternative centres of Japanese popular culture for transnational consumerism (Hu, 2004).

Japan has been identified as being precociously 'post-industrial', 'post-Fordist' and 'post-modern'. The role of the Japanese state is increasingly becoming one of facilitating an informationalization of Japanese society designed primarily to benefit the business sector. McKenzie Wark argues that the passage from modern to postmodern is also the passage from Fordism to Soyism, when researchers study the case of Japan's economical development since the 1970s as a test bed for exploring ideas about post-Fordist transition in advanced capitalist economies (1991, p47). The plummeting cost of electric components facilitates the easier imitation of basic technologies and the ever faster turnover time of the electronics commodity. This has compelled Sony and other Japanese consumer-oriented electronic companies to spend more time and money on the 'information content' of their products and on those aspects that cannot be easily imitated. However, the consumer electronics, i.e. the television, video, and personal cassette recorder products, helped Sony maintain a market leader position for many years; these are now standard products which are being produced more cheaply by the rest of Southeast Asia (Bell and McNeill, 1999,

p772; pp778-779).

Upon further examining the features of Asian pop culture and Japanese pop culture, we see an emergence from a specific set of historical, geographical and cultural locations in East Asia. The economic power of Asian countries and proliferation of media space in the region have increased the export opportunity for Japanese popular culture. Japanese entrepreneurs became keen not only in promoting electronics, but also at circulating Japanese popular music and TV programs to the East and Southeast Asian market. Because of the influx of television channels, the demands of TV programs rose in these countries, including Taiwan and South Korea. The growth of regional television markets, where producers are based in the country dominating trade within the region, is a result of the cultural product from within a region costing less than the foreign product from outside the region (Hoskins et al., 1997, p35).

Asian Pacific metropolitan cities, such as Singapore, Seoul, Taipei, and now Shanghai, have followed similar modernity processes, e.g. the fast developing urban infrastructure, and social and economic transformation. Not only are there similar economic and social qualifications, but also the consumption of pop culture, in terms of films, music, TV series, and games, can be found commonly shared among the Asian arena. The rise of economic power in East and Southeast Asia and the rapid growth of commercialized TV markets in the region have pushed the industry to apply the well-worn techniques of creating pop idols in other Asian markets (Iwabuchi, 2002, p100).

When further examining Japanese TV formats and concepts, we can find that these cultural products are deeply influenced by, and borrowed from, American programs, and information about the American way of life appears in the mass media frequently. Japanese media in their sophisticated capacity for indigenizing “America” is symptomatic of a growing disquiet generated by the globalization of indigenized modernities. For example, ‘Tokyo love story’ is a popular Japanese TV drama in Japan and other Asian countries. It presents the way in which the youth live in urban settings. One of the attractions of the TV drama, to Taiwanese young viewers, is the new style of portraying love, work, and women’s roles and positions in society (Iwabuchi, 2002, p111; p144; p146). Another similar case suggests the way in which Japanese popular music is influential as a mediating element in the chain of transnationalization of American-dominated popular culture. The Japanese influence in the spread of Japanese consumer culture is actually a highly materialistic Japanese version of the American ‘original’ (Igarashi, 1997; Wee, 1997; Iwabuchi,

2002). The cultural hybridity, a set of regionally differentiated patterns of modernity, can explain why Japanese cultural products, which adapt American popular genres into more localized forms, appeal to Taiwanese audiences (Straubhaar, 2002, p689).

The audiences emotionally engage in particular popular Japanese dramas throughout the East Asian market. This reflects the meanings of modern living in a specific socio-historical conjuncture of each urban area (Lee, 2004; Leung, 2004; MacLachlan & Chua, 2004). A different interpretation from the view of cultural proximity is presented by Iwabuchi (2001), who says the audiences from other Asian countries existentially have the abilities to hyper-read the dramas and translate the elements from the global to the local. When a majority of these dramas focus on the plight of city life, the Hong Kong audiences can read a message embodied inside the dramas, and the Taiwanese youth becomes the central force to consume more cross-cultural products through media and travel, across the network constructed by the Japanese government and media corporations (Iwabuchi 2001, p144; p146).

International communication is thought to be a key to the process of modernization and development for the 'Third World' by scholars, such as Eisentadt, Moore, and Lerner (Sparks, 2007b, pp22-24). Modernization theory arose from the notion that international mass communication could be used to spread the message of modernity and transfer the economic and political models of the West to the newly independent countries (Thussu, 2000, p56). Based on previous belief, researchers point out that media help to diffuse a value system that is favorable to innovation, mobility, achievement and consumption, which originates with the concept of modernity that developed in Western Europe and North America. Upon having the evidence concerning the role of media in national development, Lerner (1958) notes that media could help to break down the 'traditionalism' that is an obstacle to 'modernity'. This further raises expectations and aspirations enabling people to imagine and want a 'better alternative' for themselves and their families (McQuail, 1987, p191; p272).

4.4.4 Geo-cultural market

Although the media sector is considered to be the privileged preserve of North America, different cultural product industrial agglomerations around the world are increasingly catching up with one another in the global web. Two key examples of cultural exports are that the Mexican and Brazilian Latin American soap operas from the South to the North, and South Korean TV series which won high viewing ratings in Asian countries, and even in India (Thussu, 2000; Sinclair, 2002). Therefore, cultural content continues to be marketed with very specific market

boundaries, including ethnicities, religions, languages, communities, and habits (Hoskins et al., 1997; Preston and Kerr, 2001). Tracey and Redal's research (1995) corroborates that the extension of television shows are a parochialism that have long characterized the preferences of audiences, despite the traditional concepts of the patterns of distribution of international television. In addition, a lot of scholars argue that the theories on globalization and control are inadequate, and difficult to be believed. John Tomlinson (1991) points out cultural products are adopted and used in different ways in various locales. Suzanne Kapner's research (2003) indicates that the circulation of cultural products is increasingly restricted; 71 percent of the top 10 programs in 60 countries were locally produced in 2001.

While geographic proximity helps media to cross international borders, language and culture appear to be more important than geography. Despite the domination of English-speaking media networks, two major media conglomerates, Televisa (Mexico) and Globo (Brazil) have risen to dominance in Central and South Latin America. In conjunction with unique access to a large market and geographical proximity of export, these two TV stations have been able to make themselves the centre of their respective international regions. Further use of satellite technology has made cultural similarity more a determinant of international market formation than geographical proximity (Sinclair, 1996, p36; p63). This research supports that the concept that cultural products are circulated within certain regional markets, rather than the global.

Major regional TV markets are developing in Spanish, Arabic, Chinese, Hindi, French and English. Increasingly, these cultural markets extend beyond neighbouring countries to a large region or even the world, while populations have migrated to every possible corner of the world. They are reached and united through a variety of new technologies: video, satellite television and cable TV (Straubhaar and LaRose, 2001, pp522-523; Straubhaar, 2002, p695). Thussu (2000) argues that the one-way flow of Western media content appears to be diminishing due to the increasing counter-flow of international media. However, the output of cultural products from non-English markets, such as the Pan-Arabic Middle East Broadcasting Centre or the Mandarin language Phoenix Channel, is still limited. Their global impact is restricted to Diaspora communities who are their primary target markets (p223).

Complex cultural elements have transformed people's thinking and their preference for TV programs, and still play an important factor in affecting the audience. Wildman and Siwek (1988) consider language so important that, in their

model of trade in film and television programs, the cultural market is defined by language rather than by political boundaries. Cultural-linguistic markets are emerging at a level smaller than global but larger than national. Cultural-linguistic markets form where audiences share the same or similar languages, as well as intertwined histories and broadly overlapping cultural characteristics. It seems that people there and elsewhere tend to look for television programming, Internet sites, and music with more cultural proximity (Hoskins et al, 2004, p43).

4.4.4.1 Confucian value in Chinese market

Huntington (1996) has hypothesized that there are a limited number of 'civilizations' based on underlying religious, language and cultural division. In this section, we are going to discuss the feature of the Chinese cultural market and its relationship with other Asian markets. The Chinese domestic market has expanded to a 'Confucian' cultural influence area market, and the large Arabic market has broadened to a global Islamic market (cited in Sraubhaar, 2002, p693). Evidence suggests that Taiwanese and Mainland Chinese audiences usually have common interests on mass cultural productions such as popular music and TV series, because they have the culture proximity and same language. Both Taiwan and Mainland China share the same cultural background of Confucianism, which places an emphasis on ethics and principles of good governance, and the importance of education as well as family and hard work. Taiwanese television dramas, including martial-arts stories, period, romance, and contemporary series are very popular in China, because they insert traditional values and virtues. Such treatment of traditional values appears to resonate strongly with Chinese audiences, who perhaps want to reinforce some of the personal values that have been strained so much by their numerous political and ideological struggles (Chan, 1996, p142).

In addition, the South Korean wave of pop culture is also growing in popularity across Asia. South Korean films and dramas about urban professionals in Seoul present images of modern lives centring on individual happiness and sophisticated consumerism. Most importantly, South Korean content with enduring Confucian based values in their emphasis on family relationships, offer to Chinese audiences both a reminder of what was lost during the Cultural Revolution, and an example of an Asian country that has modernized but also retained its traditions. A television drama about a royal cook, '*The Jewel in the Palace*', is injected with abundant elements of Confucian based values such as obedience, tolerance and harmony, and Chinese traditional cultures, such as homeopathic medicine and acupuncture. This historical TV drama is garnering record ratings throughout Asia (nytimes.com, 2nd

January, 2006). Hong Kong based film critic, Law, has the view that Korean popular culture's success arises from its ability to touch the right chord of Asian sentiments, such as family values (Chon (2001) cited in Shim, 2006, p39). This can provide illumination to why South Korean drama is more popular than Japanese in the Greater Chinese market.

4.4.4.2 *Wuxia* culture in Chinese market

China has grown to be a huge media consumption market, with growing economic power and a large middle class. Today's technological change and growing economic integration between China, Taiwan, and Hong Kong are conducive to the development of this geo-linguistic region into a arena of television exchange. Comedies, gangster movies, and action films with special effects, all have a market niche in the current Chinese commercial cinema market (Chan, 1996, p157). Likewise, recent empirical research demonstrates the dominance of Western media might be diminishing. Audiences increasingly showed a preference for national and regional productions, especially in news, talk shows and variety formats of drama (Curtin, 2007, pp9-10; Keane, 2006).

Hong Kong originally dominated much of the Asian market for martial arts, 'gangster' films, and television dramas. The most popular Hong Kong exports to China are martial arts series adapted from works by the most popular martial arts novelist, Hong Kong's Jin Yong (Curtin, 2007, p268; Zhu, 2008, p64). Through decades of exploration, Hong Kong has built up a specific production system for *wuxia* themed cinema, by presenting its own styles of plotting, shooting and action aesthetics. Based on Chinese society and *wuxia* culture, Hong Kong's film-makers and moviegoers construct a fantasy *wuxia* world and *wuxia* beliefs. The unique production environment provides a pool to train waves of professional *wuxia* film-makers, including directors, choreographers, actors, and stunt men. This has led to the production of hundreds of movies (Wu and Chan, 2007, p196; pp206-207).

Wuxia themed genre takes a huge market share in Chinese film and TV market. Not only in Taiwan, but also in Mainland China, there is a substantial audience ready for martial arts dramas, chiefly because a large reading public enjoys the genre. The genre of martial arts, which is deeply grounded in China, originates from Chinese *wuxia* novels. Martial arts movies with flamboyant physical stunts and special effects have become part of the global cinema. Chinese versions seem to succeed largely on the basis of their ability to relate to recognizable stars, legends and cults. In Curtin's view, the formula for the martial arts drama is in some ways similar to the Hollywood Western during its halcyon days, when it provided a pretext for reflection

on tradition and modernity (2007, pp142-145; p268). Based on the observation of Arjun Appadurai (1990, p595) the transnational movement of martial arts, as mediated by Hollywood and the Hong Kong film industries, has reformulated to meet the fantasies of young populations, creating a new hybrid of culture with muscular male violence.

The Asian market is a complete constituted market, just like European market. Regional programming for Northeast Asia, South and West Asia, or Southeast Asia may not work very well, for though the languages may be similar across national borders, the cultures are quite distinct. This is indicated by the fact that the highest rated programs in many of the region's countries are very much productions with a local idiom. It would be impossible to deny that certain genres, such as dramas and comedies, have had a long popular tradition in most local cultures, long before the arrival of television. It might be argued, instead, that television, whether transnational or domestic, has been instrumental in their preservation in rapidly-modernizing countries. At the same time, it may be said that in Asia, local cultures are being co-opted in the process of the globalization of their cultural industries and post-modernization of cultures (Thomas, 2006, p162).

4.5 Conclusion

Through examining and drawing together globalization theories developed in social, economic and cultural dimensions, this chapter has established a local, regional and global framework to analyze the current changing Asian OLG industry and the nature of this change.

First, this research examines the media industry, the media institutions and their relationships with the labour force. From the political economy approach, media industries have been facing the trend of integration, conglomeration, and globalization. Media companies seek vertical and horizontal integration under the competitive influences of market, capital, and technology. As media businesses become bigger, they provide more job opportunities, from the production line to designer and even professional manager. The procedure to divide production and labour in the cultural industry has become professional and technological, not only in production but also in marketing and distribution. However, the symbol creators do not benefit in the complex professional era of cultural production. The culmination of the capitalism of the cultural industry makes media organizations or institutions practice under the influence of economic and social power, further constraining creative personnel. Miège (1987) offers a variation on an analysis of the structure of

corporate control and the nature of the labour process. In addition, Toby Miller's (2001) NIDL illustrates the trend that Western cultural industry has shifted their production abroad, normally to countries or regions with lower labour costs.

Second, when we further analyze the current globalization, in an economic perspective, Gereffi's (1994) global value chain provides a different illustration, challenging the system of world economy, and stressing the dependent relationships existing between core and peripheral countries. While the commodity production line has to be subdivided into fragments which can be assigned to places, a profitable combination of capital, labour and technology appear. For the undeveloped countries, the opportunities to make promising progress from the aid of global enterprises in providing superior skills and technology, and most importantly the opportunities for local linkages to modernization. The development of the economy (local or regional) reveals that some of the actors may be both 'insiders' whose role is based upon the place-specific networks, and 'outsiders', who play a distinctive and important role in the structure of the global economy, when the local needs the sources and aids from outside to activate its economy. Furthermore, an interlinked network of metropolitan nodes, based on networking geometry, has emerged, although peripheral cities still hold a subordinate position.

Third, the process of globalization has raised the transformation of developing countries in both economic dimensions as well as in social and cultural dimensions. The theories of media globalization illuminate how the West uses economic power to exploit the market of cultural artefacts globally, further manipulating the undeveloped countries as well as the developing countries. Based on the observation of socio-economic researchers, the whole global market seems to present a western hegemony model. This can be applied to the phenomenon of a globalizing media system: a two-tiered system exists between US based media global conglomerations and the media enterprises based in other cultural-linguistic markets.

However, other research suggests cultures still play an important role when audiences have their preference to choose certain cultural content. Definitely, cultural content continues to be marketed with specific market boundaries. On one hand, the research focuses on the discussion of modernization in East Asian countries and the effect on media development. In East Asia, Japanese modernization was the first to follow a path from the West, and similar processes of modernity can be found in Taiwan, South Korea, and currently in China. Western-style capitalism seems to represent the most developed and globally relevant model for the modernization of developing countries. Japanese media provided their sophisticated content of

indigenizing American, which were accepted by other Asian audiences. On the other hand, the emergence of new technologies, such as the Internet and satellite TV, has reshaped a significant Chinese cultural market, including China, Hong Kong, and Taiwan. Chinese cultural products based on different cultural elements, Confucian values and *wuxia* culture, appeal to the massive Chinese audiences, forming an inclusive cultural-linguistic market.

In addition to the above theories, developed in the Euro-American context, this study will also test local and regional narratives evolved in the developing Asian OLG industry. It may further explain why successful Internet business models, such as South Korean e-services for game players, are easily introduced or transplanted into its neighbouring markets, such as Taiwan, Japan, and China, and how the game product is localized in each different local market. Also, what does an emerging Chinese OLG market imply? Is there a regional market subordinated within a Western hegemony global media system, or a specific cultural-linguistic market, differing from the Western-centred market? Most importantly, the goal of this research is try to find out what the position of the Taiwanese OLG industry is, in the regional and the global markets.

In the next chapter, the analytical and the investigative structure of the research is introduced and the methodological issues concerning the operational mechanism for data collection, both in Taiwan and China, is examined.

Chapter 5 Research Design and Data Collection

Chapter 5 has two purposes: first, it aims to establish the investigative structure, including the scope, locations and reference period of the research. Second, it aims to identify proper data collection methods of investigation in light of the research objects.

This chapter is divided into four parts. The first introduces the objective of this research and raises key research questions. The second part establishes the structural political-economic approach as the prime analytical framework and further identifies the investigation structure. The chapter's third part discusses the issues of which data collection methods should be adapted and how data is collected. The research used two data production methods (documentary research and semi-structured interviews), and elaborates their implementation in the field and categorises the collected data.

In addition, it provides the weakness of methodology, the possible error, as well as the weakness and richness of the data collection in Taiwan and China, to further examine the intense competitive OLG industry in the intra-Asian market, and observe how the Taiwanese cultural industry has transformed to cope with global competition.

5.1 Aims of research

The aim of this research is to discover the unique characteristics of Taiwan's OLG industry which provides value-added services and has its unique market niche in the intra-Asian markets.

To support my research, the following aspects will be investigated:

- A case study of a local game firm: analysing its business strategy, its core management values, and its cooperation with foreign firms;
- Policy support by the government for OLG industry;
- The clustering OLG industry developed in Taiwan;
- The experience of game production in Taiwan;
- The unique game genre developed by Taiwanese game producers;
- The competitiveness and advantage of Taiwanese game operators;
- The study of the formation of fragmented game production and the circulation network in the intra-Asian market.

5.2 Research objective

The objective of my study is to construct a profile of the OLG industry in Taiwan and Mainland China by addressing the following objectives:

- Understand the cultural, technological and market issues of the OLG industry;
- Present the current status of the OLG industry;
- Identify emerging trends of this industry;
- Identify the OLG industry's strength and weakness in both Taiwan and Mainland China;
- Develop an understanding of the perceived role of government in the industry;
- Provide an understanding of the current skilled-labour market in the industry;
- Observe the various linkages and networks among these different game industries.

5.3 Research design

In examining influential factors of Taiwan's OLG industry, Porter's Diamond theory (1990) is expounded on why nations gain competitive industries within a nation.

1. Factor conditions.

These can be sorted into two categories: Home-grown resources and highly specialized resources, such as skilled labour and a well-developed infrastructure. Also, resource constraints may encourage development of substitute capabilities.

2. Demand conditions.

The nature of a nation's domestic demand for the industry's product of service

3. Related and supporting industries.

The presence or absence, in the nation, of supplier industries and related industries that are internationally competitive

4. Enterprise strategy, structure, and rivalry.

The conditions in the nation governing how companies are created, organized and managed, and the nature of domestic rivalry

Chance and government are two additional variables, which can influence the national system in important ways, and are necessary to complete the theory.

Porter's research also stresses the importance of governmental support on the development of an industry in a nation.

Factors such as government policy, high-skilled labour, and modernisation in political, economic and social development become the dominant factors when the managers of online game enterprises set up marketing strategies.

The principle factors include labour, capital, technological facilities and infrastructure. The nature of the 'diamond' system promotes the clustering of a nation's competitive industries. A nation's successful industries are usually linked through vertical (buyer-supplier) or horizontal (customer, technology, channel, etc.) relationships. Based on Porter's research, I will examine how the theories fit into the smaller open economy (SOE) of Taiwan, and its cultural OLG industry.

One of the relevant issues of Porter's Diamond model refers to the important role of domestic demand. The profits of demand stress the importance of the domestic market, and whether the size of the domestic market and its pattern of growth have the ability to shape the quality of an industry. However, it has been argued that the Diamond theory model does not work very well for SOEs such as Canada, Finland, Austria, New Zealand and Ireland (Bellak & Weiss, 1993; O'Donnellan, 1994; O'Gorman et al., 1997). In order to attain a minimum efficient size, industries from these SOEs, especially those focusing on niche markets, commonly have to export a substantial proportion of their outputs. Research suggests that domestic demand often cannot be a major determinant of the competitive advantage of industries in small countries (O'Gorman et al., 1997).

5.3.1 Hypothesis

Previous reviews provide the hypothesis that Taiwan's OLG industry has a degree of competitiveness in that the industry is a competitive game developer with an aggressive operator attitude suitable for global competition circumstances. Taiwan also has a unique position, as an experimental test-bed environment for entry into the Chinese market, or as a value-added intermediary in the intra-Asian market.

The hypotheses of this research are:

1. In the context of globalization, the contemporary OLG industry has been challenged by rapid technological and economic changes as well as cultural and social shifts. These accelerated changes have been forming a new environment, and are forcing Taiwan's game industry to develop new business models and functions in order to survive within the increasingly intense global markets.

2. Taiwan is seen as a sophisticated internet consuming market. A variety of game genres still can find a niche market in Taiwan. Taiwan attracts foreign game firms to use Taiwan as a springboard to the huge neighbouring Mainland China market. Taiwan, as a result of the physical, geographic and economic position, has a specific role in the regional market, as a value-added experiment or an intermediary in the Asia Pacific market.
3. Technological innovation decides whether an enterprise dominates or controls an emerging industry. Nowadays, advanced technology enables online computer games to present a fantasy 'real' world, in the transformation from 2D scrolling storyline images to 3D rotating digital worlds. More complex technological skills require higher levels of investment in the commodified processes of the game, including creation, production and operation. Recently the technology changes have forced Taiwanese game firms to look for integration into global markets. Taiwanese game firms with the game production experiences are still competitive in the domestic market despite burgeoning global competition.
4. Geo-cultural markets are unified not only by language but also history, religion, ethnicity and culture. Previous research shows that regional cultural-linguistic markets are emerging. Taiwan and Mainland China share the same cultural and historical influences. Specific Chinese games still appeal to a significant number of Chinese players including Taiwanese, Chinese and other Asian Pacific markets, however, these markets face the challenges of globalization, in terms of capital, technology, and culture. The Chinese topics games have been adapted from Chinese storylines, which can explain a phenomenon in which an active intra-regional cultural flow exists in the intra-Asian market.

5.3.2 Research question

The following research questions are designed in relation to the purpose of my investigation in the two contexts of Taiwanese and Chinese game firms:

1. Taiwanese game firms:

Technology

- As a leading producer of high-technology products, how does Taiwan's ICT (Information Communication Technology) industry foundation play a role in supporting Taiwan's game industry?
- What kind of value chain exists within each Taiwanese game company?

- High quality human resource management is an important factor in maintaining a company's competitiveness. How do Taiwan's companies make use of their advantage in game production in the regional market?
- What kinds of alliances exist between Taiwan's game companies and foreign investors to gain technology support and understanding of global commodity trends?
- From the technical view, what kinds of difficulties exist in the development of Taiwan's OLG industry?

Marketing

- To resist media globalization, what kinds of business strategies are used by Taiwanese firms, especially toward the major players USA, South Korea and China?
- What differences exist between the Chinese games and Korean games in terms of shaping and segmenting in the Taiwanese market?
- What are the different ways Taiwanese firms evaluate their competitors - Japan, South Korea and China? What kinds of relationships exist?
- How has the Chinese government's protection policy limited the Taiwanese OLG industry to broaden its own market?
- From the marketing viewpoint, what difficulties face the development of Taiwan's OLG industry?

Culture

- When facing competition from South Korean and American games, do Taiwanese firms simply bring in foreign games, or do they offer an alternative by providing self-produced games to meet the demands of the Chinese cultural sphere?
- How do Taiwanese firms define the rise of Eastern 'technocultures' in OLG industries? Can we find any exclusive genres or game concepts, such as the 'cute' culture, based on Japanese *manga*, or Chinese *wuxia* culture, designed in the Chinese or East Asian regions, which are different from the Western definitions?
- As Taiwan is seen as a sophisticated market, different game genres will always the opportunity to find a niche in this small scale market. What kind of game content readily appeals to the greatest number of Taiwanese players? Japanese style cute game, Western medieval epic games, or specific Chinese topic games?

- Do Taiwanese gamers share similar tastes and interests with the Chinese? Or does another subculture exist within Asian cities, such as Taipei, Seoul, Tokyo, Beijing, and Shanghai, where popular consuming cultures have an appeal to the common urban players?

2. For Chinese game firms:

- The government's influence on modern international competition is very important. Conditions are affected through subsidies, policies toward the capital markets and policies toward education. In addition, the government's role in shaping indigenous demand conditions is often more subtle. What kind of role has the Chinese government played in the development of China's OLG industry?
- How do Taiwanese and Korean game firms influence the Chinese game industry?
- What significant differences exist between the gamers who prefer Chinese topic games, and the gamers who play South Korean or American games?
- How do Chinese investors evaluate Taiwan's market? Is it a more sophisticated market with urbanities, or is it just an extended market of China?
- What possible business strategies can exist within Chinese and Taiwanese game companies when more Chinese games are operating in Taiwan's market?

5.3.3 Case studies

The case study method is an approach to study a social phenomenon, involving an in-depth, longitudinal examination of a single instance or event. The advantage of this method is to provide a way for researchers to conduct an intensive analysis of many case specific details that can be ignored by other methods. However, the case study is different in the use of large samples and following a rigid protocol to examine a limited number of variables. The case study approach may be viewed as a research drawback on the misunderstanding of being difficult to summarize and to develop general propositions and theories on the basis of specific case studies. Bent Flyvbjerg (2004) argues that case studies can be used not only in pilot studies, but also for full-fledged research schemes. Indeed, the method produces a supplement of rule-based knowledge which may be a nuanced view of reality. Case studies cannot be meaningfully understood by many theories in social science, and does not exist in predictive theory. As a research method, the case study can be

an effective remedy which unearths some truth covered by the tendency (Flyvbjerg 2004, pp390-392).

According to Robert Stake (2000), three types of case have been identified: the intrinsic, the instrumental and the collective case study. This research uses the collective case study, e.g. multiple case studies, where a number of cases are studied in order to investigate a general phenomenon.

My case choice is based upon: first, the significant case in the Taiwanese OLG industry; secondly, the accessibility and availability of data on the case. Most importantly, the degree of relevance of the features demonstrated in the case related to the theoretical concerns of this research. Based on the use of case studies, the research will discuss the competitiveness of two major players in Taiwan's OLG industry: *Soft World* and *Gamania*.

Soft World, Taiwan's biggest game firm, focuses on the Chinese markets of Mainland China, Taiwan, Hong Kong, and other Chinese Diaspora communities in Southeast Asia. The enterprise's game business includes production, distribution and game operation. *Soft World*'s game portal provides diversified-forms of digital entertainment, containing other Asian licensed game properties or self-produced ones. In addition, *Soft World*'s subsidiary, *Chinese Gamers*, is the first company to produce an MMORPG based on a Chinese topic. As an early player, *Soft World* has accumulated much experience in the OLG business.

Gamania is significant because the company maintains many popular Korean MMORPGs in Taiwan's market. Four of the top Korean game companies, including *NC Soft*, *Nexion*, *Gravity*, and *NHN* set up close partnerships with *Gamania*. This company also has great ambitions to tackle other potential markets, including China, Hong Kong and Japan, while its marketing strategies and online services have proven to be a successful way to make sizeable profits in Taiwan.

5.3.4 The reference period

The study's time frame is from 2002 to 2008, during which time the OLG industry has faced increasing global competition. Under the wave of globalization, OLG businesses face higher costs of production, more complex technology, and higher investment risks. Firstly, developing and running a MMORPG has become a very expensive investment. The process is sufficiently intricate for small and medium game firms to cover the whole game process from pre-production (development) to post-production (sales and operations); many instead just become a game developer or a game operator. Nowadays, Taiwanese game firms seek more game titles from the outside; and at the same time, South Korean developers have the

capabilities to develop the game properties and supply other Asian operators. This turn of events has resulted in links between the game developers and the game operators in the intra-Asian markets. This cooperation will lower the investment risk, as well as help both game providers and game buyers. Second, China's OLG industry has emerged as one of the fastest-growing in the world. The Chinese can develop oriented game products and further meet the demands of China's massive user base. Furthermore, Chinese self-produced games have been exported to other Asian countries. The changing trends have made the Asian OLG industry move to more complicated cooperation, becoming competitors and co-operators. The nature of Asian online games, influenced by the factors of market, technology and culture, presents a regional cultural and economic activity differing from the existing Anglo-American digital game studies. This complex and fluid period constitutes the basis for this research's study period.

5.4 Data collection

Data collection is profoundly interconnected to formation of a reliable conclusion in social research. A combination of different methods of data collection is important as it provides a systematic way for researchers to conduct crosschecks, to indicate the contradictions, and to enrich comprehensiveness.

This research uses the triangulation method as the basis of data collection against the possibility of invalidity. According to Uwe Flick, triangulation is used to name the combination of appropriate research perspectives and methods that are suitable for taking into account as many different aspects of a problem as possible (1998, p49). No research method is intrinsically better than any other; everything will depend upon the research objectives. So it is necessary to prepare different angles of questions to restore a balance between different ways of research (Silverman, 2000, p115).

Triangulation of data collection involves both the use of different methods to produce data and the use of different data sources. They include 'within-method', for instance, studying phenomena at different dates and places and through different persons, and 'between-method', combination of documentary research with interviews (Flick, 1998). By having a cumulative view of data drawn from different contexts, the researcher may be able to triangulate the 'true' state of affairs by examining where the different data intersect. However, overlaying one set of data upon another is a complicated task. The method of developing an analytic

framework will become an important issue while conducting research (Silverman, 2000).

Triangulation used in this research may improve the reliability of a single method. However, different perspectives and specific starting points are posed in qualitative research. Beyond such juxtaposition, it is arguable that a single position and its perspective on the phenomenon are adapted as the other perspectives are critically rejected. This may explain how different theoretical perspectives can be understood in different ways to access the phenomenon under study. Any perspective may be examined as to which part of the phenomenon it discloses. Different research perspectives, hence, may be combined and supplemented to decrease error term or to avoid possible bias (Flick, 1998, p25).

This research used two data collection methods, documentary research and semi-structured interviews. The varied data sources used include government or semi-government publication, journals, books, commercial reports, newspapers and magazines published in Taiwan, China, South Korea, Japan, and Western countries.

5.4.1 Documentary research

When undertaking qualitative research, observational and oral data normally are treated as the primary data and any documentary materials as secondary. The main reason is that the latter are often drawn on to cross-check the oral accounts, or to provide some kind of descriptive and historical context. Paul Atkinson and Amanda Coffey (2004) argue that documentary materials should be regarded as data in their own right, because they often enshrine a distinctively documentary version of social reality (p59).

According to Atkinson and Coffey (2004), many published studies of occupational, professional, organizational, and even educational or academic settings are implicitly represented as devoid of written documents and other forms of textual recording. Such accounts do not always do justice to the setting they purport to describe. It is, without doubt, necessary to redress the balance if only for the sake of completeness and fidelity to the settings of social research. In addition, qualitative field research should pay attention to the collection and analysis of documentary realities. Such enquiry is not confined just to the inspection of documents. At the same time, it must incorporate a clear understanding of how documents are produced, circulated, read, and used for a wide variety of purposes (Atkinson & Coffey, pp56-57).

Five varieties of documents were chosen for this research according to their different functions and degrees of importance. The first category is government

publications, including official statistics. They can be found at government websites, for instance, eng.korean.net, www.dic.org.tw, and www.chinaculture.org.

The second category consists of commercial reports from research companies, for instance, *IDC* in Taiwan and *iResearch Consulting Group* in China. These provide valuable information about industrial structures, business strategies, financial situations, possible challenges and the prospect of OLG industries in Taiwan and other Asian countries.

The third category also comes from the Internet, which contributes much to the collection of the valuable information. First, the data collection refers to the timely publication of the contents of the websites of game firms, including Taiwan's *Gamania*, *Softstar* and China's *Shanda* and *the 9th*. Annual reports, press releases and in-house company reports are also included. These provide an understanding of the current situation of these game firms with information about marketing strategies, business plans, financial reports, and investment announcements. Another website source includes game portals, *7173* in China, *Gamebase* and *Gamer* in Taiwan. Here, the documents provide detailed accounts of the differences of game industries in the intra-Asian market.

In addition, Chinese and English academic literature, including books, journals, theses, and conference papers published in Asia, the USA and Europe, are used here to study findings, issues, arguments, and opinions concerning the developing online game industries in the Asian market from different perspectives. Major English journals used include *Games and Culture*, *Screen Digest*, *Media Culture and Society*, *New Media and Society*, and *Fibreculture*. However, it must be stated that research on the OLG industry is very difficult. Due to the fast moving nature of the business and its relative youth, very little objective records and academic research exists.

Finally, the research has used both English and Chinese print media and online mass media, including *Commercial Times*, *Economic Daily*, *Economic Examiner*, *United Daily News Online*, *Xinghau News Online*, and *New York Times* websites to collect up-to-date comment and reports.

In spite of diversity of data sources and data collection methods, it is important to recognize that "incompleteness" is an issue faced not only by the documentary research method, but also by social research in general. The research conducted here does not seek a whole picture and 100 percent accuracy in analysis of a social phenomenon, but rather aims to enrich current knowledge.

5.4.2 Semi-structured and elite interviews

The interview is chosen as another data collection method for this research. Many quality case studies combine other methods with interviewing. This may be because the researchers want to use different sources to corroborate each other so that they can apply some form of methodological triangulation (Silverman, 2000, p121). In addition, the interview not only produces primary sources from people involved in the OLG industry, but it also helps to gain people's insights, opinions and attitudes to particular issues. In social research, there are four types of interviews. The one employed in this research is the semi-structured interview. According to Flick, the 'interviewed subjects' viewpoints are more likely to be expressed in a relatively open designed interview situation than in a standardized interview or a questionnaire (2002, p74). For this type of interview, a list of open-ended and pre-determined questions was posed to interviewees.

5.4.2.1 Elite interview

Specifically, the elite interview is used in this research to clarify the nature of the Asian OLG industry and how it has moved under complicated conditions. The elite interview is used as a measure for collecting data, as scholars seek highly specific information about highly specific events and process (Berry, 2002, p679). Elites, defined by Marshall and Rossman (1995), are individuals within an organization who hold positions of authority and influence. They usually understand the overall significance of a company's position in the business environment. Moreover, they normally have comprehensive knowledge of the organisational infrastructure (Bowen, 2002, p273). Normally, the elite interview is used in political science.

According to Oisín Tansey (2006), a broad number of uses have been identified for this form of data collection:

1. To corroborate what has been established from other existing sources. The goal of collecting such data is often to confirm information that has already been collected from other sources.
2. To establish what a set of people think. As well as serving a corroborative purpose, elite interviews can also be used for additive purposes, providing new information that will improve the research process.
3. To make inferences about a larger population's characteristics and decisions. Interviews can also be used not only to gather new data about the beliefs or actions of specific individuals, but also for the purpose of making inferences about the beliefs or actions of a wider group who are not themselves interviewed.

4. To help reconstruct an event or set of events. The research aims to combine together various accounts to form a picture of a complex phenomenon, in order to establish the unearthed actions and truths that lay behind an event or series of events (Tansey 2006, pp4-6).

Strength, weakness and difficulties.

The benefit of interviewing elites is their ability to give expansive information in a specific field. One of the strongest advantages of elite interviews is that they enable researchers to interview, at first-hand, participants of the processes under investigation, allowing researchers to obtain accounts from direct witnesses and experiences (Tansey, 2006, p6).

However, it is very difficult to gain access to the elites in game companies, especially the very high level of decision maker, CEO, General Manager or senior game producer, who spends much time travelling between East Asian cities. In this research, time was used in the most efficient manner. Many of the interviews in this research were conducted during press conferences. Other ways included telephone conversations, sharing meals, and emails. Researcher Jeffrey Berry reminds that the 'error term' in elite interviews can easily cross an unacceptable threshold, unless the researcher pays close attention to field methodology (2002, p679).

The elite participants are more knowledgeable in answering macro-level questions; the higher the level the subject is positioned the more detail they can provide. The research benefits from enlisting the highest level of elite interviewees, such as CEO or general manager of the game company. In addition, elite participants are very informative in a deep discussion. Unlike the passive interview using structured questions, a base list of questions, prepared in advance, allows the researcher to decide what additional questions to ask. It is very important for a researcher to thoroughly plan all aspects before conducting an interview.

5.4.2.2 Sampling

When the goal of a study is to formulate generalizations of a specific group from a small sample of the group then some methods of probability sampling is essential to the robustness of the generalizations. Non-probability sampling techniques involve researchers drawing samples from a large population without the requirement of random selection. This research uses non-probability sampling. The goal of this research is to try to obtain information about the OLG business in the Asian market. Only elites can provide detailed information about how they made business decisions and how they coped with global competition. The distinguishing

characteristic of non-probability sampling is that subjective judgments play a role in the selection of the sample (Tansey, 2006, p10).

This research has combined two sampling methods to choose informants: 'judgmental' sampling or 'purposive' sampling and 'theoretical' sampling.

Judgmental sampling. First, I made the primary decision of who would be interviewed. Judgment was made on the basis of two criteria: choosing people who (i) could provide the required information and (ii) were willing to share it. According to Abraham Oppenheim (1992), researchers sometimes draw a judgment sample for preliminary investigations and some parts of the pilot work. This description means that accurate parameters for the population are lacking but that the investigators have done their best to obtain as wide a spread of individuals as possible. There exists the risk, however, that the sample will represent only a particular sector of the population, which is only very approximately representative (Oppenheim 1992, p43). Therefore, the snowball sampling method is used in the research to make it complementary. This sampling method involves identifying an initial set of relevant responders, such as professional journalists and analysts, and then requesting them to supply the names of other potential subjects, e.g. the leading players in game firms. This second set of subjects is also requested to supply other possible names.

Theoretical sampling. Here, my research combines another method, such as theoretical sampling, with interviewing, when using different sources to corroborate each other. The basic principle of theoretical sampling is to select cases or case groups according to concrete criteria concerning their content instead of using abstract methodological criteria. Sampling proceeds according to the relevance of cases instead of their representativeness (Flick, 2002, p66). Therefore, the sample must be chosen according to theoretical criteria, neither by random sampling nor by stratification. Individuals are selected according to their (expected) level of new insights, viewed in the light of the material already used and the knowledge drawn from it. Sampling decisions in theoretical sampling can start from two levels. In this research the sampling directly focuses on specific people (Flick, 2002, p64).

Flick notes that the theoretical sampling method may give unlimited possibilities of integrating further people or cases. At the same time, it is necessary to define criteria for a well-founded limitation of the sampling. These criteria are defined here in relation to the theory. The theory developing from the empirical material is the point of reference. Examples of such criteria are how relevant it might be for developing the theory (Flick 2002).

5.4.2.3 Interview

The informants involved in this research were separated into two groups. The first group consisted of professionals associated with the OLG industry, for example, journalists, scholars, government officials and analysts. They were invited to provide related information and opinions. The second group consisted of 'elite' personnel in the OLG industry who the positions of CEO and senior executives in finance, operations, production, R&D, and enterprise spokespersons, as well as senior music composers. The interviewees in the first of group respondents were seen as secondary sources, providing supplementary information, interpretation, and explanation of the same issue or event. The interviewees in the second group were primary data sources and my major focus, because they are directly involved in the OLG industry.

Different interview questions are designed for different levels of interviewee based on the interviewer's goals. For interviewees at the same level, a set of similar questions was compiled and used for each interviewee. Afterwards, specifically focused questions were used to fit different types of interviewees. For instance, the interview questions designed for a CEO or general manager were modified to cater for the business plans and marketing strategies; the questions designed for product managers focused on the processes of production lines whereas the questions for producers focused on the use of complex of technology.

Most of the interviewees received a letter, via e-mail, asking them to take part in the study if the enterprise allowed research questions. The interviews started with an open-ended question. The intention was that there would be minimal interruption by the interviewer, allowing the respondents to structure their own accounts.

However, less than half of the 59 interviewees consented to being tape-recorded. Indeed, interviewees from Chinese game firms were very sensitive about the business strategies of the OLG industry. None of them agreed to be tape-recorded. One Chinese enterprise agreed to be interviewed by e-mail only, because they were in the process of preparing for public listing in NASDAQ.

Tape-recorded interviews allow the interviewer to return to the data in its original format as often as they wish. The problem with field notes is that readers will only have access to how you recorded the event (Silverman, 2000, p20), in this research the dialogues. Taking notes, however, became the primary format in the research process because many interviewees were unwilling to be recorded during the interview. The challenge of dealing with the issues raised becomes even more daunting, as the researcher must pay attention to taking notes without a technical aid.

It is important that all these problems (and possible solutions) be kept in mind and balanced as the interview moves along rapidly (Berry, 2002, p682).

As pointed out in documentary research, other sources such as websites, newsletters, e-mail and newspapers were monitored to provide supplementary context in my research.

5.5 Data collection in Taiwan and China

The majority of data used in this research was collected from Taiwan and China from January to October, 2007. A series of in-depth interviews was carried out in three cities, including Taipei, Beijing and Shanghai. In order to analyse the development of Taiwan's OLG industry and its ability to compete in the intra-Asian market, I examined 28 Asian games firms, spread through Taiwan, South Korea, Japan, and China. The choice of these nations (other than Taiwan) was for pertinent reasons: South Korea was the first nation in Asia to develop an OLG industry; Japan has advanced skills in video gaming production, and China's domestic OLG market is the world's largest. All of them are Asian game enterprises, which act as both Taiwanese competitors as well as collaborators. These 28 Asian game enterprises were examined through combined approaches, including a historical approach and a critical political economy approach to analyze its structure in the OLG industry. The research also looked at functions, business models, and journalistic practices within the context of globalization. Some of the government's official statistics and publications may still serve to justify the data collected from the fieldwork.

Finally, in this research I explored the key research questions, which were mentioned above, in comparison with two other Western game firms: *Blizzard* (USA) and *Digital Bros* (Italy).

Without dismissing possible errors in the documentary data, these materials to a large degree provide rich and detailed factual data and reveal a considerable level of critical discussion on particular issues. With critical reading and analysis, the research materials have helped the researcher to capture a large part of Asian OLG industries, specifically the Taiwanese game firms from 2002 to 2008.

5.6 Conclusion

This study moves beyond existing research in three respects. First, it reflects the changes of the OLG industry in the intra-Asian market. Second, it investigates the causes of these changes, in terms of market, technological and cultural forces. Third, it examines the position of the Taiwanese OLG industry in intra-Asian

markets, while facing the competitive neighbouring rivals of China with a massive market potential and cheap labour, and South Korea with advanced capabilities of game production. However, research of the OLG industry is exceedingly difficult due to the fast moving nature of the business and its relative youth. Also, OLG specific research academics do not exist and consequently archival research data is equally non-existent.

Chapter 6. Gaming Industry in the Intra-Asian Market

The focus of this chapter is the nature of the Asian gaming industry: its market development, the competition and cooperation, and the integration and synergies. This chapter reviews existing research on the Western gaming industry, further anatomizing the digital games industries in the Asian market, including China, South Korea, Japan and Taiwan. It examines the process of value creation, analyzes the fragmentation of the production line of game products, investigates the underlying factors in global competition and spells out initial implications of the value-added chain, which has been established in the regional economy of the intra-Asian market. Additionally, political economic theory is used to examine the development of the Asian gaming industry. This perspective also serves to highlight the impact of globalization that is reflected in the trends of increasing vertical integration, and the importance of Intellectual Property rights (IP).

6. 1. Key trends in gaming industry

The gaming industry is divided into three market segments according to the dominant hardware platforms: consoles, handhelds, and personal computers (PC). At present the main consoles have moved to next generation platforms: *Sony's* PlayStation 3, *Microsoft's* Xbox, and *Nintendo's* Wii. According to the Japanese magazine, *Enterbrain*, the sale of global game products in 2006 was US\$ 23.2 billion. North America, Europe, and Japan are the top three markets in the gaming industry (*Enterbrain* cited in Xinghau news, June, 2007).

6.1.1 Vertical, horizontal, and diagonal integration

Throughout cultural industries, there is a strong tendency to integrate vertically and horizontally in order to control costs and ensure access to as wide a set of distribution channels as possible. Kerr's research analyses that oligopolies in consoles and MMORPGs have emerged with a small number of very large firms dominating the game market (Kerr 2006, p67). Doyle (2002) defines horizontal integration as "when two firms at the same stage in the supply chain, or who are engaged in the same activity, combine forces". Vertical integration is seen as expansion either forward into the succeeding stage, or backward into preceding stages in the supply chain. A third form of expansion is diagonal integration, which occurs when "firms diversify into new business areas" (Doyle (2002) cited in Kerr, 2006, p46). Upon further examination of the development of the digital game

industry, several key trends can be found, including integration, outsourcing, branding, and franchising. These will be discussed in the following paragraphs.

Vertical integration. According to Mosco, vertical integration means the concentration of firms within a line of business, extending the company's control over the process of production (1996, p176). During the 1990s, Cornford et al. (2000) identify that the global game publishing industry consolidated around "a core of between 10 and 20 major publishers" including well-known companies like *Electronic Arts*, *Nintendo* and *Infogrames* (owners of *Atari*). This data shows that the gaming industry consolidated even more, a new trend being toward vertical integration with developers rather than merging and acquiring other publishers (Kerr, 2006, p65). There are three types of developers:

First-party developers, or internal teams, who are fully integrated into a publishing company;

Second-party developers who are contracted to create games from concepts developed by a publisher;

Third-party developers and independent development houses who develop their own projects and try to sell them to a publisher (Kerr 2006, p64).

A game developer is a software developer that creates either or both video and PC games. Developers tend to specialize in, for example, particular game genres, such as computer role-playing games or first-person shooters; sporting games playable on different systems or translating games from one language to another. A new game title requires a publisher to make and fulfil a commission (contract), to publicly market the product and through a distributor to sell the game to the consumers in the market. Therefore, in the Western gaming industry, artistic developers have little involvement beyond the publishing stage, because the publisher controls the distribution and marketing. The majority of games in production is developed and completed by teams working within a publisher. Kerr suggests that close to two-thirds of game production is done by first-party developers (Kerr, 2006, pp64-65; p68).

Nevertheless, a different trade exists between the large publishers and small developers in the gaming market. Although some of companies have designed games in-house, game products are mainly commissioned by large corporations from specialist companies. In the commodified process, a publisher provides an advance to a creative artist on completion of the work, takes on the role of marketing, and distributing it. There is a premium for game publishers with inside knowledge of what fan subcultures are looking for and large corporations gain access to this

knowledge by entering into transactions with small companies who create the new market niche. The top publishers now run 'round-the-globe production' with development teams recruited or established in different locations based on labour cost, specialist skill, and localization and marketing needs (Kerr, 2006, pp64-65; Hesmondhaphgh, 2007, p245).

Horizontal integration. According to Mosco, horizontal integration happens when a company in one line of media buys a major interest in another media operation, not directly related to the original business, or when it takes a major stake in a company outside of the media (1996, pp175-176). Japanese game firms, *Nintendo* and *Sony*, control the global market by integrating with independent software publishers and buying US-oriented multinational media companies. Horizontal integration enables Japan to hold an oligopolisitic position in the video game industry.

First, the Japanese video game industry consists of a plethora of independent software publishers, as well as the platform developers. *Sony* and *Nintendo*, the platform manufacturers, function as a medium linking existing between software publishers and the electronic consumer. Platform developers facilitate the entry and the growth of independent software publishers by taking the lead in information exchange. Aoyama and Izushi (2004) illustrate that Japan's software publishers have been in an exclusive position to access dominant platform developers. Occasionally, platform developers distribute a small number of prototype consoles to a few selected software publishers with close relationships two or four years in advance of the planned release. A new platform is normally disclosed to third-party software publishers at the middle to late stages of game development. The existing cultural proximity in all cases functions to reduce the communication barrier and facilitates flow of information. It has formed a web of interlinks transferring expertise, further giving Japanese software publishers a head start in advance of the release of platform (Aoyama & Izushi 2004, pp118-126). The oligopolisitic system has a strong structuring effect on the software production process, meaning that the major platform developers erect a number of barriers in order to protect their market share (Kerr , 2006, p57).

Secondly, the video game industry has entered a more complex 'global enterprise web' made up of Japanese-owned but US-oriented multinational media companies and various smaller Japanese based software developers. The gaming industry began as a US industry, and was revived in North America by a triad of Japanese companies: *Nintendo*, *Sega*, and *Sony*. Scholar Mia Consalvo (2006)

further analyzes that video game cultures coming has become a hybrid of the US and Japanese markets, as well as an integral part of the global market. The movement of games themselves from bedroom subculture to mainstream big business has had the effect of repositioning the creative product from margin to centre (Consalvo, 2005, p125; p127).

In addition, horizontal integration means *Sony* does not have to compete with powerful Western publishers. According to Scott (1999), although new media emerging in Hollywood have become an adjunct to the entertainment industry, Northern California has only a small share of the production. Game platform makers, such as *Sony Electronic Publishing*, are strongest in the production platforms, enabling multimedia titles to be produced. This is different from film, music, and other media industries with studios, such as Fox, Disney, Universal, and Time Warner, which are active as publishers and commissioners of multimedia titles (Scott (1999) cited in Cooke, 2006, p268).

Diagonal integration. The console gaming industry is seen as an oligopoly, with three platform developers involved in both hardware and software production: *Nintendo*, *Sony* and *Microsoft*, along side a relatively small number of independent publishers (Kerr, 2006, p54). *Microsoft* is seen as a late entrant in the lucrative games software industry. *Microsoft* cautiously deployed an overall strategy before entering the arena by buying companies to obtain the capabilities to develop its gaming business. First, *Microsoft* developed DirectX, which acts as an intermediary between Windows and the games to ensure that the operating system could handle graphics, video, 3-D animation, surround sound, and other multimedia applications. To gain more technical support, *Microsoft* paid US\$ 130 million in 1994 for the Canadian company *SoftImage*, which is famous for its high-end animation. *Microsoft* continued, in 1995, by buying Bruce Artwick's company (BAO Ltd), the producers of the Flight Simulator *Microsoft* had been marketing since the 1980s. *Microsoft* also paid US\$ 30 million stake in *Dream Works* which concentrates on making or marketing games tied to high-profile media products. In 1996, *Microsoft* bought the Internet Gaming Zone, which is one of the strongest contenders in the area of networked games. In addition, *Microsoft* has recognized online gaming (OLG) as an important computer based market after acquiring different gaming enterprises. *Microsoft* has constructed its own MMORPGs, including the medieval epic *Asheron's Call* and the space combat epic *Allegiance* (Kline et al., 2003, pp164-167). But success in the digital market requires more than advanced technology and good machines. According to an analysis by Takahahi (2002), *Microsoft's* move

into different categories of the gaming markets, ranging from the production of game machines to the development of game software, can be seen as an attempt to broaden the company's portfolio of software products in order to overcome uncertainty over future business models. The company's vertical move into hardware and diagonally into different console games and online PC games signals the company's ambition to challenge the dominant positions of *Sony* and *Nintendo* (Kerr, 2006, p62).

As technologies emerge, such a transformation entails numerous moves of technology convergence, making a diagonal integration. With the transformation of text, audio, and visual media into digital data, the technological platforms that underlie different media forms have converged, blurring the lines among three distinct industries: media, telecommunications and computers. Most importantly, different entertainments have come together, maximizing the profits of major media enterprises. Now, game consoles are preparing multiple entertainments, combining with a number of emerging technologies, and crossing different platforms. *Sony's* Playstation 3 features various formats for games, including a blue-ray disc drive, blue-ray movies, and DVDs. Also, *Sony* announced *PlayStation Home*, a free-to-download community-based online service for the PlayStation network, which allows users to create an avatar. *Home*, a *Second life*-like experience, allows gamers to interact in a virtual world, which acts as a meeting place where users can play multiplayer games²⁸.

6.1.2 Outsourcing

Currently, the digital game industry is globally distributed, based on flexible production networks, targeting niche markets and is largely unregulated. Kerr notes that a clear correlation can be found between the location of the main markets in the US, Japan, and Europe and the location of the headquarters of the main publishing companies in Los Angeles, New York, Tokyo and London (Kerr, 2006, p78).

As cultural industries seek out new markets for products, lower-cost labour, and areas with minimal government oversight and regulation, these firms integrate vertically by securing control over production, distribution and exhibition. The firms also horizontally integrate across a range of media products, including hardware and software; and globally by making possible the flexible and cost-effective use of labour, capital, R&D, and production. Miège (1989) argues these media products lend themselves to industrial concentration and a detailed labour process, including an international division of labour that takes advantage of low-wage areas with

²⁸ Ing-Wei Her, Reporter of Commercial Times, interviewed in Taipei at 6th February 2007

predominantly non-unionized workers subjected to a regime of authoritarian control (Miège 1989, cited in Hesmondhalgh, 2007, pp71-72).

Outsourcing involves a part of the production being handed out to third party developers who will execute the work under the direction of the game studio. This means that parts of the production phases are shifted and conducted by people outside the core development team. Game studios never outsource the core programming tasks of game production. A large number of production activities, such as art design and drawing for different areas, such as level, characters, different items, and buildings, formulate the call for tender to be sent for potential third-party developers. Outsourcing is a feasible way for the game publisher or studio to increase a company's production volume and competence, and still provide concrete assets for the final products (Manninen, 2006, pp39-47).

Manninen's research shows out that early feedback is the key for successful quality control. Naturally, the distribution of outsourcing entails several new challenges. The quality of work, smooth management procedures, and knowledge sharing may be jeopardized if the outsourcing is not planned and executed carefully. The communication of plans and requirements should be extensive enough to allow shared understanding of the outsourcing project and the required outcomes. Once the partnerships are established, future outsourcing projects tend to improve since both parties learn something about each other's working methods and culture (Manninen, 2006, pp39-47).

Outsourcing is not specifically about sending jobs to low-wage countries. The internationalisations of labour, location and culture also become key elements, because employees located near their market are more aware of information of local conditions (Mosco, 2006, pp777-778). Researcher Hafez points out that media markets are by no means characterized by complex interdependence, even if specific transnational linkages, such as the geo-cultural area of Europe/US are more advanced (2007, p165).

6.1.3. Licensing intellectual game property

Using licensed intellectual property (IP) is seen as an emerging trend in the digital gaming industry. Licensing is a strategy which publishers and developers use to overcome the uncertainty of demand for games. IP can be drawn on real world properties, like Tiger Woods in a sport game, or on IP from comics, cartoons and Hollywood films. The logic of economies of scale and the fear of failure favour the serialization of success. In today's competitive cultural environment game developers have become focused on building a franchise around a single game or

releasing a series of sequels. The emphasis on licensing has made it difficult for smaller game developers without license and small publishers without strong financial supports to survive (Kline et al., 2003, p237). In January to June 2003, half of the top ten selling console games in the US were based on licenses, and half of the titles were sequels. Kerr predicts that the trend of licensing and series of sequels will continue, particularly in the console games market (2006; p69).

This reflects a market trend that international media firms make easier use of the value of IP, maximizing their profits through synergy and alliance. Synergies and alliances can be found between game firms or game firms and other media enterprise (e.g. games based on films, films based on games and music publicized via games, and so on). In today's cultural industry, cultural capital has been recycled and adapted into different forms of commodity. When examining the IP used in games, a complex interwoven relationship has developed between game publishers and other media companies.

First, game developers seek out existing IP (licensed IP), rather than brand new IP (original IP), to produce into video games. *Electronic Arts (EA)* acquired the exclusive rights to *Harry Potter* and produced four games featuring the boy hero's adventures on personal computers and console games. *The Lord of the Rings* is *EA*'s other licensing triumph in producing a series of games, which are slated to appear concurrently with the release of the films, based on the same stories (Kline et al., 2003, p227). In trying to decrease the investment risk, a 're-envisioned' game is considered much safer for publishers than an original game.

Nowadays, while capital and technology have condensed, media firms without cross-selling and cross-promotional potential are at a serious disadvantage in competing in the global market place. Synergistic connections are becoming vital for big firms to have success, and for the small ones to survive in the digital gaming business. Not surprisingly, there are an increasing number of strategic alliances between cultural industry companies and large corporations in other industries (Kline et al., 2003, pp236-237; Hesmondhagh, 2007, p187).

Secondly, as expected, the licensed IP from comics, cartoons, and Hollywood will increase. The IP and its ability work on a multitude of delivery mechanisms in movies, games, cartoons, and comics, matters more than ever. At the same time, international media conglomerates, which focus on recycling and adapting content across different media platforms, are rapidly multiplying. In particular, technological change development encouraging integration has become involved. Now, in the digital age, international conglomerates have been able to provide cultural capital

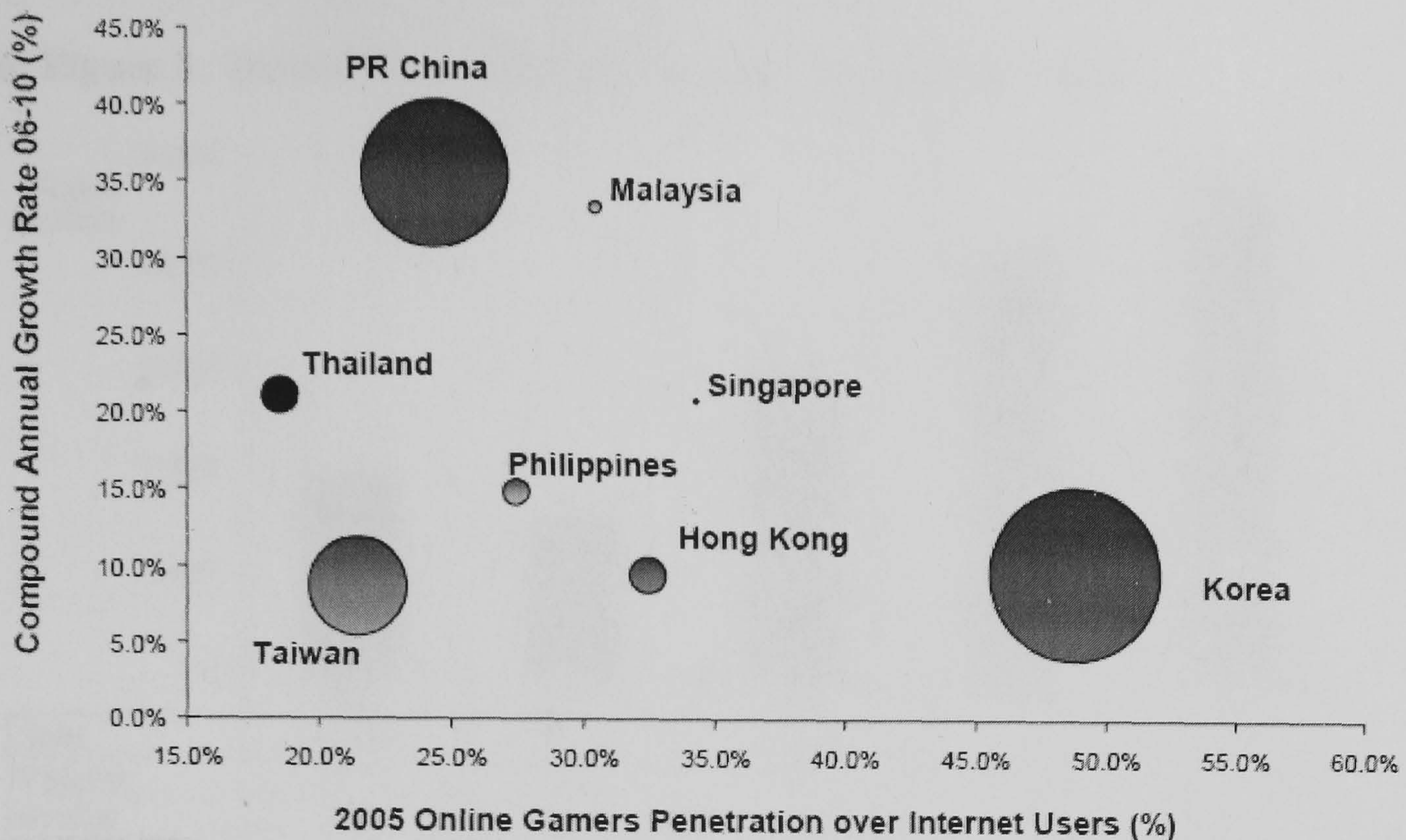
and develop business opportunities through the circulation of global commodities with popular identification. On the other hand, small companies have increasingly formed complex licensing, financing, and distribution deals with the major corporations. This reveals that other economic and cultural practices may be marginalized when losing capital power in global competition (Croteau & Haynes, 2001, p93; Keane, 2006, p844).

Thirdly, *Sony*, *Microsoft* and *Nintendo* concentrate on creating many 'safe' titles. These companies recognize that a lot of time, five to ten years, and heavy capital investment are required to develop a new game title into a branded game product. This is because when a franchise is built into the market, it will bring more lucrative profits than the number of units sold (Businessweek, Dec 2005). Since the 1990s there has been a concerted effort on the part of video game markets to saturate youth media culture with their branded products. The three dominant players have capitalized on the recognition of video game characters with their audiences. For example, *Nintendo* has featured *Mario's* image, not only in a series of sequels, but also on other consumer products, such as T-shirts, and in movies, generating an entire franchise of licensed *Mario Bros* products. Each agreement opens a new chain of promotional association with *Mario*, a new flow of income for *Nintendo* (Kline et al., 2003, pp236-237). According to Kean, many global formats and co-productions embody high levels of internationalized 'intangibles': notions about value creation, branding, marketing and consulting routinely accompany exchanges and contributes to establishing a culture of competition and business ethics (2006, p845).

6.2 The gaming industry in the intra-Asian market

According to *Enterbrain*, the South Korean and Chinese game markets in 2006 increased rapidly, separately accounting for 9.5 percent and 3.5 percent of the global gaming market share. This substantial increase is due to the increasing popularity of online games. It signifies the growth of PC online games in these two countries. Chinese government organizations say the market of Chinese PC online games will increase 13.7 percent from 2006 to 2007; furthermore, China has of global market significance with projected revenues of US\$1.3 billion by 2009 (Xinghau news Agency, 2007; Commercial Time, Apr 2007).

Figure 4. Asian Online Gaming Market Predictions for 2006-2007



(Source: Taiwan's MIC, 2006)

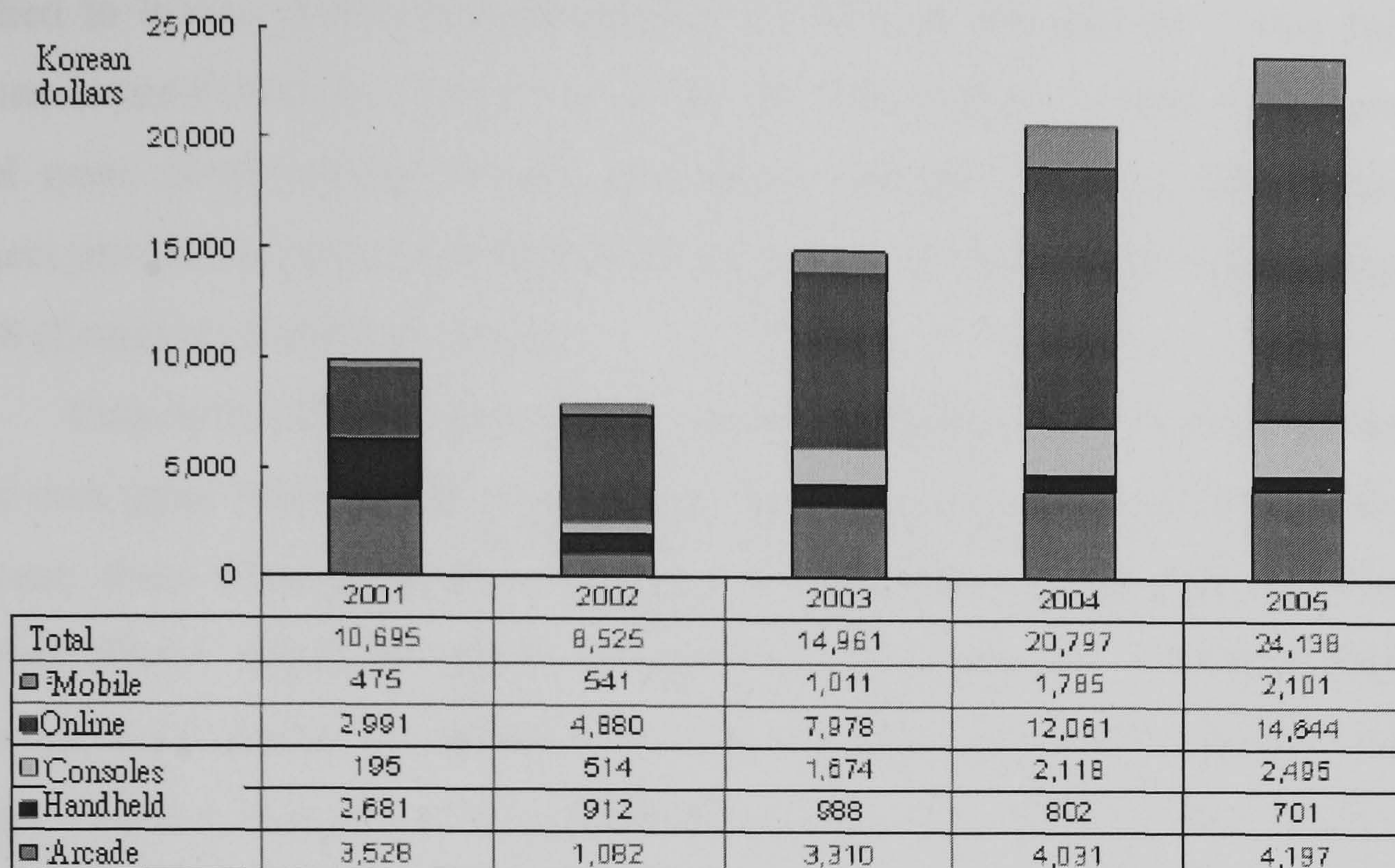
Currently, the OLG industry is dominated by a small number of firms competing directly against each other. In the United States and Japan, major players include *Sony*, *Electronic Arts*, and *Microsoft*. The major players in Asia are the South Korean firms *NC Soft* and *Webzen*, and the Chinese firms *Shanda*, *NetEase*, and *The9*. European firms have made forays into the market, but are still without any major success (Castronova, 2005, p127). Figure 4 illustrates a prediction of the growing market size of OLG in Asian countries, excluding Japan. The bubble predicts China is expected to become an important market in the regional market with a double-digit annual growth. Comparatively, Taiwan and South Korea are two of the more mature consuming markets.

6.2.1 South Korea

In South Korea, online digital play has become a popular form of entertainment for youth culture. Since 2005, the South Korean gaming market has seen a double-digit percentage growth. South Korea, in order to further cultivate the national digital cultural industry, passed the Act of Online Digital Content Industry Development in 1995. The government provided great opportunities for South Korean game firms, including personnel training, business expertise, and alliances with global networks to get a greater share of the international market. According to KDGI (Korea Game Development & Promotion Institute), the Korean digital content industry created 100,000 jobs and the output of game products reached US\$ 5 billion.

Figure 5 illustrates the market scale of digital games in South Korea, showing that online games consistently grew in sales each year.

Title: Figure 5. Digital Game Market in South Korea 2001-2005



(Source: Taiwan's MIC from KIPA, 2006)

To expand its OLG market share, South Korean companies aggressively exploit their overseas markets. China, Taiwan and Japan have become South Korea's major export markets. South Korean games used to account for 80 percent of the market share in Mainland China. In 2004, *Lineage* was launched in China and the highest number of hits topped 100,000. The sale of exported South Korean online games has reached US\$ 1 billion. South Korea has become the third largest game market, just behind the US and Japan (Commercial Times, Oct, 2002; korean.net; Economic Daily, January, 2005; MIC, 2006).

6.2.2 China

The emerging Chinese game industry has flourished, doubling in growth annually. Now the number of Internet household users in China has reached 70 million, becoming the second largest market behind the US. Almost half, 30 million are game users, and China has become one of the biggest OLG consuming markets in the world. According to official Chinese organizations, the Chinese OLG market grew in 2007, with an increase of 13.7 percent from the previous year; furthermore, China is of global market significance with projected revenues of US\$ 1.3 billion by 2009 (Tsang, 2006; Commercial Time, 2007).

South Korean games have lost their dominant market share in Mainland China since 2004. The reason is mainly due to the protectionist policy of the Chinese

government. The General Administration of Press and Publication (GAPP) took action to monitor and regulate the publication of online games. To obtain general distribution units for publications, imported publications require at least a six month wait for strict examination and approval of publishing. But the same limitation is not applied to locally produced publications. GAPP also initiated the China National Online Game Publication Project in 2004. The intent of the project was to promote local game development through government subsidies to game developers. The project provided an estimated RMB\$300 million to 16 Chinese game companies until 2008 (Economic Examiner, 2005).

Currently, Chinese game firms have the capability to develop and operate their own game titles. After acquiring the skill of tapping Chinese culture and local content, these Chinese-produced games, such as *Fantasy Westward Journey* and *Perfect World*, began to appeal to numerous local players. *Fantasy Westward Journey*, a 2D game, has appealed to over a million registers, a major success in China. *Perfect World*²⁹, a 3D MMORPG operated in China in 2006, appealed to over 250,000 users who accessed its server at the same time. Most importantly, Chinese self-produced game products have been exported to other Asian countries. Chinese OLG products have not only entered South Korea's market, but now also outflank their South Korean rivals by entering Vietnam's OLG market.

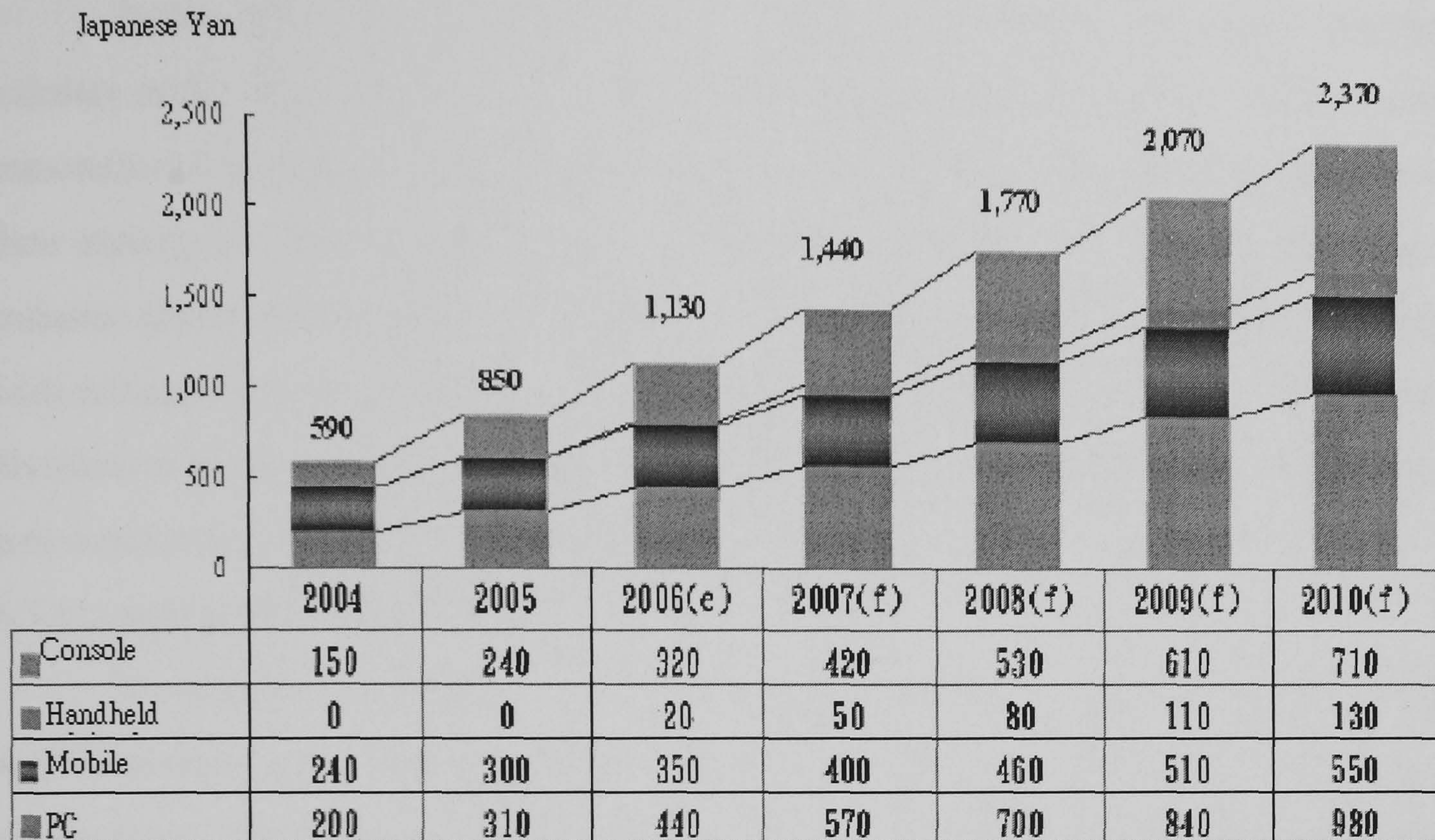
6.2.3. Japan

Compared to South Korea and China, Japan consumes much more Internet content than it produces. South Korean games have succeeded in Japan's market. Only few games, such as *Lineage*, *RO* and *Final Fantasy*, could appeal to more than 10,000 gamers. *Final Fantasy* is a Japanese-oriented product, and the other two are South Korean. Japanese users achieved a high level of consumption in 2005, the size of the Japanese PC game market (including OLG) reached Yen 44 billion. Year-on-year growth has been stable since 2004 and will reach Yen 237 billion in 2010, with an annually rapid growth since 2004. Japan's game operation services increased by 106 percent in 2004 and 162 percent in 2005 (IDC 2007). This was due to the free games model that emerged in Japan. In 2005, a large number of game portals appeared providing an increasing 70 percent of new game titles, an impetus of virtual in-game item buying with a growth of 57 percent, when compared to the previous year. Figure 6 predicts the market size of digital gaming in Japan, showing the

²⁹ This Chinese MMORPG provided a feature and fashion system with game-play, whereby players could create the looks and the costumes they want.

market scale of OLG exceeded console games in 2004, and will reach Yen 98 billion in 2010 (Nomura research center, 2006; IDC, 2007).

Figure 6. Japanese Digital Game Market Prediction, 2010



e = estimation f = forecast

(Source: Taiwan's MIC from Nomura Research Center, 2006)

Japanese internet game firms still lag behind other Asian game competitors in technical skill. To foster its OLG industry, the Japanese sought cooperation opportunities with the Taiwanese and South Koreans. The Japanese government had an aggressive role in helping Japanese game firms by taking a series of actions, including setting up an OLG information center in 2003, organizing an OLG forum in 2004, and planning the online game WG³⁰ in 2005. The aim of all these activities was to create business opportunities and induce a good investment environment for Japanese companies³¹.

6.3 The changing nature of the Asian game industry

The Asian digital gaming industry has been changing rapidly. The Asian industry was created by a number of interwoven factors. (I) Video next-generation games face a higher investment risk because a new game title needs complexities of technical support, while having a shorter game-play life span. (II) The Asian OLG industry has been integrated into a regional economical activity, while facing

³⁰ The meaning of Wikipedia in Japanese, the free encyclopedia

³¹ Takafumi Kaya, CEO of Signal Talk, interviewed in Taipei on 20th March 2007

competition with global players, as seen in competition between *EA* and *Blizzard*. (III) China's OLG industry has emerged and its market is recognized as one of the fastest-growing in the world. All the above will be discussed in the following paragraphs.

6.3.1. Outsourcing in game industry

Japan and South Korea have the leading positions in the digital gaming industry in the East Asian market. Both of them seek lower-cost labour with special transnational linkages. South Korean game firms outsource their game production to their studios in China, from Seoul to Beijing, or Shanghai. For Japan, video game industry game development is centred in Tokyo, outsourced to tenders from Taipei, with subsequent work finished in Shanghai-based game studios. A new international division-of-labour helps maximize benefits of international co-production and low-cost outsourcing in the East-Asian market.

6.3.1.1 Asian OLG industry

To decrease production costs and increase production volume, South Korean and Taiwanese game firms all count on cheap Chinese labor market to lever their competition. South Korean game firms, including *NCsoft*, *Nexon*, and *Neowiz*, have shifted their artefact production to China. *NCsoft* has set up offices in Beijing, Shanghai, and Suzhou. When a game concept is developed in Seoul, the creation and production phase is moved to Shanghai or Beijing, in consideration of their lower cost of production.

The market consideration

The main reason for South Korea to shift production to China is due to South Korean games losing their market share in China. For South Korea, their expertise is to develop a game concept and create the software. On the other hand, China is not only a factory with cheap labour, but also a huge consuming market in which users have specific cultural preferences. To capitalize on the immense Chinese market and to appeal to the preferences of Chinese players, South Korean game firms recruited Chinese teams in Beijing and Shanghai to develop game titles specifically designed for the tastes of Chinese users.

Even with advanced technology and sophisticated aesthetic design, South Korean games are regarded as much inferior in creation of narration and story telling because its culture and literature cannot provide sources for creativity. Chinese commentators refer to South Korean games as *kimchi*, the South Korean side dish³². In addition, South Korean games are criticized for lack of novelty and originality,

³² Wang Le, Section Producer of Oak Pacific International, interviewed in Beijing on 15th May 2007

except for a few products. A lot of South Korean content consists of storylines borrowed from Western mythology, Japanese video game genres or Chinese classics. This may also explain why South Korea cannot create more epic works after the success of *Lineage*. Facing pressure from the newly emerging competition in China, South Korea has aggressively recruited Chinese design teams to add new elements into their creations.

The case of Webzen

Webzen set up an office in Shanghai to produce a MMORPG based on the topic of *Sangoku*. Only a core team of 20 people came from Seoul to provide technical support, including the setting up of the server, software writing and Internet security. Hundreds of Chinese employees were recruited to complete the game development and production, including the genre, environment setting, artwork and music. For *Webzen*, the strategy to shift the production line to China did not really reduce labour cost because more man capital was required in Shanghai than in Seoul. As the South Korean firm claims, only 50 to 60 people in South Korea are needed to develop a MMORPG, and more than 100 maybe needed in Shanghai. According to *Webzen*, the costs to create a new game property reaches approximately RMB 800,000 to RMB 1 million, which explains why South Korea has invested in China to reach its target market.

In spite of much higher costs than expected, South Korean developers insist on keeping to the strategy. South Korean game developers know that to make profits in the Chinese market, cultural artefacts must be designed for the preferences of the user. On one hand, these South Korean game developers keep the core game production and increase their strengths. On the other hand, the cultural artefacts created by Chinese designers target the Chinese market. South Korean games in the Chinese market can be seen as hybrids, with the South Korean game format at the core and Chinese-version designs added on, which means a mixing of South Korean technological skills and Chinese cultural elements can be seen.

6.3.1.2 Asian video game industry

The Japanese video game industry is highly competitive, and has a solid foundation of technical knowledge and engineering skills in its globally competitive consumer electronics. Now, Japanese game publishers seek cooperation with second-party developers in neighbouring countries, not only to reduce investment risks, but also to gain access to the differentiated higher-value services provided by other Asian studios.

The cost and risk consideration

For Japanese game firms, the decision to sub-contract game development to outsiders is based on the consideration of decreasing investment risk. Choosing to develop a game title in-house for one of the major console platforms means that the game firms must pay the hardware manufacturer a license fee and acquire a specific kit in advance. Even after the game is completed, they still have to submit the game to the console manufacturer for final quality approval. Each platform has a unique mix of technological characteristics, and each platform transition sees the manufacturers carefully choosing which characteristics will win them the competitive advantage. Normally, console manufacturers work with first-party developers first while third party development teams wait to ensure that these characteristics are properly demonstrated. Rapid technology changes and the dangers of technology 'lock-in' (i.e. when techniques on which a business is based become out of date) are the challenges for game developers in terms of preparing for future projects (Kerr, 2006, pp57-65).

In addition, next-generation games require more art design, more animation and, especially, more specialized effects. Every game has great graphics and audio components. For game developers, there is only one key distinguishing feature in today's market, and that is the 'game-play experience'. Design work needs greater budgets and bigger teams to deliberate the best representation in the production of unique and entertaining video games³³. To meet the rising demand for assets of higher fidelity and volume, current next generation console games require increasing complexity of engines. Game developers have to pay more for software to support the special effects in presenting realistic images on the screen³⁴. There certainly will be an increase in costs that accompany these trends. For example, *Tekken Series 6* uses hundreds of software supports to display a sense of reality, such as the surface and hue changes of skin and flesh when the protagonist is fighting, and the differences of light scattering when they are moving in a virtual world³⁵.

However, console machines have smaller memory storage with XBox at 64 MB and PS2 at 32 MB, while computer games allow 512 MB, or even 1GB, accommodating much larger loading to carry very sophisticated game designs. There must therefore be sophisticated arrangements inside the game design: the

³³ Eva Chen, Executive Assistant to CEO of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

³⁴ For example, Hover, a physic engine, and Bink, audio software, are designed to support special effects

³⁵ Yoshinari Mixushima, Art Director at Contens Production Headquarters of Bandai Namco, interviewed in Taipei on 30th July 2007

render engine controls the game's visual representation, generating polygons, landscapes, and objects; the game AI controls how the characters respond to one another and finally advanced software. The limitation of loading within a platform, including software support and graphic design, makes console game design an increasingly difficult task. Game designers have to carefully consider the arrangements, especially scheduling non-player characters within games³⁶. The demands of more complicated technology make game design more difficult and consume higher budgets of financial investment and time. High investment is not a market guarantee but could be a higher risk, especially in the context of a shorter game-play life span. Life-span, due to the increased diversification of entertainment, has been reduced from 20 to 30 hours to between 4 and 6 hours (Businessweek, Dec 2005).

The case of Japan's game publishers and Taiwan's game developers

To decrease investment risk and increase game quality, Japanese game publishers began to subcontract their game development in Taipei instead of Tokyo. In 2004, *Namco Bandai*, a Japanese game publisher, subcontracted its game development to Taiwan's *Xpec*. This was the first time in *Namco Bandai's* 50 year history, the company sent its development team and producers overseas to secure control over production. Agreement between the two parties was reached after 14 months of negotiation.

a. Co-branding

Namco Bandai agreed to co-brand with *Xpec*, which was contracted to create the game title, *Bounding Hounds*, based on a Japanese game title. The cooperation is different from the pre-defined relationship of outsourcing between publisher and second-party developer. Nowadays, developing a console game requires incorporation of different suppliers in the value chain. The Taiwanese game firms delivered quality contents, different work from the low-end outsourcing of artefact production and plotting³⁷. Being a content provider, *Xpec's* technology teams and art teams are capable of completing a commissioned project within 18 to 24 months. The specialty of *Xpec* is to provide technological solutions in 3D game production³⁸. This has enabled *Xpec* to move its position upwards in the global value chain and have the right to share the profits with the big game publishers.

³⁶ Wonder Lin, Vice President, Marketing & Business Development of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

³⁷ Aaron Hsu, Chairman of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

³⁸ Eva Chen, Executive Assistant to CEO of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

Xpec started in 2004 and has accumulated its knowledge by delivering more than ten game titles based on multiple platforms. In the Asian market, very few developers have the experience of developing 'development' console game titles based on different platforms, except the Japanese. Most of *Xpec*'s human resources, 250 of 318 employees, are directly involved in game design and development. For *Xpec*, it is more important to provide technical solutions, focusing on the core game production regarding audiovisual artefacts and integration of virtual assets, rather than game product completion. Being a developer in all kinds of platform (Console, PC, Mobile), *Xpec* knows not only the demands of next-generation visual graphics but also how they are visually represented and interact. Consequently *Xpec* can co-brand and share revenue with their Japanese partner by offering value-added services in a global game production chain. Since the *Namco Bandai* agreement, *Xpec*'s joint partners have expanded to include Japan's *Sega*, and *Idea Factory*, as well as the USA's *EA* and *Activision*³⁹.

b. Two-steps outsourcing

In 2006, two game titles, *Spectral Force Chronicle* and *Mage Knight*, were released by Japanese publishers in the North American market, each of which were produced by Taiwanese game firms. *Spectral Force Chronicle*, a PS2 strategy/RPG, was co-developed by *Idea Factory* and *Xpec*. This title was based on the *Spectral Force series*, originally created by Japan's *Idea Factory*. To minimise misunderstanding and to obtain tacit information, *Xpec* assigned its designers to stay in Japan for a year. *Mage Knight*⁴⁰, a strategy/PRG computer game, was developed by *InterServ* (Taiwan) and published by (Japan) for the US market. *InterServ* had to fulfill *Namco Bandai*'s original idea, developing the game product from the early stage of creation to the final stage of production, while the cash-rich Japanese publisher provided the capital, and controlled the market and distribution channels. For *InterServ*, it was a good opportunity to integrate into the global market by producing a game project originating from internationals⁴¹.

Taiwan's small or medium game developers would have great difficulty in competing with international companies in the global market, if they did not obtain material from customers external to Taiwan. In addition, Taiwan's independent developers face immense pressure to upgrade their technological skill when each new generation game machine is launched. Consequently, subcontracting from

³⁹ Aaron Hsu, Chairman of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

⁴⁰ *Mage Knight*, created by the US' Wizkids, is based on a miniatures wargame using collectible figures. This game product was an immediate success when it was introduced in 2000.

⁴¹ Aaron Hsu, Chairman of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

American or Japanese publishers may be the best solution for small and medium Taiwanese seeking opportunities to integrate into global markets. It is an unavoidable trend that the production cycle of the cultural industry is increasingly vertically integrated and controlled by few companies. Being second-party developers integrated into the global market is the best solution for Taiwanese game developers, which helps them gain financial support in advance and acquire technological skills from internal companies⁴².

The interviews in this research indicate that both *Xpec* and *InterServ* have placed their game production, especially the artwork, in China. *Xpec* set up their studios in Beijing, Shanghai, and Suzhou for the purpose of lower labour costs, which enables Taiwan's game developers to make more profit when contracting with a Japanese publisher. *InterServ* operates in three international locations in Shanghai, Taipei, and the USA (California). At the same time, *InterServ* also considers China as its backyard to provide outsourcing services, while the Taipei office is used for core development and the US office for contracting foreign game publishers. In addition, the strategic locations of geographic proximity to China and Japan, and well-structured modern infrastructures, allows the Taiwanese game developers to maximize outsourcing capabilities and streamline the communication process with North American and European clients. Taiwan can maintain frequent communication with the outside, which helps it integrate into a global media system⁴³.

6.3.1.3 The position of China

The outsourcing process helps other Asian game firms to understand the Chinese market when they recruit more Chinese labourers to complete game production, sometimes with a large degree of freedom in terms of art design and content design. At the same time, when a South Korean firm or a Taiwanese firm employs Chinese local labour in graphic design, there will be a degree of technology transfer to the local population through training in specific skills and techniques. This has also benefited Chinese game firms who plan to develop their own products in the future. Previous research points out that a successful regional economy should possess more sensitive global ties and make use of its own advantages, such as low-cost labour and sufficient production (Porter, 1998; Fuch, 2002).

In 2006, the total number of Chinese self-produced game titles reached 218, an increase of 13.5 percent from the previous year, and 13,908 people were employed in

⁴² Jim S. Tsai, Production VP/ CCO of InterServ International, interviewed in Taipei on 3rd May 2007

⁴³ Jim S. Tsai, Production VP/ CCO of InterServ International, interviewed in Taipei on 3rd May 2007

digital game development. In addition, the game industry in Chengdu and Jang-Zhe were the fastest-growing areas, with an increase of 45 percent. Chengdu has become one of the favourite areas for game firms to set up their R&D studios. Global Services published the 2008 list of the top 50 rising cities for global services outsourcing, and Chengdu was grouped in the list for the first time, ranking 37th, the only city in Midwest China to enter the top 50. In October 2008, the first Chinese Xbox Live Arcade (XBLA) game, *Crazy Mouse*, was launched in Chengdu. In 2007, the market size of Chinese self-produced games reached RMB 6.8 billion, accounting for 65.1 percent of the market share. Indigenous game firms, such as *Perfect World* and *Shanghai Giant*, have the capability to develop game titles, which have more appeal to Chinese users than South Korean-produced games. China's OLG industry is recognized as one of the fastest-growing in the world (iresearch, 2007; sina.com, 2008).

6.3.2 Licensed IP in Asia game

In the US, a new MMORPG costs at least US\$ 5 million. But the guaranteed success seems to call for much higher initial funding levels, as much as US\$20 to 30 million. That money may go for a lucrative license, such as *Sony's* purchase of the rights to implement a virtual *Star Wars* (Castronova, 2005, p128). Although the originality provides innovative concepts in game design, more game publishers in the Asian market will seek secure ways to develop game titles with market awareness. Game developers normally welcome the idea that comes from an existing game format based on a famous novel, or a popular film to decrease uncertainty of demand for games.

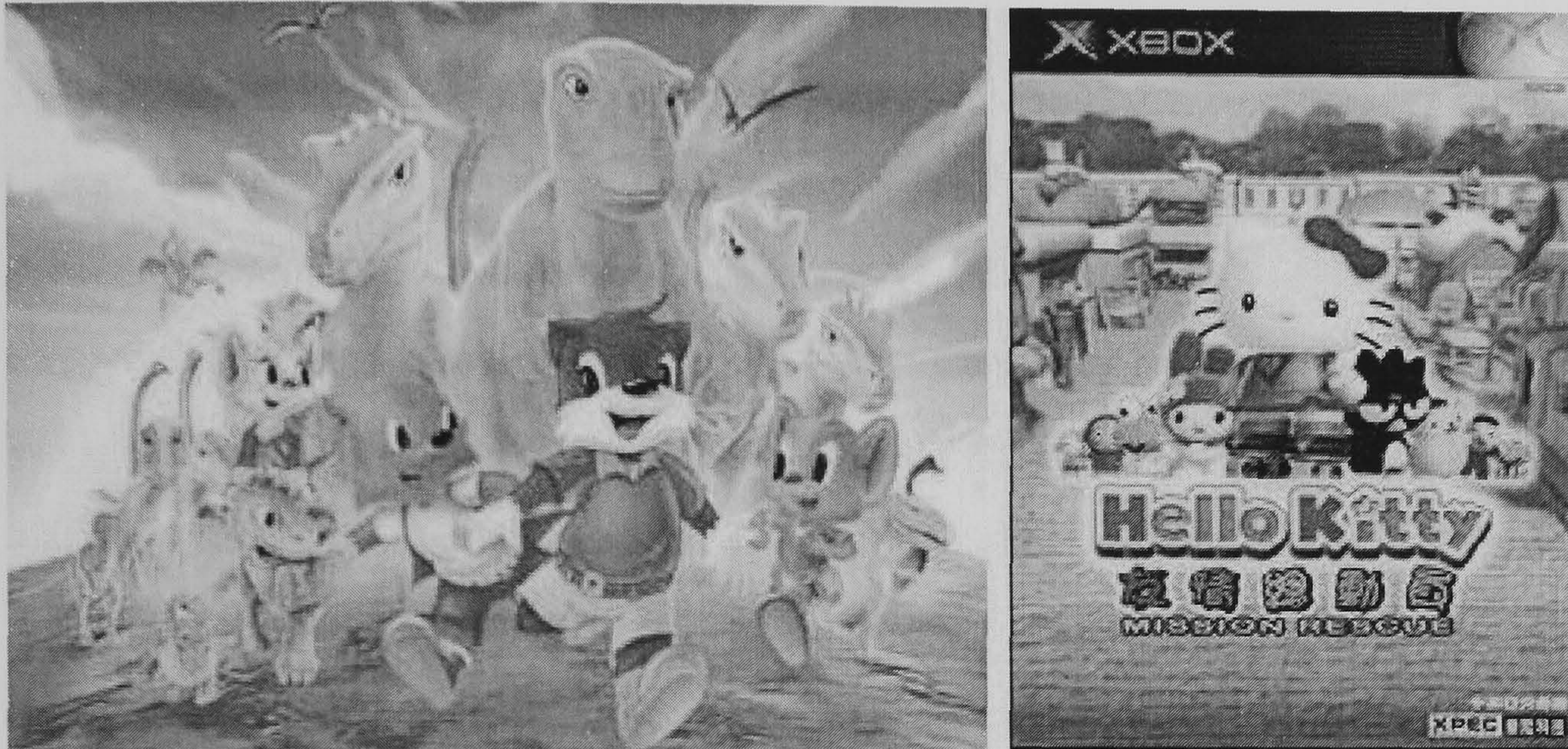
Japan's successful video games, based on existing products, have become a brand for those game developers, such as *Final fantasy series* and *Dragon Quest series* for *Square Enix*, which the publishers spent more 15 years developing. Most of Japan's online game titles were based on their existing genres of console games, which have established a high degree of brand awareness among users. Similar forms were revised into online game designs, which enticed players of video platforms to switch to the playground of online games. On the other hand, the MMORPGs, based on those successful console games series, are criticized for lacking originality. They can only draw the attentions of the audiences who have preconceived notions of those classic characters from other platforms⁴⁴.

In the Greater Chinese market some specific topics, such as popular *wuxia* cultures or Chinese classics, have frequently been adapted into games. For ensuring

⁴⁴ Takafumi Kaya, CEO of Signal Talk, interviewed in Taipei on 20th March 2007

market success, game developers chose topics with high market awareness rather than originality. As a result, these digital games adapted from Chinese topics, such as *Romance of the Three Kingdoms* and *Westward Journey*, are based on licensed IP from popular culture, such as Jin Yong's wuxia novels or popular TV dramas, and have appeared in the market repeatedly.

Figure 7. XPEC's Blue Cat Learn N Play (left) and Hello Kitty Mission Rescue (Right).



(Source: Xpec)

In addition, some cultural symbols, such as *Hello Kitty* in Japan or *Blue Cat* in China, cross media and become game characters for the purpose of targeting young users in the Asian market. These two cultural products illustrate that interactive media create an intersection between the commodification of child's play and the technification of culture.

Hello Kitty and Blue Cat. Many of *Xpec*'s game products, such as *Spectral Force 3*, *Sorcerian Online*, and *Neverland Saga Zero*, are based on series. *Xpec*'s *Hello Kitty Mission Rescue* and *Blue Cat Learn N Play*, based on licensing IP, are developed for younger audiences in different markets.

Hello Kitty Mission Rescue was based on licensed IP from *Sanrio* (Japan) and developed across different platforms including Xbox, PS2, GameCube and PC. *Hello Kitty* is the best-known of many fictional characters produced by *Sanrio* in 1974. This simply drawn character, registered in 1976, is now a globally known trademark. Although originally aimed at the pre-adolescent female market, the product adorned with *Hello Kitty* logo now appeals to Asian females of all ages. In Japan, its popularity has penetrated every aspect of Japanese daily life. Now, *Hello Kitty* in Asia is no longer viewed as merely for young girls, but is equally popular with teenagers and even adults who like the sweet, cute girly image. In 2005 *Xpec* released the *Hello Kitty* 3D action game for its 30th Anniversary to the global market,

including the US, Europe, Japan, New Zealand, Australia, South Korea, Taiwan, Hong Kong and Singapore, and sold 300,000 units. *Hello Kitty*'s success reveals that cute artefacts, which bring feminine pleasure also easily crosses the cultural border and gains empathy with young women with different geo-linguist backgrounds.

Blue Cat Learn N Play is an electronic learning kit franchised by China's **Sunchime Cartoon Group**. It combines the functions of entertainment and education for children with a fun learning experience in Chinese, English, maths, and other subjects. The product was co-invested by *Xpec* and *SEGA*, each taking part a 50 percent stake, designed to target Chinese children⁴⁵. *Blue Cat* is grounded in the recognition of Chinese children, because of the popularity of the animated series in China. *3000 Whys of Blue Cat*, produced by **Beijing Sunchime**, is the first large-scale Chinese animated series in China with an emphasis on science. The show remains one of the longest running children's cartoon series in the world, attracting great numbers of Chinese children. The franchise of *Blue Cat* in China is just like *Pokémon* in the US and Japanese markets. From the view of an interviewee, however, the art design of *Blue cat* is awkward and toneless, far inferior to the Japanese cute cartoon design, such as *Pokémon*. By contrast, those Japanese cute designs, recognized as infantile symbols in Mainland China, do not appeal to Chinese users⁴⁶. As expected, Chinese cute characters do not appeal well to Chinese young audiences, excluding the users in Taiwan and Hong Kong. For game developers and game publishers, acquiring the franchise of *Blue Cat* is a stepping stone in reaching market success, because of the high market awareness of the character by young Chinese audiences. This can explain why Japan's publisher, *Sega*, was willing to finance half of the investment of production in advance.

However, the cases of *Hello Kitty Mission Rescue* and *Blue Cat Learn N Play* are simply seen as profit-making products rather quality cultural artefacts. Nevertheless, original games, including features and capabilities that will inspire new ideas for gameplay, characters, and stories, are the core that drives this industry to prosper and move forward. However, both large game publishers, such as *Sony* and *Microsoft*, and third party publishers mitigate risk by re-releasing commercially successful game concepts.

6.4 Global competition

Since 2003, Asian OLG industry has faced global competition. The challenge is

⁴⁵ Eva Chen, Executive Assistant to CEO of XPEC Entertainment, interviewed in Taipei on 3rd April 2007

⁴⁶ Jim S. Tsai, Production VP/ CCO of InterServ International, interviewed in Taipei on 3rd May 2007

from the US game firms who have prepared to enter the Asian market, especially a rapidly growing Chinese market. At the same time, Asian game firms have to face new game rules. The forces of capital, technology and the market have become key roles in deciding the winners within the game arena. Horizontal integration in Asian OLG industry has become intense. This will be discussed in the following paragraphs.

6.4.1 Synergies with Chinese operators

From the view of the foreign game firms, the growing Chinese market provides too many business opportunities to give up trying to enter. According to official Chinese statistics, in 2006, the revenue of the Chinese OLG industry reached US\$ 1.04 billion dollars, and the output of self-produced games increased 73.5 percent from the previous year. In 2004, IDC classified China's *Shanda*, *The9* and *Netease* in its list of the top ten Asian leading OLG service providers (Asian Times, May, 2007). Foreign companies are aware that the Chinese game market is very complicated and local firms have control of the market. Foreign companies cannot make profits without the co-operation of local operators.

6.4.1.1. The dominance of Chinese operators

In 1999, China's *Shanda* ran its first MMORPG, *Legend of Mir*, gaining a significant success in the domestic market. Since then, Chinese game firms have gained the skills necessary to shape their characters and competency, tightening their control of the domestic market. Chinese game publishers and game distributors have created an interwoven sales web to promote new game titles. Market competition starts when the product enters the market. Differing from South Korea and Taiwan, where coverage of broadband Internet is widespread, only 10 percent of Chinese families have the broadband Internet access and more than half of Chinese Internet users have to go to internet cafés to access online games. Therefore, Chinese game firms ground their market share through the aids of Internet cafés and salesmen.

Internet cafés have become common throughout China. Chinese game firms found that Internet cafés, which are located in small communities or nearby colleges, are the best places to promote online games. The owners of Internet cafés have social connections with the users, because they all live in the same community. The Internet café owners become the best salesmen to promote the sales of new game products to players because a trust relationship has been cultivated between them. The success of Chinese game firms, such as *Shanda* and *Netease*, was due to the market strategy which they used to promote their game products. Furthermore, *Shanda* developed a new Internet billing system, calling E-SALE, jumping from

traditional distribution where computer software shops sell the game product. After submitting an application form and making payments through an Internet bank, Internet cafés can login to the E-SALE system to download game software. Users then buy *Shanda*'s point cards available in Internet cafés. The procedures take only a few minutes. In 1999, this almost instant in-time system helped *Shanda* to gain an 80 percent market share in the second-tier cities in China. Most importantly, *Shanda* can access all the business data of the subsidiary Internet cafés. The application form recording business data promotes a close alliance between *Shanda* and the Internet cafés, and the game operator can, subsequently, make use of this data to promote other new game titles.

These Chinese firms quickly realised that the mass of users resides in rural areas, rather than in wealthier areas. It is very difficult for media to function while promoting a new title in the second-tier cities. Game publishers and game operators have to set up another sales strategy by sending out sales people strong in interpersonal communication skills. To promote its game title, *Zhengtu*, the Chinese game firm *Shanghai Giant*, hired up to 20,000 salesmen. These salesmen were assigned to persuade the local Internet cafés to sell only its game product. *Netease* paid the gamers who played their game product in a local Internet café. This strategy would not only make it easier to raise *Netease*'s market share, but also entice more local Internet cafés to sponsor the game products. The result proves that in rural towns, interpersonal communication is more persuasive than media exposure when promoting a game title⁴⁷.

6.4.1.2 The complexities of Chinese market

According to the analysis of Chinese official organizations, the market of Chinese OLG continued to grow in 2007, an increase of 13.7 percent from the previous year; furthermore, China is of global market significance with projected revenues of US\$ 1.3 billion by 2009 (Tsang, 2006; Commercial Time, 2007). The rapidly growing Chinese market has been one of the main factors prospering the development of the OLG industry. To meet the demands of numerous Chinese users, the Chinese OLG industry has developed quickly.

The Chinese OLG industry started as an operator, leading to the development of its own game industry. Now, the first-tier game firms, such as *Shanda* and *The9*, provide diversified products and better operation services to sustain massive numbers of users. Foreign games, such as *Ragnarok* (South Korean) or the *World of Warcraft* (USA) are based on Nordic and Greek mythology; however, the content may not be

⁴⁷ Wang Le, Section Producer of Oak Pacific International, interviewed in Beijing on 15th May 2007

compatible with local indigenous preferences. Indigenous game firms have the capability of developing game titles with more appeal for Chinese users than South Korean-produced games. While 3D games are well-accepted in the first-tier cities, such as Beijing and Shanghai, more 2D technology products with talent have been appealing to a greater number of users in the second-tier cities, such as ChongQin and Wuhan. These Chinese game developers have the advantage to model content based on the preferences of local users, such as an easier version rather than a new version.

6.4.1.3 The cases of EA and Webzen

In order to gain a prime position in the OLG business, in June 2006 *EA* acquired Virginia-based *Mythic Entertainment*. This game studio was recognized worldwide for revolutionizing the OLG space with the award winning *Dark Age of Camelot*. Upon completion of the acquisition, *EA* owned the studio as well as their technology and experience. *EA*'s success in the South Korean market proved that the acquisition had strengthened its ability to compete in the international market. In 2006, *EA*'s *Fifa Online* became one of South Korea's most popular games, consistently ranking among the top performers with more than 4.4 million registered subscribers in the South Korean market, according to *EA*'s company data.

Actually, China is *EA*'s major target. *EA* seeks for close cooperation rather than just licensing a game property, differing from the Asian business model. In 2007, *EA* invested *the9*, acquiring approximately 15 percent of the common shares. The investment was roughly US\$167 million. The agreement was built on *EA*'s strategy of partnering with proven regional operators to bring online games to Asia, and *the9*'s strategy of expanding its game product offerings in the Chinese market. The strategy alliance made *The9* have exclusive publishing rights to *EA*'s games in China in the future. *EA*'s synergy reveals that the US game publisher not only sells game property into the Asian market but also creates partnerships with other Asian game operators, through equity investment to maximize profits.

At the same time, South Korean game firms also take the steps to synergize with local Chinese publishers/operators to lever their strength in the huge and unpredictable market. South Korea's *Webzen* and China's *The9* co-invested to set up a cooperative enterprise to operate MMORPGs together. The move was made to reduce the risk of high investment in the Chinese market and to avoid the restrictions on direct investment of foreign game firms placed by the Chinese government. In addition, South Korean game firms understand that the content originally designed for South Korean gamers has a cultural barrier making it harder to attract a bigger Chinese audience, when the Chinese can provide their own self-produced game

products⁴⁸. It is the best solution for foreign companies to synergize with those Chinese game operators who can offer localized services to attract large group of players in the domestic market.

6.4.2 Asian game firm's buyout and finance raising

While the US game firms aggressively enter the global market through synergy with local game firms, Asia has been seeking capital and industry alliances to shape their quality and further gain the capabilities needed to compete with the internationals. Undoubtedly, big Asian companies with the advantages of existing technical knowledge, skilled workers, sophisticated market strategies and quality of domestic demands, possess the ability to compete in the regional market. Global competition will change the ecology of the Asian OLG industry: big firms hold the resources forcing the small and medium-sized firms to be incorporated into a subordinated position.

South Korean's game firms buy US studios

South Korean game developers are not satisfied with being the game centre in the intra-Asian market. The following cases illustrate that big South Korean game developers look for international cooperation to further consolidate their competitive advantage. In February 2006, *Webzen* announced that it signed an exclusive worldwide agreement with the USA's *Red 5 Studios* to publish a new MMOG. *Red 5 Studios*, formed by key members behind *Blizzard Entertainment*, is a leading US game publisher. The core members at *Red 5 Studios* have proven their development strength in launching successful MMORPGs, such as *Diablo II*, the *Starcraft* series and *Warcraft III* all on a global scale. As such, *Webzen* obtained the *Red 5 Studio's* new game title, which was primed to deliver a worldwide market appeal⁴⁹. Also, *NCsoft* set up its studios in Texas and California, for the purpose of working with other *NCsoft* subsidiaries and third-party developers throughout North America, and to develop and publish innovative online entertainment software products. In November 2007, *NCsoft's* US studio took full ownership of *City of Heroes*. Previously, the intellectual property (IP) ownership was split between *NCsoft* and *Cryptic Studios*, the original developer. Now, *NCsoft's* studio in California is built around key members of *City of Heroes* team, including the art, programming and design team leads, coming from *NCsoft* and *Cryptic Studios*⁵⁰. As an early mover in the OLG industry, South Koreans are in an endless search for competitive advantage, while setting up overseas offices and acquiring the Western studios for diversified

⁴⁸ Scott Lee, Vice President of Webzen, interviewed in Shanghai on 22nd May 2007

⁴⁹ Scott Lee, Vice President of Webzen, interviewed in Shanghai on 22nd May 2007

⁵⁰ Scott Lee, Vice President of Webzen, interviewed in Shanghai on 22nd May 2007

forms of creation and higher quality technology of their outputs. With a successful foundation in the regional market, South Korea has strengthened its capability through acquiring US game studios, helping the South Korean publisher to enter the global market.

The layout of Chinese firms

While a large consumer base is in the process of forming in the Chinese market, the market size and demographics have been promoting the competence of the Chinese gaming industry. The indigenous firms play a decisive role in the national market, even under intensive global competition, which has attracted the attention of foreign investors. Chinese firms have raised finances mainly via NASDAQ since 2003. This has helped the Chinese game firms, not only the game operators, such as *Shanda* and *The9*, but also the game developers, such as *Zhengtu* and *World Perfect*, to gain international capital.

With the support of finances, Chinese game firms were able to purchase overseas studios to ensure the supply of new game products as well as advanced technology. In November 2004, *Shanda* purchased approximately 29 percent of South Korea's *Actoz Soft*, a game publisher. The all-cash purchase transaction from shareholders of *Actoz* is worth approximately US\$ 91.7 million. *Actoz* owns 50 percent of the copyright for *The Legend of Mir II*, which was the most popular online game title in China according to users surveyed in late 2003 by International Data Center. In addition, *Actoz* owns all, or in some cases a portion, of the copyrights for several other online games that are operated in China, including the *Legend of Mir III* and *A3*. The transaction solidifies an alliance between Chinese game operators in China and a top game supplier. The move helped *Shanda* obtain South Korean quality games and strengthen its competitiveness as a game portal. In February 2007, *Shanda* acquired the game property of *LaTale*, developed by South Korean *Actoz*, in China. *Shanda* claimed they would continuously introduce *Actoz's* additional games (china technews, Nov, 2004; Feb, 2007).

6.5 Conclusion

This chapter reviews existing research literature on the digital gaming industry and examines the developing nature of the East-Asian gaming industries, including China, South Korea, Japan, and Taiwan. Under the trend of globalization, not only Western game firms but also Asian game firms have faced integration through synergy, mergers and acquisitions. In addition, outsourcing production and using licensed IP become distinguishing features, while game firms and other media

firms try to maximize their profits. However, the nature of the Asian game industry still presents a different contour from the Western, through examining the commodified process of the game product.

First, the game industry is moving to a trend of vertical and horizontal integration, which is solidifying the dominant firms' leading positions. The case of the South Korean and Chinese game firms reveals that these big Asian game companies, with the advantages of technology and capital, have aggressively moved to different markets by controlling the business from the first sector to the last. South Korea has consolidated the market position through alliances and synergies with Chinese game operators and purchases of the US studios. The strategy of Chinese game firms is similar.

In addition, Asia's small and medium game studios must make use of the opportunities to gain close ties to international companies. This can be found in the collaborative relationships between Taiwanese game developers and Japanese game publishers. While Taiwanese game firms seek international cooperation to play an integral part in globalization; Japanese publishers use out-source contracts for game development and production for economic consideration. Taiwanese and South Korean outsourcing to China implies that the production chain is increasingly vertically integrated and controlled by just a few companies, highlighting the impact of globalization.

Secondly, this chapter examines the commodified process of game production, analyzes the fragmentation of production line of game products, investigates the underlying factors of global competition, and spells out initial implications that a value-added chain has been established in a regional economy, the intra-Asian markets. A new international division of labour has formed among Asian game firms. Business co-operation helps maximize benefits and profits through international co-production and low-cost outsourcing. Based on the interlinks in the regional market, South Korea can keep their advantage of advanced game production; China can make use of its advantages of lower cost production; Taiwan can gain the know-how from cooperation with international partners and the Japanese can hold its leading position in the video game business. These Asian game firms seek collaborative cooperation with the aim of minimising the investment risk and enhance the quality and the volume of game production.

In addition, there will be a degree of technology transfer from outside to the local population through training in specific skills and techniques. For Taiwanese game developers, the know-how of video game production is accumulated through

the exchange of technique knowledge. For the Chinese, the outsourcing brings the skill training for local labour, shaping the capability of indigenous game firms. The process of knowledge transfer can be termed as a process of “open innovation” while large companies outsource their R&D functions (Cook, 2006, p273).

Thirdly, Asian cultural products are developed, produced and marketed in an intra-Asian market. When further examining the value of IP which is used in game products, some can be seen as a brand or a franchise rather than a commodity. Lash (2007) explains that commodity production is labour-intensive while branded goods production is design-intensive. The value of a brand is in differences and singularities, because it can generate an identity separate from another brand. The brand is like an organization, self-modifying, with memory (Lash 2007, pp5-7). This may explain why *Blue cat* has become a well-recognized symbol by young users in the Chinese market and why *Hello Kitty* is a cultural symbol appealing to young female users in the Asian market. The brand of cultural artefacts provides a sign value in singularity for the gamers. The cultural industry has moved into the concept of branding, with a large range of products that target different niche markets. As expected, the increasing use of licensed IP will become a trend in the digital gaming industry.

Based on the above discussions, the trends in the Asian game industry have been developed in four distinct ways. First, there is offshore outsourcing and low-cost production between South Korean game developers and Chinese labour, or Japanese game publishers and Taiwanese game studios; second, there are joint ventures and synergies between US and Asian game firms; third, there is acquisition bringing technology transfer from the US to South Korea or South Korea to China; and fourth there is increasing branded franchising controlled by the big Asian firms. Predictably, in the context of increasing market risks and intensification of global competition, cooperation among Asian companies will become closer, especially with the Chinese, who have emerged as a cheap labour provider and a huge consuming market. In the following chapters, we will explore the changing nature of the OLG industry since 2002, and the interlinks of Asian game firms, especially South Korean or Chinese game developers and Taiwanese game operators, which implies a cultural flow of product existing in the intra-Asian market.

Chapter 7 The Online Gaming Business in Taiwan

This chapter explores the development of Taiwan's online gaming (OLG) industry, examining the crucial factors influencing the process of commodification, and investigating the changes in the business model. First, the research investigates the production cycle of OLG. Also, the chapter examines how the industry developed and distinguishes the influential factors, i.e. capital, technologies and market in the OLG industry. A discussion is presented on the the changing role of Taiwanese game firms, moving from game developers to game operators, and finally the chapter explores the challenges of Taiwanese operators in the domestic market and the ever-expanding overseas market.

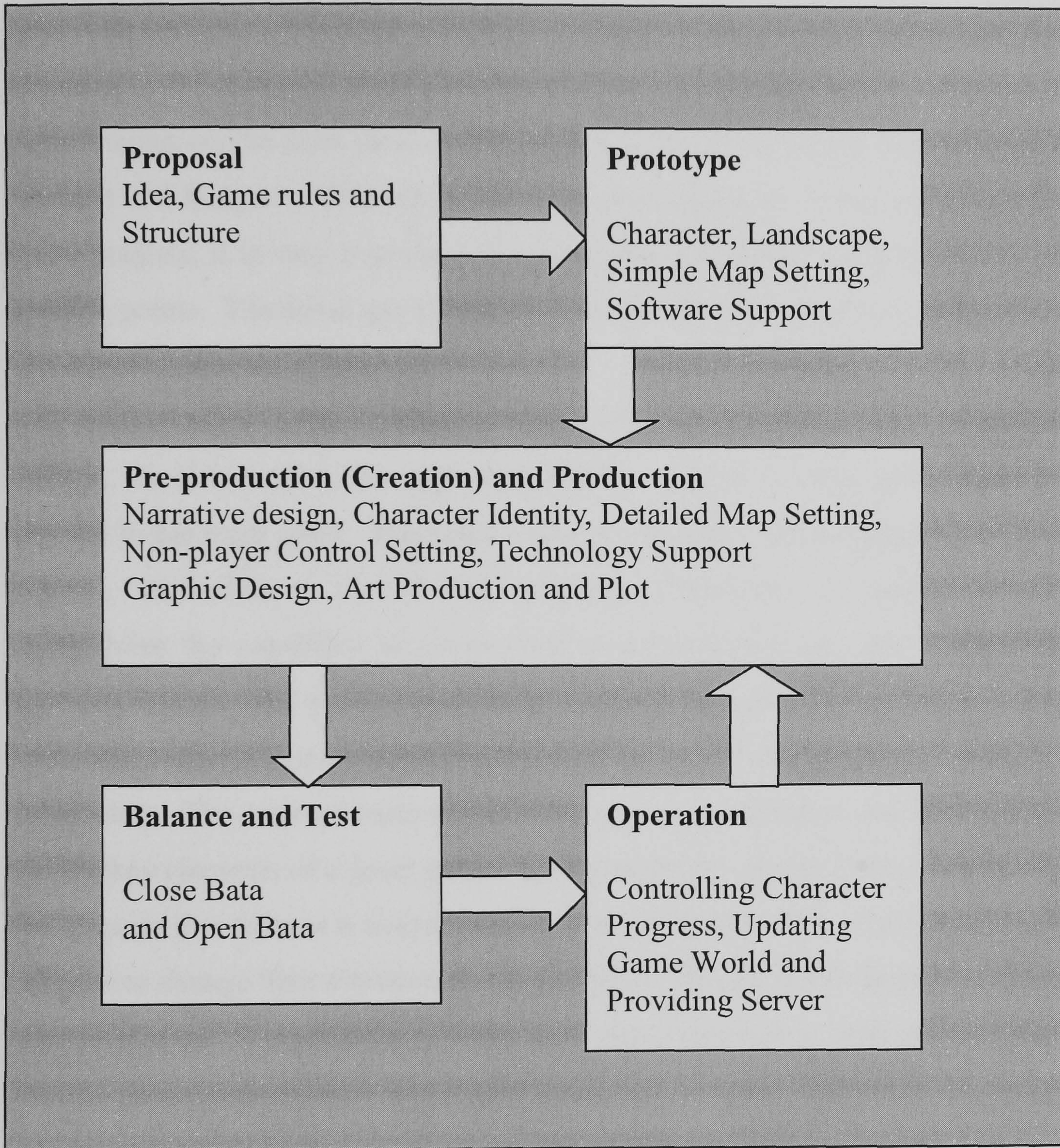
7.1 The production cycle of online gaming

This section is going to examine those institutions that are directly involved in the gaming business, including the producers, distributors and operators, as the core stages in the processes of commodified digital entertainment are production, publishing, distribution, and operation. After a new game title is completed by the game developer, the publisher and distributor decide how to promote the game in the market and sell it to the customers. The game operator provides an online service and updates content when the game is publicly circulated. In the West, the game publisher not only produces but also runs a game. By contrast, the OLG industry in the intra-Asian market has segmented into four important roles: developer, publisher, distributor and operator. Figure 8 shows the production cycle of the online game, including the core stages of proposal, creation, production, balance and test, and operation.

Development of a game is seen by developer as an expansive and profitable business today. Typically, large-scale commercial games, such as MMORPG, are created by development teams within a company specializing in computer games. The main stages in the production of online game titles are design, pre-production, production, publishing, distribution, retail, and operation. Contemporary 'artistic', or production stage, game ideas are just as likely to originate from the publisher, reflecting a trend that Williams called 'the corporate professional' structure of cultural production (Williams (1981) cited in Kerr, 2006, p64). The production line can be further segmented into the following procedures:

- Proposal: idea, game rules, and structure setting
- Prototype: character, landscape, simple map setting, and software support

Figure 8. Production Cycle of Online Gaming



- Pre-production (creation): narrative design, character identity, detailed map setting, non-player control setting, technology support
- Production: graphic design, art production and plot
- Operation: controlling character progress, updating game world, and providing server

Proposal. Normally, all games begin with a concept or proposal briefly described on a few pages of paper. Before full-scale production begins, the development team produces a design document (a proposal), which describes the concept and major gameplay elements in detail. A game proposal usually includes information on the core idea, including the genre, environment, artwork, the target market and budget. Although game developers desire to invest in new genres and new markets, it is very important that the game idea should include a list of unique selling points. The developer is mainly concerned with whether a new game idea can fit into the schedule of games⁵¹.

Generally, game design is technology-driven rather than entertainment-driven. In this context, the early MMORPGs, such as *Lineage* and *Legend of Mir*, appeal to hardcore users. The tasks within these games are designed for combat and quests. According to Tsai Ki-Ben, producer of *Lineage 2*, a good game designer must have the capability to create entertainment-driven contents maximizing the greatest delight. All players can find enjoyment through the diverse forms of game content, such as instant social interaction, puzzles solving or combating hostile characters. The issue of ensuring all of the players at different levels have fun is one of the key elements of a good game. For example, the design of the ‘reverse system’ in *Lineage 2* is seen as a unique arrangement, as it allows the worst player a second chance to change their situation in the gameplay. Players never know the result until the final stage⁵². Appealing to more new users, game play, such as cute games or casual games, has become easier and more user-friendly. All these considerations lead some Asian games to easily crossing cultural borders, enlarging their game player base and further increasing the size of the OLG market.

Prototype. The prototype stage, including a simple game play setting, based on game ideas, takes two months. After an idea is conceived, the next stage sketches out an interactive demonstration (demo). The function of the prototype is to present sections of the game to showcase the maturity of the game idea. The major task at

⁵¹ Eric Chen, Marketing & Operation Dept. Manager of *Chinese Gamer* interviewed in Taipei on 6th Mar 2007

⁵² Tsai Ki-Ben, game producer of NC Soft, interviewed in Taipei Game Exhibition on 24th February 2008

this stage is to see whether the software writing can support the whole game idea. There is no need complete the entire game design in detail.

Pre-production. Before an approved design is completed, development moves to the stages of pre-production and production, which takes a year. During the time of pre-production, a skeleton crew of programmers and artists begins work. Programmers may develop prototypes, showcasing one or more features some stakeholders would like to see incorporated in the game. Or they may begin developing the technical framework the game will eventually use. Artists may develop volumes of sketches as a springboard for developing real game assets. Producers may work part-time on the game at this point, scaling up to a full-time commitment as development progresses.

Production. Mainstream production is usually defined as the period of time when the project is fully staffed. Programmers write new source code, artists develop concept art, textures or creat 3D models⁵³ and animations. Sound engineers develop sound effects and composers develop music for the game. ‘Level’ designers⁵⁴ create advanced and eye-catching levels, and writers write dialog for cutscenes and NPCs (non-player controls). In addition to actually creating the environment the player inhabits in the game, a level designer makes the planning and integration of various 3D objects that form the game level. Their job includes structure, terrain, enemy (monster) or non-player character placement, or scripted story events. They also have the responsibility of writing high-level code, altering game rules or scoring in a multiplayer game (Manninen et al., 2006, p29). In this, a team of designers determines what the player will do, while artists begin to render the environments and characters. Most game developers employ more expert testers and programmers to de-bug games.

Under the direction of the game designer, the game artists design the look of the character through concept art and render them to be integrated into the game. They are also responsible for designing the scenery, props, and any other visual effects in the game. Game artists are responsible for all of the aspects of game development. Because MMORPGs rely heavily on player’s imaginations, graphic illustrations can influence the appeal of the game. As games become more popular, developers spend more money on art development to help continue to broaden the

⁵³ In 3D computer graphics, 3D modeling is the process of developing a mathematical, wireframe representation of any three-dimensional object (http://en.wikipedia.org/wiki/3D_model).

⁵⁴ A level designer is a person who creates levels, challenges or missions for computer and/or video games using a specific set of programs. In addition to actually making the environments the player inhabits in the game, a level designer may also work on enemy or Non-player character placement or scripted story events. The jobs also include writing high-level code, altering game rules or scoring in a multiplayer game (http://en.wikipedia.org/wiki/Level_designer).

game's appeal⁵⁵. The synthetic environment looks like a nice painting. Researcher Surman points out that contemporary game design is largely preoccupied with achieving greater photo-realistic representation. The spectacular aesthetics in game design have developed as an autonomous mode of expression with its own hyper-reality of visceral pleasure across all screen media. The 'reality' of games arises from their use as an everyday cultural practice, through their foregrounding of innovations in hyperrealist digital imaging (Surman 2007, p207).

All the movements in a game are presentations of some kind of animation. The work of the animator includes pre-designed and real-time animations. Animations connected to dynamic objects serve the purpose of making the game world look alive (Manninen et al., 2006, pp30-31). When online games move to 3D production, game developers have to invest more on technological support software and hire highly skilled artists to reach the effect of spectacular aesthetics. The gaming industry has, consequently, become a capital-intensive business.

Pre-production involves more advanced production and design work, and the team expands to its largest staff numbers when production occurs. Finally, the Alpha and Beta testing are often done initially, before the final version of the software is published. As development draws to a close, the process of software testing for games is performed by professional game testers. Professional game testing may involve general playtesting. The testing team needs to make sure that features that have been in place for months still operate correctly. A typical game testing procedure starts with an incorrect program behavior analyzed and identified as a bug. The bug is reported to the developers using a defect tracking system. After the developer claims the bug has been fixed, it is the responsibility of the distributor to promote the new game title in the market.

Distribution. In the Western market, the retail stage of the production cycle is increasingly the responsibility of large supermarkets and specialty chains, particularly in the USA. In Europe, independent retailers still constitute a significant part of the retail sector (Kerr, 2006, p65). Differing from the western retailing system, game products in China and South Korea are retailed through Internet cafés, whereas convenience stores are the major distribution channel in Taiwan.

Operation. It is the responsibility of operators to run a synthetic world when the users download the software. Maintaining a MMORPG is a gargantuan corporate task, demanding massive backend server support and impervious server security. By

⁵⁵ Angus Huang, Assistant to President and Company Spokesman of Softstar Entertainment, interviewed in Taipei 27th March 2007

distributing the database work properly, it is possible to build worlds that can be accessed by thousands or even millions of people simultaneously. Kerr contends that running a 'persistent' world requires significant ongoing investment, including maintenance, expansions and community support (2006, p59).

7.2 The crucial influencers

MMORPGs come from what is known as Multi-User Dungeons (MUDs), which moved into 2D graphical network games, and then into the technologies of realtime 3D graphical genres. MMORPGs were developed through a process of breakthroughs in technology, including servers, engine design and graphic artefacts. Today, the online virtual world is constructed using more complex engines and graphical capabilities and a social-networked, text-based gaming environment. Researcher Sten predicts that only the most massive multinational corporations like *Microsoft*, *Sony* and *EA* will survive in the MMORPG market's endgame, when the complexities of technology have risen and the risk of investment has also increased (Sten 2002, p262). In an emerging industry, an early entry into the market is a high risk strategy but may involve low entry barriers that win the customers' loyalty. However, technology change will make early investment obsolete and will allow firms entering later to have an advantage by having the newest products and processes to reap the rewards of the consuming market (Hoskins et al., 2003, pp202-204; Porter, 1980, pp232-233). The following paragraph will address the difficulties for the Taiwanese entering the high risk OLG industry.

Western technology providers have changed their policy; they now ask for an additional royalty fee after the game is published. According to Jacky Chang of *Userjoy Technology*, a Taiwanese developer, the payment for a license for a commercial engine from *Bigworld* includes a lower advance payment of US\$ 500,000 (normally \$750,000) and an additional royalty fee, about 3 percent to 5 percent of the game's annual revenue⁵⁶. It is predicable that Asian game developers cannot rely on endless technological supports from Western companies.

7.2.1 Higher cost of production

Jacky Chang states the primary challenge facing the OLG industry is the increasingly heavy investment costs. Developing a 2D online game requires a team of 20 to 40 people and spending US\$ 1 to US\$1.7 million and consuming one and a half years to two years. A 3D game requires a team of 30 to 40 people and an

⁵⁶ Jacky Chang, Vice General Manager of 2nd Division of Userjoy Technology. interviewed in Taipei on 1st Aug 2007

investment of US\$ 2.6 million. More time is needed to produce a new 3D online game because of lack of experience of modelling software and artwork. In addition, Taiwanese game developers have to acquire a 3D commercial engine technology license from a Western company, with a normal charge of US\$ 750,000 in advance⁵⁷.

7.2.2 Complexities of technology

A server-client system keeps all of the data in a central location, which makes it easier to secure. Developing a MMORPG server requires expertise with client-server architecture, network protocols, security, and relational database design. The server must be able to handle and verify a large number of connections, prevent cheating, and apply changes (e.g. bug fixes or added content) to the game. After different parts of the content are developed, the same system is used for a game test. Game operators require skill and experience to manage their server when a new game title is launched. The central server will experience a significant bottleneck due to game players crowding into a newly open virtual world. The typical consequence of these bottlenecks is that the number of people who have access to a world is limited to about 2-4,000 people. When large crowds of game players gather, for example during large-scale battles, the technical performance of the game's virtual world declines rapidly. Although peer-to-peer systems might be faster and more reliable, they are less secure. Security is a critical issue; in a persistent world there are obvious incentives for hacking. By distributing the database work properly, it is possible to build worlds that can be accessed by thousands or even millions of people at once. Bandwidth and Internet security will have been planned to withstand any future massive data-intensive usage (Castronova, 2005, p138).

7.2.3. The changing business model

Previously, the OLG business model has been a two-part pricing system: users buy the software and then pay a monthly subscription fee. Now, most online games are free to play, although game players have to pay under certain conditions: membership fees are levied for access to special zones and activities; players have to buy virtual in-game accessories, such as pets and costumes, a specific avatar (user's image) distinct from other players', or to increase their combat power.

- a. **1998 to 2003: monthly pay model.** During that time, most MMORPGs, like *World of Warcraft* (USA) and *Lineage* (South Korea), charge subscribers a monthly fee for their services. In 2000, *Lineage* (South Korea) and *Stone Age* (Japan) were representatives of the monthly pay model games in Taiwan. Game

⁵⁷ Jacky Chang, Vice General Manager of 2nd Division of Userjoy Technology, interviewed in Taipei on 1st August 2007

companies profited from charging monthly fees. At that time, a virtual world was operated 'persistently'; and operators frequently updated the contents to keep the freshness of the world for game players (Wang & Wu, 2007).

- b. **2003 to present: free to play model.** Games offer an alternative no monthly fee scheme. Only few sites now rely on monthly subscription fees, while the remainder let people play for free, leaving the players the option of paying to unlock new content.

However, the OLG market trend has changed since 2005. The monthly charge model was changed from selling time, such as a monthly subscription fee, to selling virtual items. When game play becomes free to play, the concept attracts former players to return and new players to join. This revolution paved the way for sites to offer games to web surfers with three clear beneficial consequences. The game player base expanded and significantly so did the age range of players and each player's online spending has risen to the current average of US\$10 to 20 per month⁵⁸.

7.3 Taiwan's online gaming market

In Taiwan there are approximately three million online players, most of them between the ages of 12 to 25 years. South Korean produced games make up 65 percent of the market share, Taiwanese domestic games account for 20 percent of the market share, and games produced by the USA and South Korean cooperation with the Chinese and USA games have 15 percent. In 2005, the OLG market in Taiwan reached US\$ 25 million. MMORPGs accounted for 70 percent of the market share, equating to a 7 percent decrease from the previous year, and the online casual game accounted for 30 percent, equating by contrast, to a 7 percent increase. Although the subscription revenue rose to US\$ 21 million with a 12.2 percent increase over the previous year, the size of the market could not provide support for Taiwan's OLG industry to survive. In addition, the net profit of game operators, which had reached 60 percent previously, decreased to 30-40 percent. In 2006, most of the new games titles operated in Taiwan were South Korean oriented products, which did enlarge the game base of players in the Taiwanese market. The model of the free game emerged since 2005, helping the market to grow in Taiwan. According to the data of MIC (Market Intelligence Center), Taiwan's OLG industry has appeared to be flourishing since 2006 (MIC, 2006).

⁵⁸ Hsin Yu Lin, Manager of Investor Relationship Dept of Soft World, interviewed in Taipei on 12th March 2007

7.3.1 Taiwanese game developers

Taiwanese game developers have faced a variety of problems in developing a new 3D game. Some developers have acquired experience on 2D online game, arcade game or PC game productions. Interviews in this research suggest that running a self-produced game title in Taiwan makes more net profits than running a licensed game. A Taiwan game firm, *Chinese Gamer*, reveals the profit of a successful self-produced game reaches 80 percent. Normally, a 2D MMORPG in the first 3 months can recoup an advance investment, US\$ 600,000 to US\$ 1 million, containing the cost production and server setting. A game is profitable for at least 3 years after the launch⁵⁹. However, the techniques of game production are quickly changing, for example Western and South Korean online games have moved to next-generation 3D games, which raise the entry barrier for Taiwanese game developers creating a new title.

7.3.1.1 A successful case: *Chinese Gamer*

Chinese Gamer is a Taiwanese game developer, established in 2000. In the following next year, its first online game *Sango Online* was published. In 2006, the Taiwanese game firm published the most successful domestically produced game, *Huang Yi Online*, which was adapted from a famous Hong Kong *wuxia* story. *Chinese Gamer* is good at Chinese topics, especially *wuxia*-themed game production. According to *Chinese Gamer*, the sales revenue of *Huang Yi* in the first two months reached US\$ 1.6 million and US\$ 1.9 million respectively, almost recouping the advance costs of game production and server setting. Revenue in the third month increased to US\$ 2.6 million, with 63 percent of net profit. This game can be seen as a 'cash cow'⁶⁰ in the following six months for *Chinese Gamer*, which was fortunate for the company. The ability to develop a 3D MMORPG came on the back of two major game production failures in 2004, *Dragon's Tales Online* and *Jingyon 2 Online*. Each failure was a very expensive lesson, causing the game to lose NT\$ 80 million (US\$ 2.4 million), including NT\$ 30 million (US\$ 0.9 million) on development and production and NT\$ 50 million (US\$ 1.5 million) on market promotion⁶¹.

According to *Chinese Gamer*, one of the biggest mistakes in *Dragon's Tales Online* was to decide to develop their own 3D engine⁶². Commercial game engines

⁵⁹ Inter Eric Chen, manager of the Marketing & Operating Department of Chinese gamer, interviewed in Taipei on 6th March 2007

⁶⁰ A 'cash cow' is a product or service that generates vast profits in respect of low production costs

⁶¹ Leu Shyue Sen, CEO of Chinese gamer, interviewed in Taipei on 3rd October 2007

⁶² A game engine is the core software component of a computer game with real-time graphics. It provides the underlying technologies, simplifies development, and often enables the game to run on multiple platforms such as game consoles and desktop operating systems such as Mac, Linux and Microsoft Windows.

are provided in an integrated development environment to enable simplified, rapid development of games in a data-driven manner. Normally, most of the small and medium game studios will buy a commercial game engine due to time constraints. The process of game development is frequently economized, in large part, by reusing the same game engine to create different games, although it may increase the budget to develop a game title in advance. *Chinese Gamer* was unable to develop a 3D engine to run a game and as a result, bought engine technology from Australia's *Unreal*.

Nevertheless, *Chinese Gamer*'s next lesson was still a technological problem when they created *Jingyon 2 Online*. First, its R&D (Research and Development) team spent more time learning how to maneuver the software smoothly. The core of the functional game engine is, typically, to render the engine and integrate 2D or 3D graphics, sound, scripting, animation, artificial intelligence, networking, memory management, threading, and a scene graph, all together. The task of *Chinese Gamer* was to integrate all the produced assets into a core product. Besides that, PC games often require specialized hardware in the user's computer in order to play, such as a specific generation of graphics processing unit or an Internet connection when users seek to play online. In the beginning, *Chinese Gamer*'s art team could not predict the limitation of the software loading and added too much level building in the game's development, which increased loading on software support at the client end. The mistake slowed down the speed of running the game for users, causing PC crashes during gameplay.

Chinese Gamer was unable to resolve the problems of technological performance, including adjustments of game balance and the stability of the central server. A further monumental error impeded users from logging-in when the game was launched. Leu Shyue Sen, CEO of *Chinese Gamer*, points out the fatal factor:

How to handle the central server became a challenge for us, when we moved from development to operation of the 3D game. Maintenance skill requires sufficient servers and bandwidth, and a dedicated support staff. Insufficient resources for maintenance led to time-lag and frustration for the players, and severely damaged the reputation of the game, especially at the launch. When users couldn't access the newly opened game world, it was doomed. The game plummeted within the first 3 months. To add frost to snow, high investment on marketing promotion doubled the losses of our first two 3D games⁶³.

Chinese Gamer has now overcome the entry barrier, solving the technological problems of game development and operation, such as the stability and Internet traffic flow. The Taiwanese game firm is capable of developing 3 to 5 OLG titles in-

⁶³ Leu Shyue Sen, CEO of *Chinese Gamer*, interviewed in Taipei on 3rd October 2007

house *per year*, while other game developers are still struggling with the problems of the Internet system. *Chinese Gamer's* eight R&D teams include 400 people, accounting for 70 percent of human resources and capital. Each team develops a different game, sharing the ground server setting and software structure. Minimizing the cost of game development, *Chinese Gamer's* 3D MMORPG cost only NT\$ 40 million (US\$1.2 million), nearly half the cost of other Taiwanese game products. The company's 2D games are all in-house produced including mass production of artwork in the production phase; whereas 20 percent of the 3D game productions are outsourced to China.

In the context of global competition, the next lesson for *Chinese gamer* is to develop diversified forms of content that will be widely accepted by players in the intra-Asian markets. The Taiwanese firm is adept at developing MMORPGs based on Chinese topics, borrowing the storylines from Chinese historical novels, such as *The Romance of Three Kingdoms*, or popular *wuxia* stories, such as Huang Yi and Jin Yon's novels. The advantage becomes a disadvantage for *Chinese Gamer* which can only provide homogenous game products. Other Chinese game developers face the same situation: *Shanghai Giant's* new game, *Giant*, replicated the same storyline of *Zengtu*, but in a different space and time, the old game based on ancient pre-industrial era and the new one on modern post-industrial era; *Netease* also faces the challenge of creating create new genres after the major success of the *Westward Journey series*⁶⁴. These examples suggest that, unlike other media production processes, technology has tended to lead toward the production of particular genres. Nevertheless, the high level of investment necessary to write a game engine will influence the choices available to a software studio (Dovey & Kennedy, 2006, p59).

However, it is hard to develop a different genre from the ground up. The best way is to get licensed games coming from other Asian game developers. In 2006 and 2007 *Chinese Gamer* published two South Korean MMORPGs, *Trickster Online* and *Lunia*, representing two distinctive game genres. *Trickster Online* is a cute MMORPG, in which game players can experience a package game by playing through detailed quest modes and different campaigns. Differing from most MMORPGs in the current market, *Lunia* aims to offer a new style of gameplay, mixing elements of action games and RPGs (Role-playing games) together, much like action arcade games. For *Chinese Gamer*, it is an opportunity to acknowledge the features of different genres of MMORPG through running South Korean-produced games.

⁶⁴ Leu Shyue Sen, CEO of Chinese gamer, interviewed in Taipei on 3rd October 2007

When facing competition from other Asian game firms, such as those from South Korea and China who can provide diversified game products or cheaper ones, Taiwanese indigenous games have adjusted their market strategy to maintain their advantages in the national market. *Chinese Gamer* always has at least six new game products in stock, and select three of them to launch, depending on the demand of market trend at that time. However, the phase to prepare the game released to the market still takes six months for game testing and revision of content. Eric Chen, Manager of the Marketing and Operating Department of *Chinese Gamer*, analyzes its marketing strategy. He points out that:

Although the online gaming market size in Taiwan is quite small, it has diversified market niches inside. Taiwan's unpredictable market trend implies that users have different preferences and tastes and easily swing to another side. Besides that, when most of MMORPGs have become free to play, the life span of a game is shortened from two years to one year and even less. The above challenges Taiwan's game firms who must provide diversified content and different genres of game to keep the fresh for the users who always like the new game and loathe the old one⁶⁵.

7.3.1.2. The failure cases of Softstar, Interserv, and IGS

Softstar and Interserv. Developing a MMORPG requires the harnessing of technology and complex creative skills. A few Taiwanese game firms do have unique experiences in developing PC games or arcade games. However, the previous experience does not necessarily pave the way for these Taiwanese game developers to overcome the difficulties and complexities of MMORPG development. These game firms might lag behind the capability of 3D game production, or might be incapable to provide a secure server-client system. Taiwanese firms eventually become aware of their inabilities when failing to make a 3D virtual world after years of development work. In 2005, Taiwan's *Interserv* closed down its operation sector, accounting for a 20 percent annual deficit in human resource allocation. The game developer decided to centralize its sources to become a second-party developer, revealing that game firms have become subordinated in the Asian digital game industry, as they give up the MMORPG business⁶⁶. *Softstar* owns a successful self-produced *wuxia* romance PC game, *The Legend of Sword and Fairy*, in the Greater Chinese markets. However the success of this game did not guarantee the company would move to becoming a MMORPG developer. Indeed, in 2008, *Softstar* ceased both their development and 'operation' sectors. *Softstar*, like many Taiwanese game firms, has recognized that to the difficulty in developing and operating a 3D

⁶⁵ Eric Chen, Manager of the Marketing & Operating Department of *Chinese Gamer* interviewed in Taipei on 6th March 2007

⁶⁶ Jim S. Tsai, Production VP and CCO of InterServ International, interviewed in Taipei on 3rd May 2007

MMORPG at the same time due to the complication of technological problems, which are hard to be controlled and resolved even after years' effort.

International Games System. This company was founded in 1991, originally as a video game software developer and arcade machines manufacture. In 1996 International Games System (IGS) completed the development of Polygame Master (PGM) system which enabled IGS to break the Japanese monopoly in the Asian market. IGS' major works in PGM include both combat games (*Alien Challenge*) and intellectual games (*Dragon World*). IGS also has the capability to compete in the market of simulation game machines, releasing *Rock Fever* in 2000, and *Fighting Club* and *Rock Fever EX* in 2001. *Rock Fever* and *Rock Fever EX* were respectively a music and rhythm game and a series of music and rhythm engines while *Fighting Club* was the world's first fighting game machine enabling game players to use their fists and legs in fighting at the same time.

On the basis of their technical foundation, **IGS** moved to develop PC games based on the local area network (LAN) and the Internet. In 2002, **IGS** published a LAN game, *Star 31*, a mahjong casual game⁶⁷. LANs allowed more players to join computer games at that time. After that, the Taiwanese game producer started to develop its MMORPG. According to **IGS**, the 28 people in R&D sector managed the whole process of game development, including content design and game engine writing, and other assets production.

In 2003 **IGS** published its first self-produced MMORPG, *Fong Shen Online*, taking two years and costing US\$ 2.5 million to develop. Disappointingly, this 2D game only maintains 5000 current users and revenue of approximately US\$10,000 per month, which makes it an uncompetitive game in the Taiwanese market. By contrast, **IGS'** online casual gaming and arcade gaming is much more profitable. Casual online games, such as a poker series or a mahjong game take less than three months to complete but create revenues of US\$ 1 million per month, with an 80 percent net profit. IGS' arcade game, completed within 18 months, has achieved 60 percent net profit⁶⁸.

After the failures of its self-produced MMORPG, **IGS** admits that it is hard to transplant its successful experiences across the different game platforms, when moving the content from arcade games and PGM production to the PC Internet platform. Andy Huang, Assistant Manager of **IGS**:

⁶⁷ Before cost-effective broadband Internet access became available, multiplayer gaming was largely limited to local area networks (LANs), due to their typically higher bandwidth and lower latency (commonly known as lag) than the dial-up services of the time.

⁶⁸ Paul Chiang, President of International Games System, interviewed in Taipei on 31st March 2007

It was a challenge for us to build up a virtual world, especially the complexity of Internet technological skill to integrate often fast-paced action into real time, although we already owned profound skills to produce the game based on other platforms. At the next step, we would obtain a licensed game from other Asian game developers to make up the distinct absence of technological skill⁶⁹.

However, *IGS* is optimistic about the future of its MMORPG business. The firm plans to transplant the content of action games that were used to develop arcade games and PGM, to MMORPGs, but only when Internet connections can support a heavier loading of game design. For example, a human player fights with an AI-controlled character in the arcade game by choosing a character and engaging in hand-to-hand combat with an opponent in a competitive two player series. However, in the Internet world, the fighting occurs between two people or two peers. It may take more time for developers to gain more sophisticated technical supports while the fighting concept is moved to an online game title. This is not a possibility until higher bandwidths can provide instant speed and response.

7.3.2 Foreign licensed games in Taiwan

A supply and demand chain has been formed within the Asian OLG industry. South Korean game developers provide the game products and possible technological support; other Asian game operators run the game in different local markets and offer online services for game players. As a result, the game developers become game providers; and the game operators are often referred to as game server providers (Castronova, 2005, p127). For obtaining a game property, Taiwanese buyers have to pay advance licensing fees, ranging from US\$ 1 million to US\$ 3 million. In addition, South Korean game firms have a right to share 30 percent of the monthly revenue, after the game property is operated. When more Taiwanese bought licensed games, it made entry easier into the OLG business. Any game firm, able to put up around US\$ 3 million of capital, can cross the entrance barrier to have an OLG business⁷⁰.

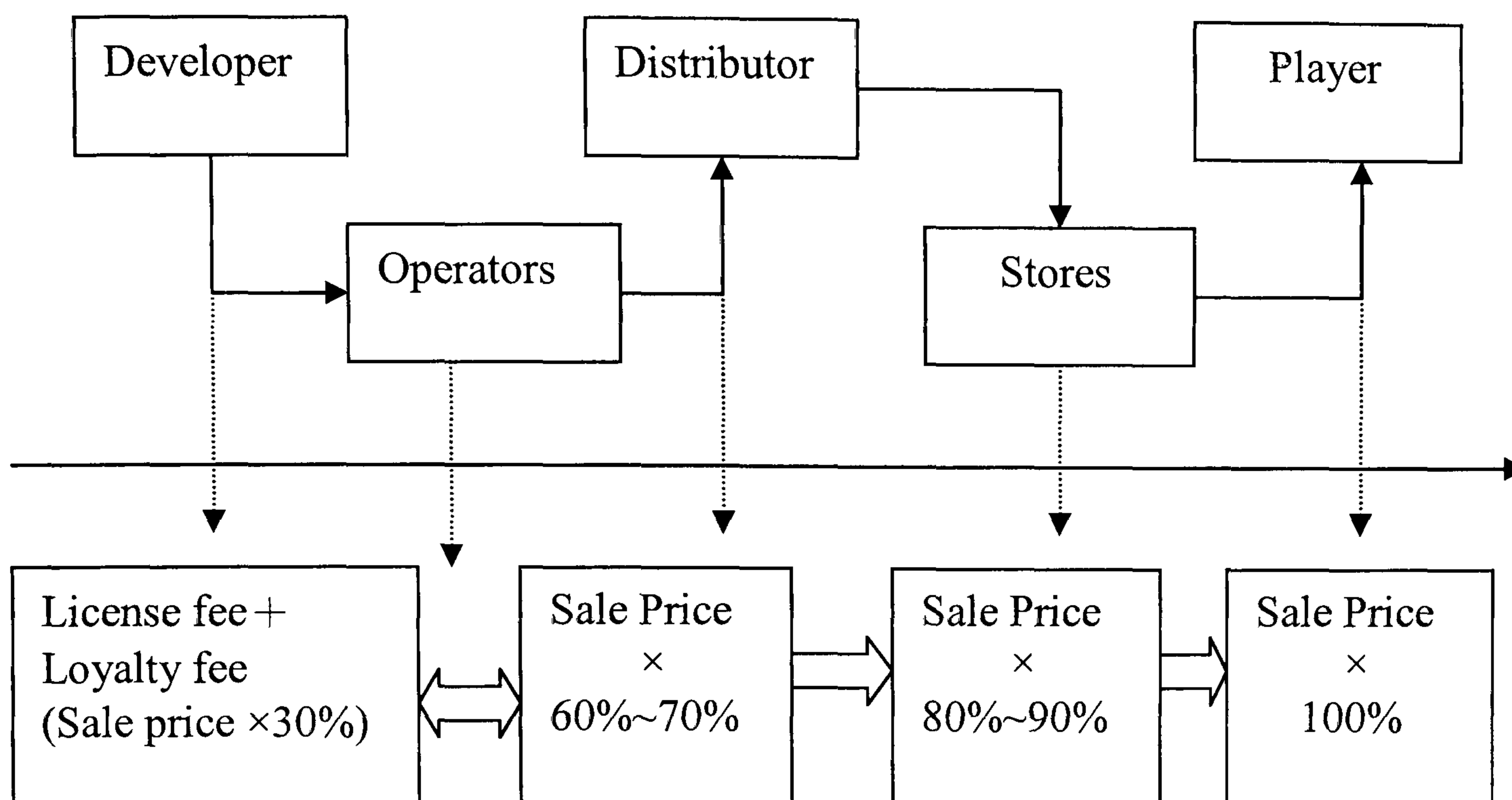
Taiwanese game firms do not have to worry about the supply of games and at the same time, they can avoid the high risk of investment on self-production. South Korean game developers provide comprehensive services, including updating content and technology supports, to support other Asian game operators. Game operators in other Asian local markets have the simple task of operating the products in the local market, including marketing, distribution, and operation. Figure 9 outlines an OLG business model in the Taiwanese market, showing that the profits of OLG business

⁶⁹ Andy Huang, Assistant Manager of *IGS*, interviewed in Taipei on 21st Mar 2007.

⁷⁰ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 9th March 2007

are shared by different players. The arrows connect different players in the production cycle.

Figure 9. Online Game Industry Business



The arrows in the dotted lines represent how much each player gained within the online game value chain when a user consumed. The proportion of allocations per NT\$ 100 revenue for a game attracting 5000 users equate to: convenience store distribution fee NT\$ 30; South Korean developers about NT\$ 20; labour costs of maintenance NT\$ 45 and net profit for the operator NT\$ 5. For a game operator, the current price to obtain a licensed online game property includes a minimum cash advance of NT\$ 15 million (approximately US\$ 0.5 million) and an additional 30 percent monthly revenue. A formula is worked out to ensure the operator has a profit after the developer and distributor have been allocated their share of the revenue. For local operators, the only way to make a quick profit is to increase the number of players. Only when the number of current users surpasses 100,000, does the operator's profit ratio increase to 30 percent⁷¹. Calvin Lin suggests that in the first two months the game must generate a minimum NT\$ 24 million of revenue to recoup the advance, in order to make a net profit in the third month. The formula is conditionally based on a minimum requirement of 30,000 users⁷².

The license fee of South Korean game properties has increased from US\$ 300,000 to US\$ 500,000 and in some case as high as US\$ 1 million. When South

⁷¹ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 9th March 2007

⁷² Coco Chen, Senior Assistant Manager, interviewed in Taipei on 7th May 2007

Korea raises the prices of game products, Taiwanese game operators are forced to have more flexible market strategies to create profits. For operators, the free game is a panacea to the problem of expanding the size of the market while increasing profits.

Gamania. The significance of Taiwan's *Gamania* is due to their successful operation of *Lineage*, a South Korean-produced game. The game firm was one of the first to operate a South Korean licensed game in the Taiwanese market. South Korean developers hold advanced skills in solving Internet technical problems, such as lag and macroing software, and server setting up⁷³. At that time, *Gamania* spend NT\$ 240 million setting up its own Internet data centre (IDC) for securing the quality to operate its first MMORPG, *Lineage*. Related purchases included acquiring nearly a hundred sophisticated IBM computers with high levels of CPU which were used by the the US Defense Department for intercontinental ballistic missile system⁷⁴.

The major success of *Lineage* in Taiwan proves that a large investment at the primary stage is worthwhile, although it brought Gamania to the brink of bankruptcy. When *Gamania* starts to run a game, the costs of operation decline compared to other Taiwanese operators which have to pay for leasing IDC facilities from a telecommunications office. With the stability of a running system and a lesser problem of lag, *Lineage* has been a major hit since the year of 2002. In 2003 *Lineage* in Taiwan claimed an astounding 3.5 million subscribers and 180,000 users who accessed its server at the same time. While other Taiwanese game firms still struggled with game development, *Gamania's* strategy proved to be a success, making profits in Taiwan by running a quality game and holding advanced technological skills to maintain a stable Internet system.

7.3.3 Game portal

The success of *Gamania* shows that the model of Asian OLG business is going to change. The commodified process of game products has formed in a regional market. The South Korean game developer provides internal expertise, helping the Taiwanese operator to avoid mistakes caused by bad design or service, which is driving users to leave⁷⁵. Since 2005, more Taiwanese operators, like *Wasabii* and *MacroWell*, have appeared in Taiwan's OLG market. These game operators started without any background related to the digital game industry, but had either large cash

⁷³ Lag is the effect a user perceives when there are long delays between the time when a command is executed and the time its effects appear. The problem of macroing software was that players program their characters to perform repetitive tasks automatically for upgrading to a higher level or skill.

⁷⁴ Hank Su, CFO and Spokesman of Gamania Digital Entertainment, interviewed in Taipei on 3rd Apr 2007

⁷⁵ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 9th March 2007

reserves or owned the distribution channels. The performances of these new companies is distinctive than those game developers with experience of the game industry in the Taiwanese market. The newcomers hold the advantages of providing diversified 3D MMORPGs and having the advanced technology necessary to control Internet communication traffic, with South Korean supports. Now, running a game portal has become more important than developing a successful MMORPG for a game firm in today's market.

Game portals are also distribution channels for games products through the Internet. People play or download games from, and have the opportunity buy the games, through a game portal. With the increased popularity of the Internet, online distribution of game content has become more common. One reason for using game portals is publicity: the top listings of games in game portals achieve millions of 'downloads' by game players that want to play online - and generate high revenues⁷⁶. In the USA, portals take 50-65 percent of Internet sales; but in Taiwan, users are accustomed to topping up their online credits in convenience stores. Besides that, game portals are regarded as an advertising hoarding on which the operator releases details of updating and online activities for users.

The concept of the free game completely changed the traditional way that the operator works in only providing online service and updating contents after a game title has begun to be operational. Maintaining a fresh appeal to game players after six months is difficult. According to a Taiwanese operator, a game portal has to provide diversified forms of games, in at least four genres, to attract game players with different requests and preferences⁷⁷. To keep a game business successful, a games portal must continuously launch new game products, at a frequency of one to two games per year. However, to develop a MMORPG requires one and a half years. The challenge for indigenous Taiwanese game developers is to provide enough new products to satisfy the demands of the local market. As expected, Taiwanese game operators must increasingly rely on other Asian game providers for more game products⁷⁸.

MacroWell. In 2007, *MacroWell's* website had two million game subscribers, ranking *it* in the top three game portals in the Taiwanese market, below *Soft World* and *Gamania*. In the first three years, *MacroWell's* market share increased 350 percent annually. According to Calvin Lin, General Manager of *Macrowell*, monthly profits are 25-32 percent.

⁷⁶ Andy Lin, Vice President, interviewed in Taipei on 27th April 2007

⁷⁷ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 9th March 2007

⁷⁸ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 9th March 2007

MacroWell's game portal has posted seven game products, including *Flyff*, *Nostale*, *Rappelz*, *Goonzu*, *Shaiya*, *Luna Online* and *World of Konfu*. All of these are South Korean-licensed games, except *World of Konfu* which was bought in China. Three types of game genres, cute game, medieval epic and Chinese *wuxia*, are mainstream in the Taiwanese market. To keep the loyalty of game players, every four months a new game title is scheduled for launch. In order to obtain good products, *MacroWell* keeps close ties with South Korean game firms to reserve good game products as early as possible. Calvin Lin explains the strategy:

MacroWell bought *Luna Online* when this game was in the prototype stage. The game had been on hold for six months after completion, just waiting for a suitable time when there was no other similar type of game in the Taiwanese market. Now we hold four games in reserve for Taiwan's market⁷⁹.

For a game operator, it is very important to make sure the profit keeps coming back, especially when considering the increasing cost of a licensed game. *MacroWell* adjusts its market strategies with the aim of making a profit. First, the cost of each game must be less than US\$ 1.5 million and ideally below US\$ 1 million. Second, a new game title must attract the attention of game players within the first three months. Nowadays the life cycle of a game has shortened from three years to six months. The first three to four months is a crucial phase, which determines whether the game can make profit. The revenue generated during those three to four months equates to 75 percent of the whole revenue the game will generate. At the same time, game operators have to make every possible effort to ensure the timing is right and in providing a variety of packages, at an extra cost, to satisfy the demands of game players. Third, it is very important to provide a range of game genres to increase the game player base. A game portal must provide at least one quality game, which has the function of attracting users to sign up or log-in. Other genres in the website, especially the *wuxia* themed, are designed to make money through vending diversified virtual items. The business model is similar to a store's sales promotion, which provides special prices on certain items to attract customers who will buy more once they have entered. Nevertheless, the layout of game products still needs to be arranged technically, as only one or two game products in the website generate high revenue, while the other games provide entertainment or social activities for the game players.

Currently, *MacroWell* is making an effort to develop a brand in the market. The company, once the game portal has earned a high reputation among the users, can afford to spend more on the game than on market promotion. At the same time,

⁷⁹ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 14th April 2008

MacroWell also faces the economic pressure to obtain more quality products, as its user base has reached two million. Quality games in a game portal is a magnet to attracting users; however it needs to pay a higher license fee because the developer has to spend more time and money to model a good game. In 2008, *MacroWell* published *Shaiya*, a South Korean-produced game based on a medieval age story. The game developer, *SonoKong*, took two years and invested more than KRW 4 billion on this project. The high financial investment of the game's development meant *MacroWell* had to pay a license fee to US\$ 1 million. This meant that its profit ratio was destined to decline once the game was published in public, regardless of the great number of subscribers.

The success of *Gamania* and *MacroWell* comes from not only the support of South Korean game suppliers. The two game operators sense the importance of accurate market strategies helping a new game title rapidly capture Taiwan's market. *Gamania* is apt at flexible marketing strategy and was the first game firm to use TV advertisements when promoting *Lineage*. Other market promotions, such as treating champion game players to a cruise or giving a Porsche as a final prize, became a topical issue in the Taiwanese and Hong Kong markets at that time. For *MacroWell*, the first step was to use Television Commercial Films (TVCF) to reach market awareness. Normally, the high costs of advertisements on media, at least NT\$ 10 million, prove effective to promote a new game title. Furthermore, *MacroWell's* market strategy combined with other traditional market exposure, such as buses, Internet cafés, magazines, web portals and market forums, made an integrated marketing plan. *MacroWell's* first online game, *Flyff*, a South Korean-produced game, was launched in 2006. At the same time, the cute MMORPG was co-promoted with Coca-Cola and the 7-11 convenience stores, which is the biggest distribution channel in Taiwan with more than 3,000 neighbourhood stores. Although the MMORPG was not popular in South Korea, this game was a major success in Taiwan's market. According to *MacroWell*, *Flyff* was the number one game for the first week and remained in the top five until 2007.

7.4 Overseas exploitation

Taiwanese game firms, once they have gained a firm and stable footing in the domestic market, try to increase their sales efficiency by expanding into the international market. However, these companies quickly understand that it is not easy to replicate the operation experience of the domestic market a foreign market. A popular game in one market is not guaranteed to be a success in another market, even

when the markets are within geo-cultural proximity. The content of the game has to be revised to match the preferences of customers in the foreign market. The following cases illustrate that for game operators the keys to making a profit in a foreign market are not only providing localized services, but also matching content to the preferences of the users.

7.4.1 The cases of Wayi and Gamania entry into the OLG market in Greater China

In 2000, the OLG industry was burgeoning in China, during which time *Wayi* (Taiwan) was one of the biggest game firms in Greater China. *Wayi's* Japanese licensed game accounted for 80 percent of the market share in Beijing, with annual revenues of RMB 150 million. To monopolize the fast growing market, *Wayi* decided to enlarge their investment to keep its leading position in China. First, the Taiwanese firm invested US\$ 1.5 million on server-client systems to meet the huge demand of new game players. Second, *Wayi* set up game studios in Chengdu and Beijing to create new games. However, *Wayi* chose to ignore the reality that the Chinese market is too big to be controlled by one player. The only way to maintain competitiveness in such a fast-growing and ever-changing market is a network of developers, operators, distributors, and telecommunication companies. By going solo, *Wayi* left an opportunity for *Shanda* (China) to enter the Chinese market with the *Legend of Mir*, a South Korean-produced game. *Shanda*, in contrast to *Wayi*, created a cooperative opportunity with Chinese telecommunication companies by expanding the market share and sharing the revenues together, while other game operators paid a fee for the data flow and technology support. The emergence of Chinese operators created a new business model in the Chinese game market and shaped a new hegemony in the Chinese OLG industry⁸⁰.

Gamania's experience, as a game operator, of entering the Chinese market was negatively impacted on the company aspirations of success expansion in the world's largest OLG market. *Gamania's* failures are attributed to the following reasons:

First, the Chinese OLG market has been controlled by only a few domestic game firms possessing the the scale and financial strength to dominate making it very hard for foreign rivals to compete with the major Chinese players. Furthermore, the Chinese game operators had already obtained the same popular South Korean produced games which *Gamania* operated in Taiwan. Unable to obtain good alternative games became an immediate problem for *Gamania* in the Chinese

⁸⁰ Robert Huang, Chairman of Wayi International Digital Entertainment, interviewed in Taipei on 27th April 2007

market. Additionally, *Gamania*'s success in the relatively small Taiwanese OLG market was not good preparation for the size and demographics of China's OLG market. The core mass of Chinese game players live in inner cities, whereas the majority of their Taiwanese counterparts live in metropolitan areas. *Gamania* is good at promoting the company's games in urban areas using intense media exposure to increase the market awareness of a new game title. However, the same strategy failed to have any impact in the Chinese market where new game titles are normally promoted through salesmen or Internet cafés. *Gamania* suffered a large loss on its investment due mainly to mismatching the marketing strategy to local conditions. In 2007, *Gamania* decided to close down its game business in China and to downsize its Beijing subsidiary⁸¹.

However, *Gamania* is combative and claims that the company will take accept future opportunities to enter the Chinese market. The Taiwanese firm plans to bring the company's self-produced games, solving the problem of product supply. In contrast to other Taiwanese game firms which license their games to Chinese operators, *Gamania* maintains its role as a game operator. In order to reduce the investment of risk and to ensure the next attempt is a success, the Taiwanese firm is seeking an alliance with a local Chinese firm before re-entering the Chinese market. While further evaluating the competitiveness of *Gamania* in the Chinese market, Albert Lui, CEO of *Gamania*, points out the company's strengths:

The biggest assets of Gamania are its innovation and flexible marketing strategies. We never duplicate or follow past successful experiences. Although the major Chinese operators have occupied their strategic positions in the marketplace through providing Chinese-themed games, Gamania still can find its place whenever it finds a way to increase the segments of the current Chinese market. We will provide customized service and diversified forms of entertainment to distinguish our position from other Chinese operators⁸².

7.4.2 The contrasting cases of Chinese Gamer in Greater China

The failures of Taiwanese game firms, such as *Wayi* and *Softstar* and *Gamania*, did not have an overtly negative influence on other game firms from attempting to enter the Chinese market⁸³. *Chinese Gamer's* wuxia-themed game title, *Jin Yong Online*, appealed to 2.5 million in China in 2002. However, its other game products could not maintain the same degree of popularity as *Jin Yong Online*. In 2007, *Chinese Gamer* adjusted a strategy to expand into the Chinese market. First,

⁸¹ Hank Su, CFO and Spokesman of Gamania Digital Entertainment, interviewed in Taipei on 3rd April 2007

⁸² Albert Lui, CEO of *Gamania*, interviewed in Taipei on 26th July 2007

⁸³ In April 2007 Software decided to close its operation sector in Mainland China, downsizing its employees from 60 to 10 due to a great deficit of US\$ 3 million in first 3 quarters of 2006 (Commercial Times, April, 2007).

the Taiwanese game firm decided to develop a game based on the preferences of Chinese game players, because the Chinese market should not be regarded an extension of the Taiwanese market. Second, *Chinese Gamer* opened a game studio in Chengdu which developed games aimed at the Chinese market. This studio was involved in the entire game development process from idea concept to mass production. Third, because of the size of the OLG market in Greater China, game launches (even of the same game) have higher priority in Greater China than in Taiwan. Fourth, *Chinese Gamer* licenses MMORPGs to Chinese operators, because the Taiwanese firm does not have the capacity to handle the complexities of the Greater China OLG market. However, *Chinese Gamer's* new strategies will take time to prove effective or not.

7.5 Conclusion

The above cases show that the focus of Taiwan's OLG industry has moved from the role of developer to the role of operator. Traditionally, game studios develop and operate the games. The model in the Asian OLG industry has changed since 2002. The OLG industry is broken into several segments: the game developer provides the game; the distributor sells the product; and the operator offers the online service. They reinforce the fact that in the increasingly complex and competitive OLG business, most of the Taiwanese game firms focus their business on operating games as opposed to developing games. The change has been driven by the forces of complexity of technology, changing business model and flexible market strategy.

First, game developers have to increase their investment when a MMORPG moves to 3D production and requires more technological supports. The Taiwanese game developers must draw the support from Western technology, such as commercial game engines, to save time on production and reduce the risk of investment. The need to overcome all possible technological problems involved in 3D game production, although Taiwanese game firms have the abilities to develop games on other platforms is a serious hurdle. Taiwanese game studios are, while the free game model becomes the mainstream in the market, also unlikely to provide sufficient games to satisfy the demands of the users. To offset the uncertainty of the market, game firms must seek diversified content and game genres from other Asian game developers rather than developing their own.

Second, the OLG business model has moved from a monthly subscription model to a free model in the Asian market. Operators charge the users through selling virtual items. At the same time, the life cycle of the game has shortened from

three years to six months. Only a few quality games, such as *World of Warcraft* or *Lineage*, can be maintained 'seemingly' forever and charge users a monthly subscription fee. The free business model has also impacted on game players' loyalty as there is no longer any financial outlay incentive impeding changes in preferences. While Taiwan's market has become more sophisticated, a profit-making game portal must maintain diversified contents, including *wuxia*, cute and medieval age epics to appeal to different groups of users. At the same time, game operators have to rely on the effects of advertising to promote their new games. Success of a game depends on the game firms' ability in the game's initial three months to attract a critical mass of game players. The use of market strategy becomes more important, when current technology can be maximized. The OLG industry in the Asian market has moved from being a technical cultural artefact to a service business.

Third, online games have moved from technology-leading products to service products. The operator's role is to not only maintain a virtual world for the users, but also to keep the attention of the users. Only local operators understand how to revise the contents based on the local market demands. Developers make the changes according to the local preferences, so that MMORPGs can be operated in different markets after the contents are revised. In many ways, local operators still dominate their domestic markets, although Asian game firms face the increasing challenge of globalization. This may further explain why Taiwanese game firms failed in a market of close geo-cultural proximity, when they underestimated the complexities of Chinese market. Foreign operators need alliances with local game firms to gain a stable entry into the Chinese market.

The next chapter is going to discuss how Taiwanese game firms set up collaborative cooperation agreements with Asian partners to minimise the risk of investment and to maximize their profits. The chapter examines the relationship between the Taiwanese game operator and other Asian game developers, from the perspective of political economy. In addition, the chapter will answer the following questions: Does the Asian OLG industry have a locked-in hierarchical position suitable for integration into the global market? Or is the uniqueness of the Asian OLG the added value it provides in the Asia Pacific market?

Chapter 8. A value Chain of the Online Gaming Industry Between Taiwanese Game Firms and Other Asian Partners

Chapter 8 examines the relationships between the Taiwanese game operators and other Asian game providers. The model of a global commodity chain, which Gereffi et al. (2005) developed, is used to analyze how Taiwanese game firms link with other Asian partners. The discussion will modify the model, explaining the current relationship between game buyers and game providers, discussing the influential elements to further link these local nodes cooperatively. Chapter 8 also identifies how the value chains developed in the intra-Asian markets; analyzes the collaborative relationship among the Asian game firms, and explains how cross-border economic integration has formed in a regional market.

8.1. Taiwanese game operators and Asian game developers

Now, the OLG business has segmented into developer, publisher, distributor and operator since 2002, in contrast to the traditional model, in which the developer developed and operated the game. The cost to develop and operate a virtual world is one of several dominant factors; under US\$5 million in USA, but a guaranteed success seems to call for much higher initial funding levels, as much as US\$20-30 million (Castronova, 2005, p128). An important shift in the role of the corporate MMORPG developer is worth noting, a shift from a production and distribution model to a service model. Nowadays, the role of game operators has become important while MMORPGs are no longer regarded as 'just games' (Stern 2002, p261).

Taiwan is regarded as a small but sophisticated market. When indigenous games could not satisfy the demand of users, Taiwan in 2002 became an 'imported game' country. According to the analysis from IDC, South Korean and Chinese produced online games take almost 80 percent of the market share in Taiwan. In 2006 the *World of Warcraft* (USA), *Lineage* (South Korea) and *Maple Story* (South Korea) ranked as the top three most popular games in Taiwan. In Taiwan's market, each of these games appealed to 200,000 concurrent users accessing the servers. Chinese produced games are also operated by Taiwan operators in their domestic market because of the need to provide more diverse forms of content. Chinese interactive online entertainment also has advantages in the Taiwanese market because of their perceived lower production costs and the cultural proximity between the two territories. South Korean and Chinese game firms have become the main

game providers in the Asian market, especially for Taiwanese game operators. In addition, Japanese MMORPGs appeal to entrant groups of Taiwanese users.

With their successful experience of online game development, South Korean game firms were the first of the Asian game firms to develop expensive and complex 3D game productions. The South Koreans are not daunted by the design process nor providing massive backend server support and impervious server security while maintain a MMORPG. More than 300 games are operated in the South Korean market, which has been continuous growth and become the centre of game development in the Asian market. MMORPGs in South Korea are mature products in composition and quality of characters, which meet domestic demand. The successful business models of the South Koreans provide Taiwanese operators with a useful reference.

As online games provide constant game play, allowing more simultaneous users, for a monthly fee, to join in at the same time, game firms have to provide operational services hosted on a network. After a virtual world has been existence for a particular duration the subscriptions end causing revenues to fall. In order to maintain both the enjoyment of the game and the users' interest, new content models are released at intervals. Online games should, therefore, be seen as service products, and marketing rather than technology is the main concern for the game operator. Although technology oriented games became popular for some years, the OLG industry in the Asian market moved beyond that dominant design. The emphasis moved to market oriented designs, although the technology oriented design still maintained, to some extent, its market position (Choi, 2007, pp5-6). In reality, technology within game-play is no longer a major factor for game players deciding to play. A 2D MMORPG could become popular if the content suited the demands or preferences of players. Chinese game publishers have always tried to simplify the technological concepts in order to attract low-end technology users as their core mass market is found in second or third tier cities, such as inner cities or rural towns, rather than the wealthier metropolitan areas. This is a very different approach from the Korean and the USA where the OLG industries provide brand new content with each game title to keep the attention of game players.

Another link exists between Taiwan and China due to the need by Taiwanese operators for more diversified games. Chinese game developers are able to remodel games quickly to suit the demands and the tastes of local players. A durable game requires to be remoulded repeatedly especially when testing either a game concept or the stability of the game's Internet systems.

In addition, the Chinese are good at developing a variety of profit-making models, further helping game operators lengthen the life span of a game in the market. Now, most online games have become free to play, which is attracting more users to log-in. At the same time, operators have to provide various types of games in order to increase the number of their niche markets as well as enticing the casual web-browsing users. All these concepts are designed to ensure the business can make more profits. Compared to their South Korean counterparts, Chinese game developers can design the contents of a game based on the preferences of players and make them willing to pay more in game-play. These findings, infer that OLG technology has matured and the existing technologies can be optimized into different types of games. New games need innovation from creative ideas and strategies, not necessarily technological characteristics. The process of value-added in online games can be seen as 'soft innovation' (Chio, 2007, p4)

Even 'global gaming' is not homogeneous in response and effect. Tech-cultures are subject to localization by replicating traditional forms of society, including the preferences and tastes of users and their usage habits, especially when a MMORPG is operated in different markets. Now, the OLG business has become more fragmented, meaning Taiwanese game operators provide a service for the game players and other Asian developers providing the necessary technological support for them. Figure 10 illustrates the above discussion showing the basic commodified process of online games in which a game publisher controls the entire process. Figure 11 represents a segmented business, in which a game developer provides a game and a game operator publishes and operates the game. The line arrows represent exchanges between the producers and the operators.

While 95 percent of video or PC games are expected to disappear within a short space of time (weeks), the trend in MMORPGs is different: a virtual world is developed to last for one to three years. An OLG world is persistent and accessible twenty-four hours a day, seven days a week throughout the year. Players can choose to play on a dedicated role-playing server. MMORPGs keep a database entry for each avatar. Updates, including adjustments to game balance, improvements to game mechanics, and the addition of new features must be provided to maintain the interest of the users. There is a clear correlation between revenues and content, in that revenues decline the longer content remains unchanged and then rise when new content is released. The profitability of a MMORPG is attributed to sophisticated content design, advanced technological support, good marketing strategy, and most

importantly, a flexible localized operation (Stern, 2002, p261; p269; Castronova, 2005, p110, p129; p133).

Figure 10. Traditional 'Western' Commodified Process of a Digital Game

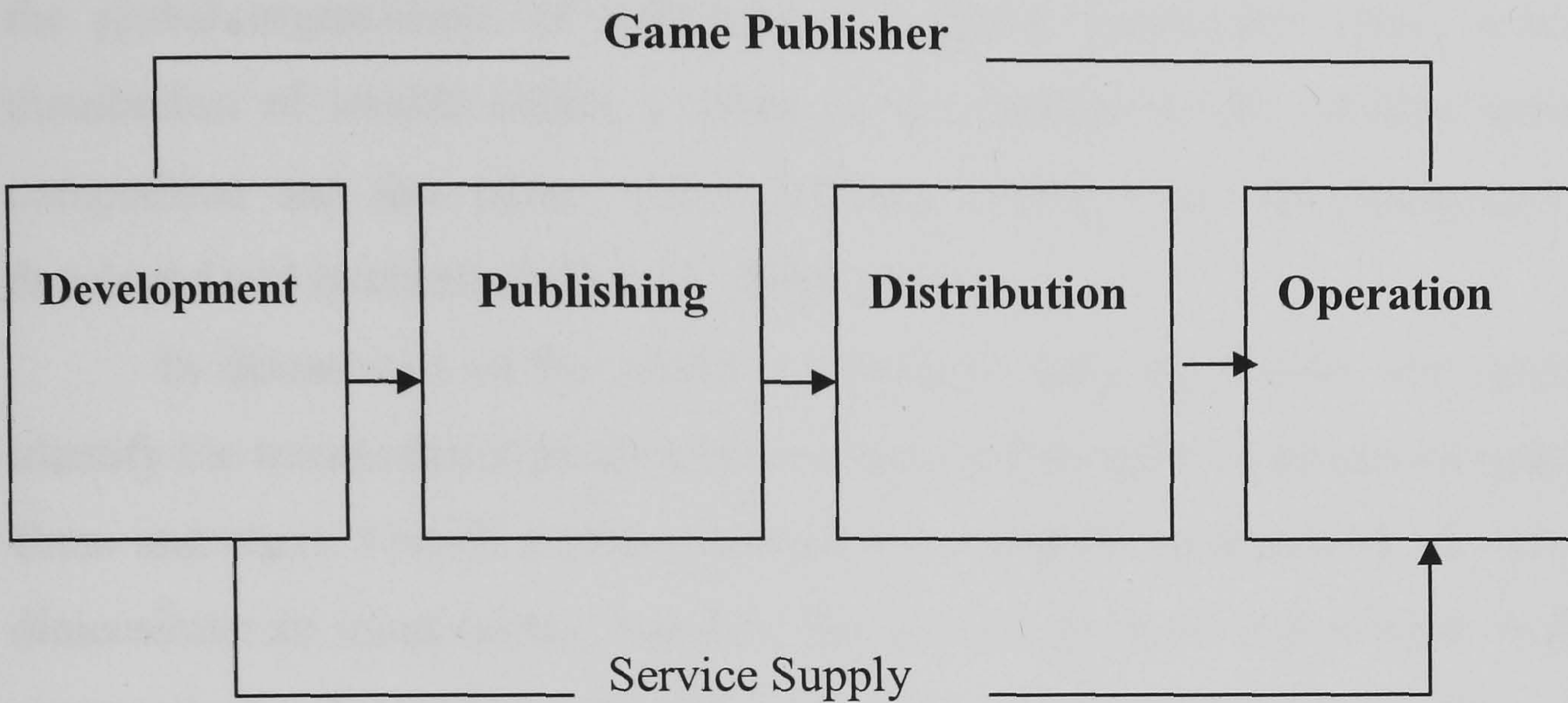
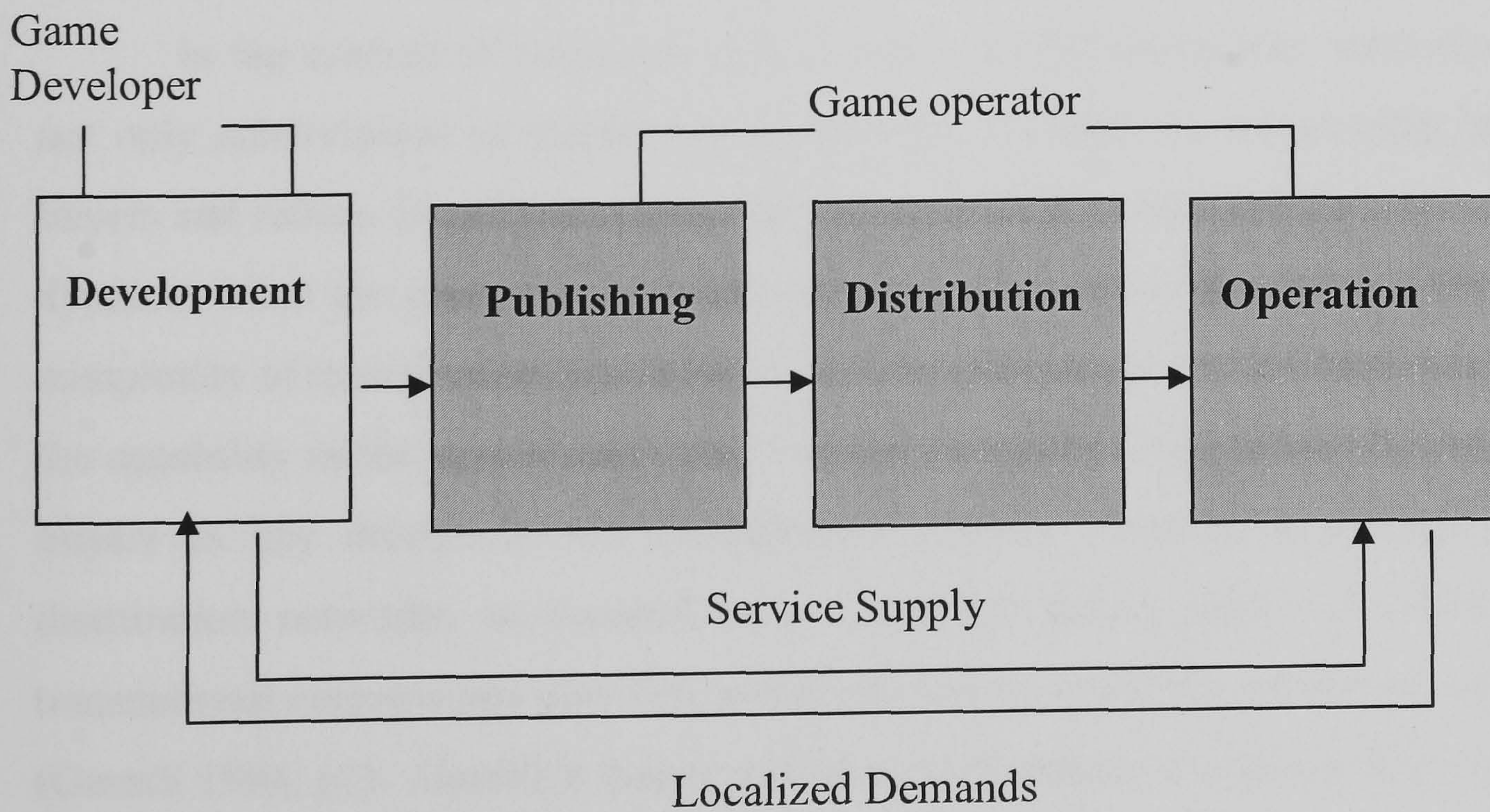


Figure 11. The Commodified Process of a Digital Game in the Asian Market



8.2 Dynamic value chain analysis

In recent years, technological innovations, liberalization of international trade in services, and increased freedom of establishment have significantly reduced international coordination costs. Thus opportunities for cross-border service links become cheaper, more reliable and more readily obtainable (Arndt & Kierzkowski, 2003, p4). In the 1990s, Gereffi developed the theoretical framework of 'global commodity chains'. The concept of a value-added chain is used to directly explain the global organization of industries. A global commodity chain exposes the distribution of wealth within a chain as an outcome of the relative intensity of competition and innovation within different nodes, when discussing how it has developed and interlinked (Gereffi, 1994, pp1-5).

In discussions of the global commodity chain framework, the model helps identify the transnational production system transformed by competitive strategies of firms and states. Gereffi further proffers that it should be separated into three main dimensions: an input-output structure, the process products and services linked in a sequence of value-added economic activities; a territoriality, spatial dispersion in production and distribution networks; and a governance, authoring and power relationship (Gereffi, 1994, p7). Previous research indicates that a successful regional economy should possess more sensitive global ties and make use of its own advantages, such as low-cost labor and sufficient production. Furthermore, an important issue for entrepreneurs and policy-makers is the robustness that the local economical node is integrated into the global network (Porter, 1998; Fuch, 2002).

In the context of economic globalization, global production networks shape not only subdivisions of manufacturing process, but also the relationship between buyers and sellers. Gereffi notes that the relationship between suppliers and buyers is dynamic when the products are to be provided under the following conditions: the complexity of transactions; the ability to codify transactions between businesses; and the capability in the supply-base. This format stresses the importance of new global buyers as key drivers in the formation of globally fragmented production and distribution networks, in contrast to the producer-driven chains in which large transnational corporations play the central roles in coordination production networks (Gereffi 1994, p7). Gereffi's theory will be used to analyze the relationship between Taiwanese game buyers and other Asian game developers. There are several basic types of value chains governance, including the modular supplier, the captive supplier, relationship supplier and the hierarchical supplier. The collaborative relationships between buyer and supplier probably move from one to another

typology or de-couple when the stability of the value chains is changed by new technology, or when new demands from leading buyers arise (Gereffi et al., 2005, pp84-85).

Types of governance in global value chains

Market. Market linkages do not have to be completely transitory. The essential point is that the costs of switching to new partners are low for both parties.

Modular value chains. Typically, suppliers in modular value chains make products to a customer's specifications. However, when providing 'turn-key service' suppliers take full responsibility for competencies surrounding process technology, use generic machinery that limits transaction-specific investment, and make capital outlays for components and materials on behalf of customers.

Relational value chains. This typology may include management through reputation or family and ethnic ties. Furthermore, the role of spatial proximity in supporting relational value chains is important. But trust and reputation may well function in spatially dispersed networks where relationships are built-up over time, or are based on dispersed family and social groups.

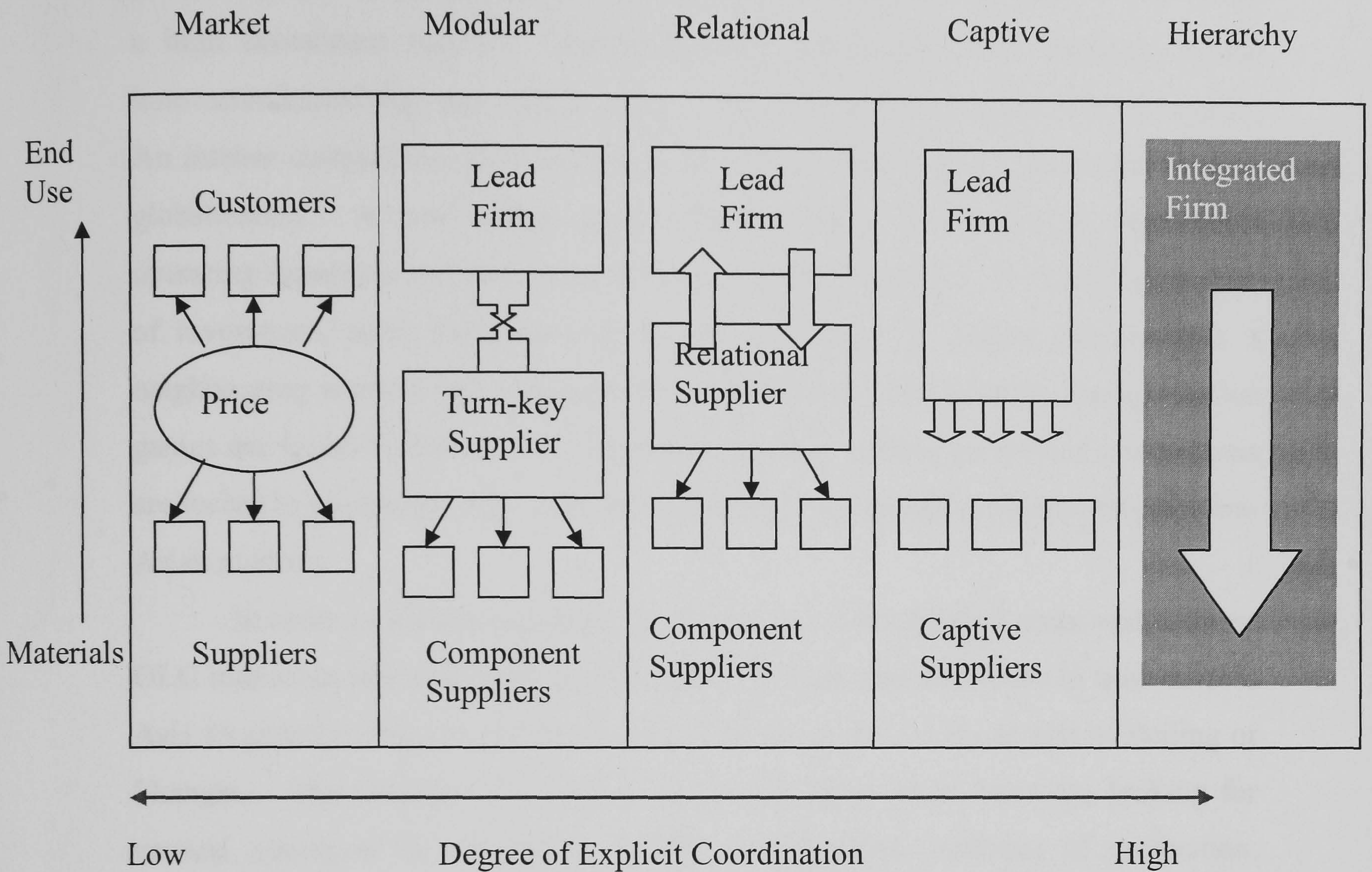
Captive value chains. In these networks, small suppliers are contractually dependent on much larger buyers ensuring a high degree of monitoring and control by the dominant firms.

Hierarchy. This form is characterized by vertical integration. The dominant form of governance is managerial control, flowing from managers to subordinates, or from headquarters to subsidiaries and affiliates (Gereffi et al., 2005, pp83-84).

Figure 12 illustrates the above discussion in graphic forms, showing the five global value chain types arrayed along the spectrum of explicit coordination. The small line arrows represent exchange based on price while the large block arrows represent thicker flows of information and control, regulated through explicit coordination. This also includes instructions coming from a more powerful buyer to a less powerful supplier, as in a captive global value chain or within the confines of a hierarchy. As in relational global value chains, the relation between buyer and supplier represents social sanction regulating the behaviour of equal partners. As a market-based type in the figure, relationship between the supplier and the customers could equally take other forms (Gereffi et al., 2005, pp86-88). While discussing the global commodity chain framework helps identify the transnational production system undergoing the competitive strategies of firms and states, Gereffi points out that it should include three main dimensions: an input-output structure, the process of

production and services linked in a sequence of value-added economic activities; a territoriality, spatial dispersion in production and distribution networks; and a governance, authoring and power relationship (Gereffi, 1994, p7).

Figure 12. Five Global Value Chain Governance Types



(Gereffi et al., 2005, p89)

The original model has been constructed on the global value chain in terms of buyer-driven forces. It was originally developed to explain the value chain of commodity rather than cultural products. The models can be used to explain the existing collaborations between game providers and game buyers in the intra-Asian market; but it cannot provide an elucidation or verification of the flow of games in a regional market. In addition, the global production and distribution systems are only founded on an explicit coordination between the buyer and the highly competent supplier. In modular global value chains, dense information flows are narrowed down to a codified hand-off at the inter-business link, leaving each partner to manage tacit information within its own business boundaries. However, these models, focusing on the nature of the inter-business linkage, do not provide deep analysis on

how the interlinks regulate the buyers and the providers, and what conditions make the models change (Gereffi et al., 2005, pp86-88).

8.3 The value chains in the Asian OLG industry

The high proportion of foreign online games in Taiwan shows that being game developer and game operator simultaneously is inherently difficult and carries a high investment risk for Taiwanese firms. Developers and operators require innovative knowledge not only in game development, but also in market strategies. An intense competition has emerged in the Asian OLG industry under the trend of globalization. A new online game requires heavy investment in technology, operating capacities and marketing in the contemporary world. To minimize the risk of investment, more Taiwanese game operators select a finished product from a neighbouring country, rather than produced their own. Consequently, more imported games are found in Taiwan's OLG market. In other words, Taiwanese games firms are forced to co-operate with other Asian partners, and further integrate into the intra-Asian markets.

In order to closely watch the development of the South Korean and Chinese OLG industries and seek suitable new games, Taiwan operators have to travel across Asia frequently, every two to three months to Seoul, and every month to Beijing or Shanghai. The frequent interactions imply that Asian game firms are looking for vertical synergies by expanding complex collaborative relations of production, marketing, and operation in order to minimize costs and maximize profits. A value-added chain in the Asian OLG industry has been established within the regional economy. In the following section, the model of the governance of global value chain, developed by Gereffi et al. (2005), is used to analyze how Taiwanese game firms, as game operators, link with other Asian partners, and how Taiwanese game firms flexibly adjust their role in the regional market for maintaining their strong aspects.

8.3.1. Taiwan's cooperation with South Korean firms: modular value chains to market coordination

South Korean games appeal to numerous Taiwanese users because of their good quality and diversified game genres. When a South Korean produced game is introduced, local operators provide proposals for localized content revision. Game supplier's services include the technological support of the Internet system, the manufacturing of virtual items, and the revision of content in accordance with the buyer's demands. South Korean game developers have the capability to supply

flexible services, even to distant market linkages, when the product requires revision to fit different local markets; for example, *RO* a cute game produced by **Gravity**, simultaneously circulated in Japan, Taiwan and Thailand. Different content or specific events were designed to attract the users in the intra-Asian market, such as the Sakura Festival in Japan, the Pouring Water Festival in Thailand and the Dragon Boat Festival in Taiwan. Now *RO* has been exported to America and Europe. To further provide specialized services and localised game content, **Gravity**'s overseas team consists of 150 people who provide the service to localize the content. The merit of South Korean firms is not only to provide products and technology support, but also service for the operators⁸⁴. The advantages of the South Korean game developers have been enhanced by the establishment of overseas offices, frequent international travel and intensive information exchange with different local operators. Increasing supplier's competence makes South Korean game firms maintain their leading position in the regional market.

The link is established with the relationship of modular value chains whereas suppliers provide specific products to customers and the customers have the know-how to operate a game in the local market. From the view of the game buyer, purchasing a game means lower market risk and a possible exchange of tacit information on operational technology. In addition, they can easily cross the entrance barrier and acquire the product and the technology to control the telecommunications traffic⁸⁵. **Gamania** maintains many popular South Korean MMORPGs in the Taiwanese market, such as *Lineage* and *Maple Story*. Four of the top South Korean game companies, including **NCsoft**, **Nexion**, **Gravity** and **NHN**, set up partnerships with Taiwan's **Gamania**. **Gamania**'s two popular games, *Maples Story* and *Kirt Rider*, originate from **Nexion**, and account for 40 percent of its revenue. When *Lineage* (**NCsoft**) became popular, **NCsoft** and **Gamania** co-invested in a new venture, 51 percent of stock held by **Gamania**, to operate *Lineage 2* in Taiwan. South Korean game firms have become Taiwanese game firms' biggest competitors as well as collaborators.

South Korean game producing firms, with 3D production skills and well-established experiences of operation, have occupied a competitive position in the East Asian market. However, South Korean game providers are not satisfied with their position on the current value chain. Evidence demonstrates that South Korean firms look for higher profits from license fees, as well as from operational revenue.

⁸⁴ Scott Lee, Vice President of Webzen, interviewed in Shanghai on 22nd May 2007

⁸⁵ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 9th Mar 2007

Now Taiwanese game buyers face an increasing licensing fee, ranging from US\$ 1 to 3 million, and an additional 30 percent royalty of the operating revenue fee each year. To break even on their advance expenses, more game operators provide free games and gain their major profits directly from selling virtual in-game items. In 2007, *Gamania* transferred 10 percent of its common shares to *Nexion* to tighten up their cooperative relationship. In the same year, the profit of *Gamania* decreased to 46 percent (from 60 percent) due to the rise of license fees from South Korean firms. Now, *Gamania* is forced to develop its own games as its profits are being reduced by its South Korean partners (Economic news, Aug, 2007).

Additionally, the business of OLG has moved to free game model from the monthly subscription fee model. The free to play model makes the major profits flow into the operation sector, such as the selling of virtual items. South Korean game developers are not satisfied that they can only exact royalty fees after the game is operated in the overseas market. South Korea's *Webzen* and *NYK* successively set up subsidiaries in Taiwan, running South Korean produced games. However, different head-on difficulties show that operating an online game requires market experience and localized service rather than technological skills. After entering the Taiwanese market, South Koreans immediately became aware that the Taiwanese publishers and operators also controlled the distribution. It was hard lesson for these South Korean firms to attract the support of local distributors. Furthermore, these transnational corporations still face the problem of how to geographically localize the content when Taiwanese operators offer online customized services. The advantages of the Taiwanese game firms include the clear understanding of local demands and a durable relationship with online players. Taiwanese game firms are more adept at designing different online activities and instant services, rather than developing content.

South Korean produced games have the strengths of advanced technological support and sophisticated game-system-generating characters, further fostering their dominance in the intra-Asian market. From the perspective of the Taiwanese operator, South Korean game developers are hard to cooperate with, which happens whenever the Taiwanese firms request new content and more diversified virtual items. Taiwanese operators are discontented that South Korean developers are unwilling to provide support after games are licensed. Within the OLG supply chain, the Taiwanese game operators are compelled to follow the South Korean developers which hold the source codes of games. To control the supply chain of the game, Taiwanese game firms have been aggressively investing in the South Korean game

studios. Taiwan's *MacroWell* proclaims that they moved to a new cooperative model. The Taiwanese game operator is prepared to invest US\$3 million for a new game designed for the Taiwanese market and developed by the South Korean. The ensuing game project was shifted to *MacroWell*'s Beijing studio, with 35 people on the R&D team. Finally, the post-production process will occur in Taiwan. As a finance provider, *MacroWell* can make changes during the development, taking full ownership of the game and acquiring the source code of game, originally developed by the South Korean. The decision, explained by *MacroWell*, is to ensure the game operator can be a controller, rather than having a subordinate position, within the supply and demand value chain and gain a game based in the Taiwanese market⁸⁶.

To catch up on the new technology and to control the cost of the product, some Taiwanese firms look for closer coordination with their South Korean partners. However, the model only exists between Taiwan and South Korean small and medium-sized firms. For example, *Unaliss* released South Korean *Joymax*'s *Silk Road* in 2005. The game title is a *wuxia* genre based on the background of the Silk Road in the Chinese Tang Dynasty, and is barely recognizable as a South Korean game. *Unaliss* acquired the rights to the game from the South Korean game studio (*Joymax*) while the game was still in the early stage of development. The strategy helped *Unaliss* obtain the property at a lower price because the developer needed to be financed in advance and was willing to offer bargain terms. In addition, Taiwanese game firms can ask for game content to be specifically designed for the Taiwanese market while a game is still under development. It saves time for operators who usually have to wait for the content designed for the South Korean market, to be localized for the Taiwanese. Normally, when a game is licensed it is close to completion. In addition, Taiwanese game firms look for synergies with the South Korean game firms by cooperating to develop a game. According to Fiona Hsiung, Chief Operating Officer of *Unaliss*, a new MMORPG title based on the *Sangoku* topic is the result of cooperation between *Unaliss* and a South Korean game studio: the development and production of the game is the responsibility of the South Korean party, and overseas licensing is the responsibility of the Taiwanese party⁸⁷. The cooperation allows *Unaliss* to minimize the risk of a large investment, and to gain the know-how of game development. Furthermore, the collaborative relationship between the Taiwanese and the South Korean game firm becomes a partnership, as opposed to a 'buyer-seller' or 'game developer- game operator'

⁸⁶ Calvin Lin, General Manager of MacroWell Technology, interviewed in Taipei on 14th Apr 2008

⁸⁷ Fiona Hsiung, Chief Operating Officer of Unaliss, interviewed in Taipei on 12th Apr 2007

relationship, because they share the investment of the production cost in advance and the profit afterwards.

8.3.2. Taiwan's cooperation with Japanese firms: relational value chains

Until 2007, only a few Japanese MMORPGs, such as *Square Enix's Cross Gate*, *Koei's Nobunaga's Ambition* and *Uncharted Waters*, had entered the Taiwanese OLG market⁸⁸. Although Japanese game firms have been slow in online game development, its MMORPGs carry a perceived sense of status with their unsurpassed expertise in console game production, especially for the Taiwanese fans. Japan's advantages include its over 20 years history in developing console games, originality in developing a game, the IP ownership of many game series, sophisticated graphic design and photo-realistic representation.

The links between Japanese game providers and Taiwanese game buyers have been established along the lines of relational value chains, of a long-term cooperation since the rise of the video game industry. The mutual inter-dependence that has arisen is regulated through social, proximity, family, and ethnic ties. Both sides have established close cooperation through the production of video games and technical R&D. The exchange of tacit information and technology transfer exists between the Taiwanese and Japanese through frequent face-to-face interactions. For example, Taiwan's *Softstar* is a member of Software Technology and Communication (STAC). The organization's twenty-three members control the Japanese game industry, accounting for 60 percent of Japanese game development and production, which is one of the most important organizations of Japanese game firms. The annual general meeting is a good opportunity for *Softstar* to understand the development of the Japanese game industry and the trend of the international game market⁸⁹.

Many Japanese console game titles, such as *Uncharted Waters* and *Cross Gate*, have brand awareness, appealing to groups of players in the Taiwanese market. *Cross Gate*, a 2D cute role-play game, was developed by *Dwango* and published by *Square Enix* in the Japanese market. The game has been operated by Taiwan's *Softstar* since 2000. Interestingly, *Cross Gate* was originally designed for a small market, allowing only a limited number of players to log-in. When the game was operated in a bigger market, the original techniques and design could not load the heavier volume of the telecommunications traffic. So when *Square Enix* released the

⁸⁸ *Square Enix* is significant because of its *Dragon Quest*, a video game series. *Dragon Quest VIII* is the twelfth best-selling video game franchise in the world. Other popular series published by *Enix* include *The Soul Blazer* series and *The Star Ocean* series.

⁸⁹ Angus Huang, Assistant to President and Company Spokesman of *Softstar* Entertainment, interviewed in Taipei on 27th March 2007

source code, *Softstar*, the Taiwanese operator, revised the source code. *Cross Gate* is operated successfully in Taiwan, although the Japanese firms cannot provide any further service, including the security of software and content updates. As an operator, *Softstar* is responsible for debugging games, revising the content and manufacturing the virtual items. Any revision and new content of the Japanese game needs the permission of the *Square Enix*, in advance. Additionally, *Square Enix*, as a game provider, owns the intellectual property of game and takes 30 percent of the annual revenues of *Cross Gate* from Taiwan's *Software* as an annual royalty fee⁹⁰. Although the quality of Japanese MMORPGs is still lower than other Asian competitors, Taiwanese game buyers are willing to pay for Japanese licensed games. At the same time, South Korean firms can provide diversified forms of content and Chinese firms can offer lower priced products.

The Japanese game firms have realized that the OLG industry has become a potential export business in Asia since 2003. They have closely watched the development of OLG industry in the intra-Asian market, especially in South Korea. At the same time, Japanese game firms are looking for possible cooperative opportunities with the Taiwanese, who have a very successful operation experience in their domestic market as well as other Asian markets, such as Hong Kong and Thailand. Takafumi Kaya admits that the Japanese have to borrow the experience of how to set up and run a virtual world from their neighbours, such as the South Korean and the Taiwanese⁹¹.

It is hard for Taiwanese and Japanese game firms to move to a more explicit coordination in the OLG industry. First, the capabilities of Japanese suppliers are arguable, whereas the South Korean game firm provides stable technical support and closer cooperation with Taiwanese operators. Sometimes, Taiwanese operators have to resolve technical problem using their own expertise rather than relying on the game's provider. The Taiwanese game firms have great difficulty bargaining with Japanese game firms because the latter understand the industry, especially the costs of development, and know where the bottom line of negotiations lies⁹². The relational value chains existing between Taiwanese and Japanese game firms also present a long lasting hierarchical relationship with dominating game developers and subordinate game operators, which is hard to change.

8.3.3. Taiwan's cooperation with Chinese firms: from modular value chains to explicit coordination and beyond

⁹⁰ Chiu Jung Chun, Project Leader of Softstar Entertainment, interviewed in Taipei on 7th May 2007

⁹¹ Takafumi Kaya, CEO of Signal Talk, interviewed in Taipei on 20th March 2007

⁹² Philip Chang, Chairman of Lager Network Technologies, interviewed in Taipei on 19th Apr 2007

The emergence of the Chinese OLG industry is fostered by its large scale of market, low cost of labour, and governmental supports. Nowadays, Chinese produced games satisfy not only the demands of users in China's domestic market, but also the neighbouring markets, including Taiwan, Vietnam, and even South Korea and Japan. However, few of the Chinese games are 'mainstream' because they do not appeal to large numbers of users in the intra-Asian markets, except in Vietnam, because the quality of Chinese games still falls behind the South Koreans. Taiwanese buyers regard Chinese produced games as a lower cost substitute for South Korean games. The relationships between Taiwanese game buyers and Chinese game providers are mutually beneficial. From the standpoint of game suppliers, Chinese game firms gain the know-how to design the content to match the demands of buyers living in wealthier or more sophisticated markets than in China⁹³. For Taiwanese buyers, Chinese games do possess much merit, including a lower license fee and better post-sale services.

Chinese game firms have the ability to develop games based on original Chinese topics, such as the popular *wuxia* story, Chinese mythology and classic Chinese stories. Although these game genres are only circulated within the Greater Chinese market, Chinese produced games do not need major localized revision, and are readily accepted by Taiwanese users. Consequently, many Chinese games have circulated in the Taiwanese market, including *Zhengtu*, *JX Online* and *The First Myth*. All of these 2D MMORPGs are based on a storyline of *wuxia* or Chinese mythology. The active intra-regional aspect of the cultural flow between China and Taiwan implies that the users in these two markets have similar preferences. According to Eric Chen, Chinese and Taiwanese hardcore users with similar characters prefer fighting the rivals and killing the monsters in a game, rather than engaging in a coordinated strategy with other partners⁹⁴. Under the context of similar cultural backgrounds, Chinese produced games are accepted by Taiwanese game players, while Japanese high-quality games, such as *Nobunaga's Ambition* and *Uncharted Waters*, appeal to very limited number of users in Taiwan. Most of Taiwanese game operators agree that Chinese produced games will become a competitor for South Korean in the Taiwanese market, due to their lower license fees and easier process of localization.

When 'global gaming' enters local 'export' markets, a series of localizations for the various markets occurs. Mia Consalvo's research shows that game

⁹³ Bruce Ren, Chief Operating Officer of Kingsoft, interviewed in Beijing on 16th May 2007

⁹⁴ Eric Chen, Manager of the Marketing and Operating Department of Chinese Gamers, interviewed in Taipei on 6th Mar 2007

localization involves careful translation or alteration of idiomatic speech, which changes not only from language to language but also culture to culture (2006, p129). In OLG specific events need to be devised to meet the complexities of game players in different markets. Traditional customs and social cultures have to be designed as events and activities inserted into game play. For example, special virtual items can be distributed during the Chinese festivals, such as red envelopes during Chinese New Year and fragrant bags during the Dragon Boat Festival. Furthermore, these devices can be applied in both of the markets because Chinese and Taiwanese users share the same cultural heritages and social values.

Although Chinese produced games are not regarded as quality games, they appeal to the users who live in Taiwan's rural areas or have low-end PC (personal computer) equipment. Low-end 2D MMORPGs appeal to users who cannot afford to update their PC, whereas South Korean games target those who own better equipment. Also, Chinese *wuxia* is one of the most popular game genres in the Taiwanese market. Other top selling game genres include cute games and epic hero quest formats. The game operators must keep all types of games in their portals to appeal to different users, of which *wuxia*-themed games are seen by the portals as the high revenue and high profit earners.

The Taiwanese spend more on marketing the Chinese brands, which are criticized for their inferior quality. One case is *Wayi* repackaging China's *Kingsoft The First Myth*, a MMORPG revised from Chinese mythology. First, the game targeted the users living in Taiwan's rural area. *Wayi* renamed it *The Third Prince*. *The Third Prince*, a character inside this classic story, becomes a god living in Taiwanese temples. *Wayi* recognized the influence of *The Third Prince*, who was symbolized as part of the Taiwanese public domain, especially in rural areas. Second, the game operator did not use much media advertising but used other game promoting activities such as parading through the streets when the game was launched. The game drew the attention of younger game players who could not afford advanced PCs. This market strategy proved effective and successfully appealed to more than ten thousand consistent users⁹⁵.

Chinese game providers, compared to their South Korean counterparts, are more cooperative in further modifying the content of game. They are quicker to revise content and manufacturing virtual items. By contrast, Taiwanese game firms have to spend more time in communicating with their South Korean partners because of cultural and language differences. Though South Korean games have better

⁹⁵ Natalie Lo, PR Specialist of Wayi, interviewed in Taipei on 27th Apr 2007

quality and stable Internet systems, South Korean game providers are criticized because their services are technology-oriented, rather than market-oriented. Taiwanese operators always suffer setbacks when asking for localized content or more virtual items to be manufactured. South Korean game firms reject the above enquiries by citing technical technological problems. The Taiwanese operators are unlikely to obtain the source code for further revisions when the technical part is controlled by their South Korean partners⁹⁶.

The relationships between Taiwanese game operators and Chinese game developers have expanded in a more explicit way. Taiwan's *Lager* produced the first mud-based 9 (Multi-User Dungeons) Chinese game, the *King of Kings*, an early example of a MMORPG produced in the Taiwanese OLG market. *Lager* has unique technical knowledge of 3D engine building. The technological skill helps the operator reduce the costs of operation and the possibilities of a bottleneck in the central server. For *Lager*, setting up a virtual world simply requires four or five servers, accommodating the largest volume of the Internet traffic and allowing the greatest numbers of concurrent users, compared to the South Korean who need at least 15 servers in the same situation. *Lager's* specialty also includes the secure protection of a central server. The technique allows a game world to run even while the content is upgraded or revised. Now, only *Blizzard* (USA-based) and *Netease (China)* have the same technical capabilities as *Lager*. For *Lager*, this level of competition should not be a major concern in an intensely competitive market. However, *Lager* can afford to develop and produce only one new game each year. The majority of the investment goes on production rather than marketing and distribution, while other Taiwanese game firms can provide at least two or three imported new games in the local market each year⁹⁷. Therefore, *Lager* must cooperate with other game firms to leverage its competitiveness.

In 2007, *Lager* acquired the license to *Zengtu*, a successful Chinese MMORPG. This game, based on the preferences of the Chinese, has been making great profits in the Chinese OLG market. At the same time *Lager* and *Shanghai Giant* (China) have the synergy to create a MMORPG, while facing the increasing costs and complexities of game development. For *Lager*, most importantly, the synergy with Chinese game producers takes into the consideration the geo-cultural proximity of both sides and the possibility of accessing a potentially huge market, besides the cheap labour which decreases the cost of game production. *Lager* is

⁹⁶ Hsin Yu Lin, Manager of Investor Relationship Dept of Softworld International, interviewed in Taipei on 12th Mar 2007

⁹⁷ Philip Chang, Chairman of Lager Network Technologies, interviewed in Taipei on 19th Apr 2007

aware of that they need to establish a closer relationship with their Chinese partner to increase both their efficiency as well as their market share. *Lager* understands the demands and the preferences of Chinese users through information exchange with its partner. *Shanghai Giant*, in return, gained the knowledge transfer to design a new 3D MMORPG title⁹⁸.

Wayi (Taiwan) and *Kingsoft* (China) have co-developed a MMORPG in Beijing, based on the topic of *The Romance of Three Kingdoms*. The partnership sprung from the occurrence that both firms had, unaware of the other's choice, selected the same topic and, simultaneously each faced bottlenecks in developing a new MMORPG. As a result, the two companies decided to cooperate to create a quality game. *Kingsoft* bought out *Wayi*'s two game studios, in Beijing and Chengdu, and obtained the ownership of *Wayi*'s underdeveloped games. Now *Kingsoft*'s studio in Beijing is built around key members of *Sangoku* teams from *Wayi* and *Kingsoft*'s studios. *Kingsoft* affirms the cooperation because two companies make an excellent partnership: *Wayi* has the know-how to develop a game concept and *Kingsoft* is good at software writing and game production. The cooperation allowed two game developers to adopt the other side's concepts, remodelling a creation coming from various sources, resulting in a finished product with multiple authorships. The synergy helped both of game firms, leveraging their advantages on game development and further creating a quality product in the regional market⁹⁹.

Chinese and Taiwanese game firms do have different merits of game development. The Chinese OLG industry, with lower cost of labour, is seen as a factory of cultural product and it provides a good environment for outsourcing of design, mapping and product output. In addition, the Chinese game firms own the know-how to design market-driven content, which is the key element to making profits in the Chinese OLG market. At the same time, Chinese developers are able to remodel the game immediately to cater to the demands of local players. For Taiwanese game firms, the collaborative co-operations with their Chinese counterparts help them to not only reduce the costs of game development, but also gain the possibility of expanding into the Chinese market through synergies or co-investment.

Although the Chinese have capabilities to develop the games based on Chinese topics, these game firms lack creativity and originality. For the Chinese

⁹⁸ Philip Chang, Chairman of Lager Network Technologies, interviewed in Taipei on 19th Apr 2007

⁹⁹ Bruce Ren, Chief Operating Officer of Kingsoft, interviewed in Beijing on 16th May 2007
unrecorded

firms, their Taiwanese counterparts have more experience with game development: the Taiwanese developed its game industry at least ten years earlier than the Chinese; the Taiwanese amongst the first in the region to develop video games based on the storyline of *wuxia* and Chinese mythology; and the Taiwanese have close interactions with other international game firms. Innovative knowledge from past experience and international interactions help the Taiwanese gain the know-how to adapt innovative ideas into online entertainment. From the view of Chinese firms, the Taiwanese are good at game creation, i.e. game concept and art design at the early stage of the game production process. For the Taiwanese game firms, how to develop the creative elements into a game has become an endogenous property hemmed in by procedural routines of production. Most Chinese game developers are still at the stage of cloning game concepts from American and other Asian game firms. Now they are aggressively looking for knowledge transfer, learning how to make the cultural elements to be typified into a mechanism of cultural artefact. Chinese game firm believe the experience of the Taiwanese can help the Chinese shorten their learning by at least five years, by gaining from the Taiwanese tacit knowledge to aid ground up game production¹⁰⁰.

For most of the time, co-operation between the Taiwanese and Chinese game firms is based on past relationships of providers and buyers, e.g. Chinese game developer and Taiwanese game operator. Understanding the greater benefits coming from closer collaborative coordination, both Taiwanese and Chinese game firms proclaim that they will seek other opportunities to co-investment cultural products with other game firms.

8.4 The dynamics of global value chains in the Asian market

Traditionally, a game has to go through a process of commodification, including production, marketing, distribution and operation. Now the OLG industry has become more fragmented, meaning that a value chain is formed by the following model: Taiwanese game operators set market strategy and provide the business service for the game players in the local market, while South Korean and Chinese game suppliers develop games and providing the necessary technological support as well as post-operation revising and updating of content. The relationships between game buyers and game providers have formed a modular value chain in the regional market.

According to Gereffi et al. (2005), the modular form appears to be playing an

¹⁰⁰ Wang Le, Senior reporter in China, interviewed in Beijing on 15th May 2007

increasingly central role in the global economy, as standards, information technology, and the capabilities of suppliers improve. Increasing capabilities in the supply-base have helped to push the architecture of global value chains away from hierarchy and captive networks toward the relational, modular and market types (Gereffi et al. 2005, pp96-97). The above case studies present value chain modularity that seems to be formed between the Taiwanese game buyer and other Asian game providers, while suppliers offer great levels of value chain bundling, e.g. full-package services and technology supports, which have the advantages of internalizing tacit knowledge and pooling capacity utilization for greater economy of scale.

Although locally produced games still have their niche markets supported by extended product services, it is highly unlikely for Taiwanese game firms to develop and to operate a game because of the rising investment risk. Consequently, more South Korean and Chinese games will be operated in the Taiwanese market. Figure 13 and Figure 14 illustrates the above cases showing the two types of global value chains, modular value chains and relational value chains currently existing between Taiwanese game buyers and other Asian game providers, arrayed along the spectrums of power of technology, capital and market. Figure 13 exemplifies a modular value chain existing between Taiwanese game firms and South Korean or Chinese game developers. Nowadays, South Korean game firms possess advanced technological skill of game development, keeping their leading position to export their games to other Asian markets. South Korean game firms have a model in the regional economy in which game providers offer bundle service and game buyers ask for localized contents. Taiwan's case shows that South Korean game firms have become major game providers in Taiwan, standing in a dominant position and further controlling the value chains, because they are capable of producing full-package services.

Modular value chains also apply to the relationship between Chinese game developers and Taiwanese game firms. Taiwanese and Chinese game firms are developing mutual trust and dependence through cultural, social, and spatial proximity. On the Taiwanese side, the firms obtain the game, fitting it to the demands of local users, at a lower cost. On the Chinese side, Taiwan is an important market for the game firms' overseas expansions. The complementary competencies between the Taiwanese and Chinese firms provide an impetus for an explicit cooperation, from modular value chains moving to relational value chains.

Figure 14 exemplifies relational value chains existing between Taiwanese game operators and Japanese game developers, and a possible cooperation between

Figure 13. Modular Value Chains

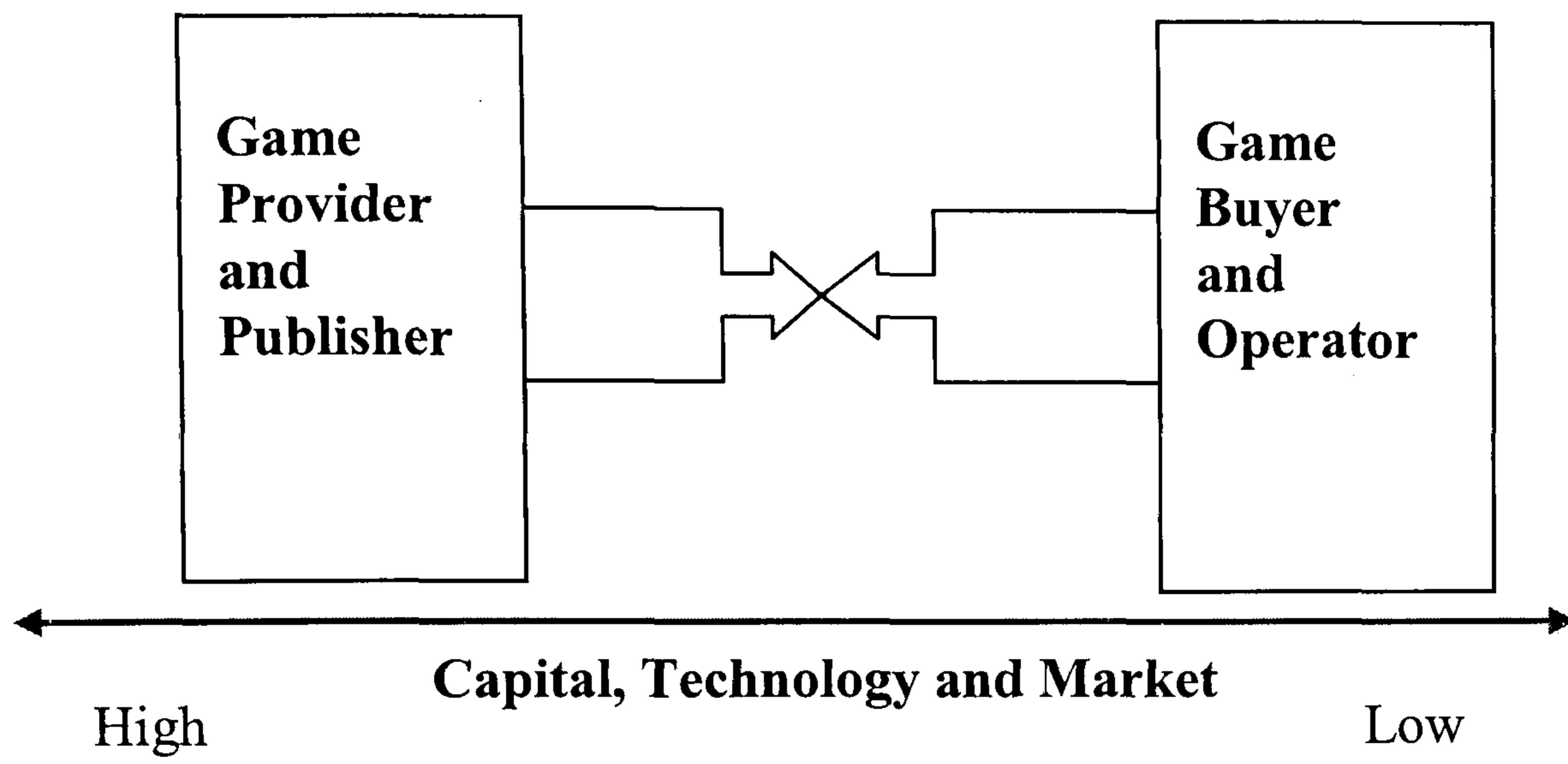
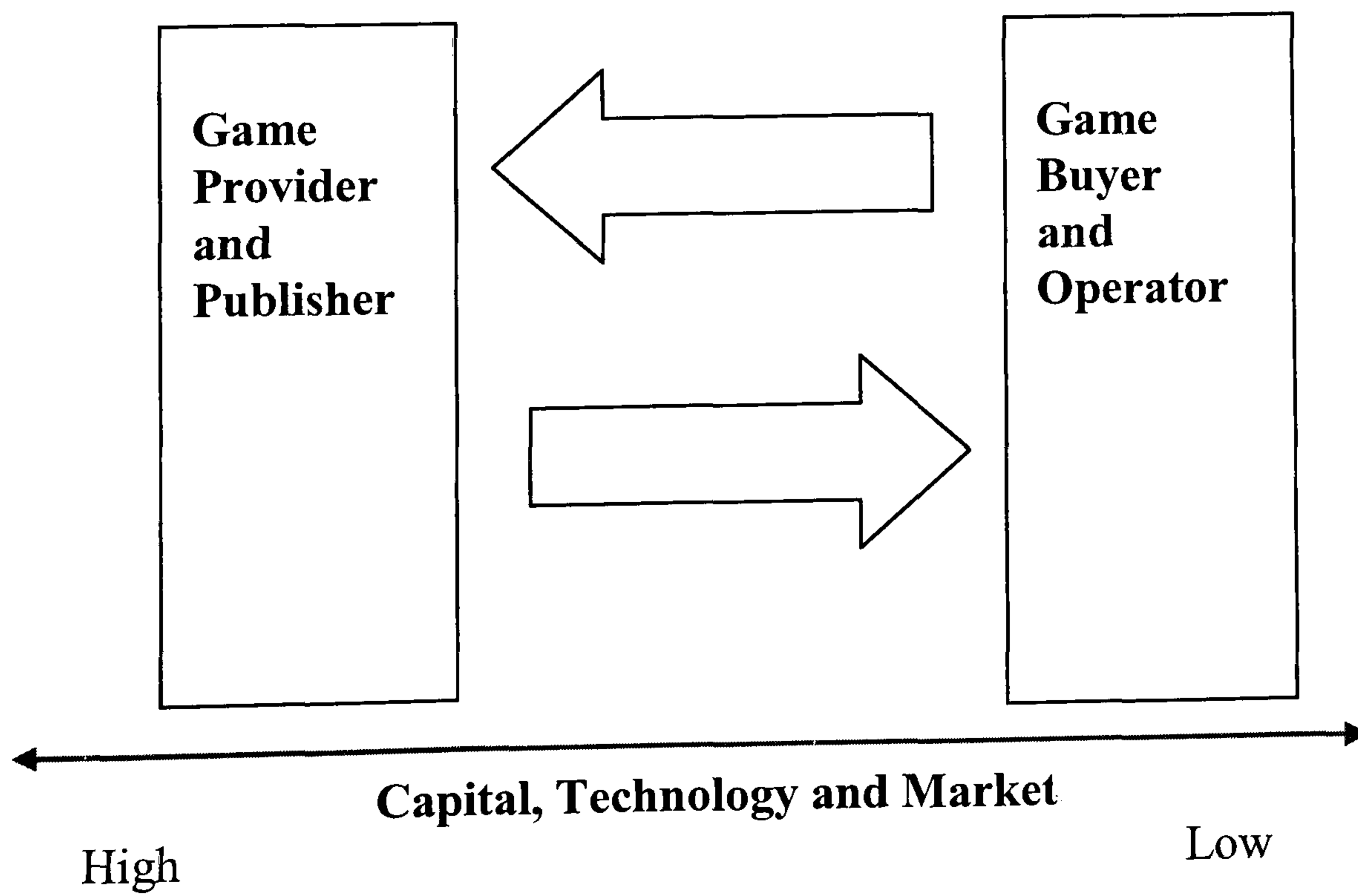


Figure 14. Relational Value Chains

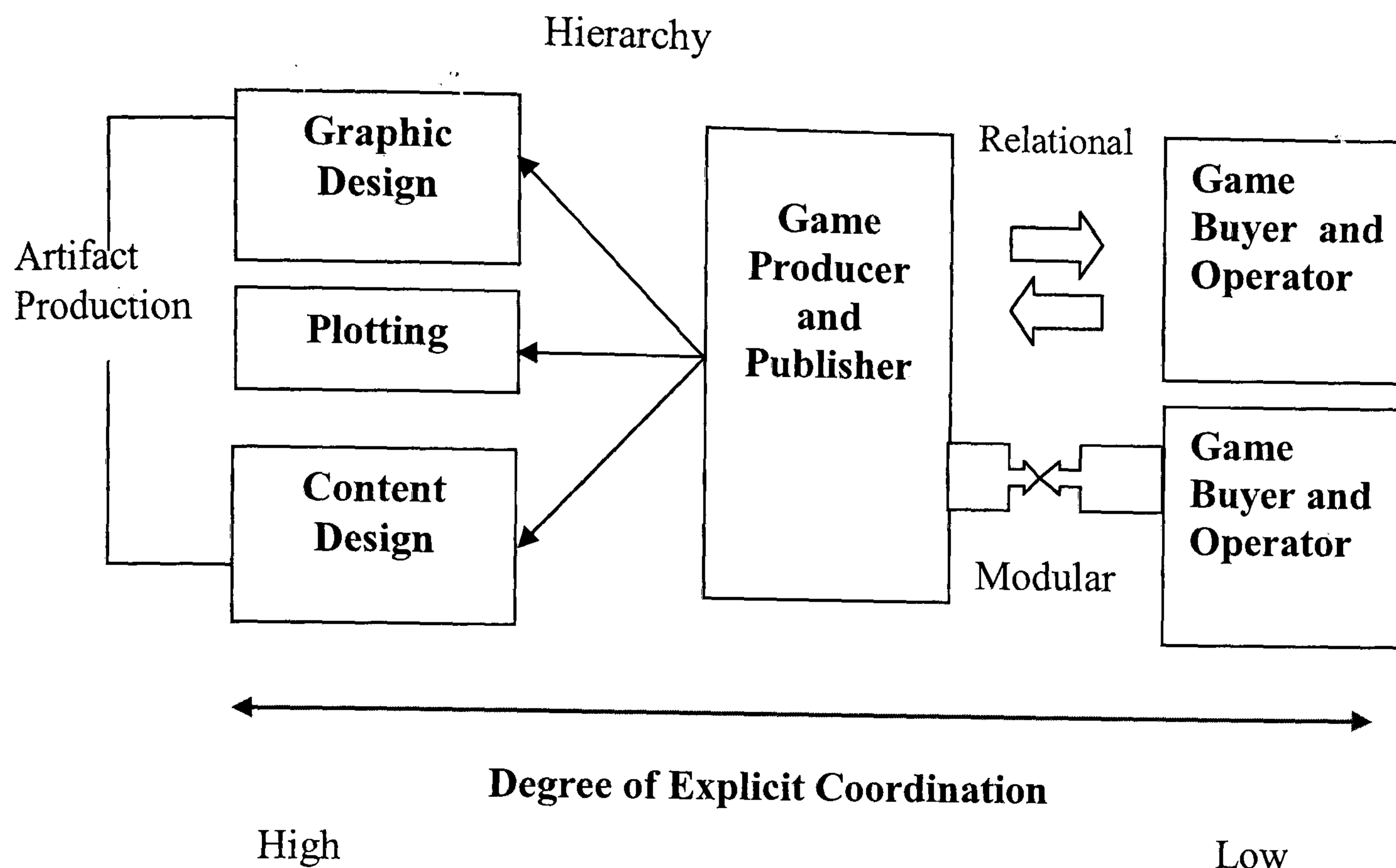


Taiwanese and Chinese game firms. The model shows that Japanese game firms are not service providers, but rather act as product providers. The Taiwanese game firms have to handle all the localisation processes of offering online service, while the Japanese provide the content. The Japanese and Chinese cases show that relational value chain governance can be expected when product specifications cannot be codified and transactions are complex. The exchange of complex information and knowledge transfer require frequent interactions and are governed by high levels of explicit coordination.

In order to manage the complexities of technological information and obtaining the products suitable to the demands of Taiwan's game players, Taiwanese firms look to cooperation with South Korean or Chinese partners. The Taiwanese firms gain the know-how of game development through the exchange of information; however, the explicit cooperative model simply exists between Taiwanese firms and South Korean small and medium-sized game studios. Major South Korean firms try to maximize their profits in Taiwan through synergies with the Taiwanese counterparts, or by setting up an operation sector in Taiwan. Another type of synergy exists between Taiwan and China in obtaining Chinese topic games and in understanding the features of the Chinese market. In contrast to co-operations with South Korean game firms, a partnership is quickly recognized through collaborative cooperation, and mutual trust is easily established, because both have complementary advantages over the other side. The pattern has benefited Chinese firms to learn the know-how of transferring cultural elements into digital contents, an innovation development, from Taiwanese partners who have long experiences of PC game development. The Taiwanese game firms resolved the problem of game supply, when South Korean game firms increased the license fee, and the problem of self-produced games because of a heavy investment risk. It is worth noting that at the same time, a partnership has been established among Asian game firms: with a general shift toward fragmented value chains driven by the cost and risk advantages of outsourcing, while South Korean and Taiwanese firms have moved their downstream production to China for lower cost.

Figure 15 illustrates the above discussion showing commodity value chains existing between Taiwanese game buyers and other Asian game providers in the regional market, arrayed along the spectrums of explicit coordination and power asymmetry. The narrow line arrows represent exchanges between firms while the large block arrows represent heavier flows of information and control, regulated through explicit coordination. Figure 15 shows that the OLG business has

Figure 15. The Value Chains of Online Games in the Asian OLG market



segmented into developer, publisher, distributor, and operator; at the same time, game production has shifted to the location where cost of labour is cheapest, such as Beijing or Suzhou in China. The whole process of game commodity has become fragmented in the intra-Asian market.

In today's global factory, the production of a single commodity often spans many countries, with each nation performing a task in flexible specialization and a cost advantage. Specific processes and segments within a commodity chain are linked together into a more complex enterprise network within the Asian game industry. Each successive node within a commodity chain involves the organization of input, labour power, distribution and consumption. Within a commodity chain, profitability shifts from node to node according to competitive pressure. When tracing the global commodity chain, the distribution of wealth within a chain is exposed as an outcome of the relative intensity of competition within different nodes (Gereffi, 1994, pp1-5).

The simultaneous outreach of online games in the intra-Asian market has been irresistible for the transnational media industry, because of the networked telecommunications environment, a rapidly growing numbers of users, especially in

China, and a complex interlinking among Asian game firms. Cultural attributes, such as language and social norms, creating the distance by influencing the tastes of consumer, are determining considerations for the media service industry in a global market. Researchers Dunning and Buckley (2002) also argue whether regionalization is best conceived as an integral part of globalization, or an alternative. Most regional economic activities, including production, of knowledge-intensive service industries can be characterized as being based on a state of incomplete global integration. According to Ghemawat, the state of incomplete global integration corresponds to the diagnosis of semi-globalization, indicating that international market integration still fall short of economic ideals regarding what is perfect (Ghemawat 2003, cited in Chen 2006, p244).

In addition, the prospering Asian OLG industries have benefited by close regional ties, combining the economic advantages, such as low cost production or advanced technology, or innovative creation, in different nodes, further integrating a value chain in the regional market. Frequent links have existed among major Asian cities such as Seoul and Shanghai or Taipei and Tokyo. When the creation of a game is developed in Seoul or in Taipei, the downstream jobs of game production is shifted to Shanghai, in consideration of lower cost. The processes of game production are effectively segmented, by the progress of Fordism in adoption of standard and other codification schemes. When a game is completed, the contents still require the process of localization based on the demands of operators located in different markets. Therefore, the Asian OLG industry becomes a fragmented business, differing from the traditional way that game firms produced and ran a game. Consequently, Taiwanese buyers and other Asian partners have to interact frequently to speed up the dissemination of tacit information on technology support and decrease the misunderstanding on localized demands. This implies a flow of Asian games circulating within the regional economy.

8.5 Conclusion

Currently, the developing Asian OLG industry features several characteristics: movement towards a service business; increasing fragmentation; and segmentation of the processes of game production. These economic activities have close linkages in the intra-Asian market, apparent upon analysis of the relationships of game buyers and game suppliers. In order to analyze the economic activities in the regional market, Gereffi's value chains model is used in this research, explaining the firmly established relationship of game developer and game operators in the

Asian market. A value-chain approach signifies the cross-border structures existing in a world economy system and interlinks existing among economic activities, binding them all into an integrated economy. In addition, the above discussion reveals that the value chains in the Asian OLG industry have moved to a more explicit cooperation, from buyer and provider to a collaborative partnership. This movement is further discussed in the following paragraphs based on the contour of value chain model.

First, the OLG industry has become more fragmented because the processes of commodity are controlled by different players, i.e. developer, publisher, distributor and operator. Now South Korean and Chinese game developers provide games and full-packaged services for local operators. Operators provide continual online service after the game begins being operated. A profit-making MMORPG relies on successful market strategies and extended instant online services provided by local operators, rather than game developers. At the same time, Asian game firms have to adjust their strategy when facing the global challenges, higher investment for production and a changing business model. In order to maximize profits and minimizing the risk, these Asian game firms have developed a cooperative model, further expanding a value-added chain in the regional economy. Modular value chains can be used to explain the economic activities between Taiwanese operators and other Asian game developers.

Second, the value chains are not evolving along a single trajectory and there is no single best way to organize the value chains. The relationship between Taiwan buyers and South Korean or Chinese game developers has been moving to a more explicit coordination. The changing interlinks among these game firms reflect more intense competitive surroundings. The explicit co-operations between Taiwanese and other Asian partners benefit both sides: the Taiwanese obtains games based on the Taiwanese market at a lower cost; the South Korean game studio gains the finances in advance, and the Chinese game firm acquires knowledge transfer from the Taiwanese.

When further analyzing the merits of these game providers, the South Korean game firms possess advanced technological skill; the Japanese provide game themes and characters based on their successful console game series and Chinese game firms offer games, based on the demand of Taiwanese operators, at a lower price. The above cases show that South Korean and Japanese game firms, as game developers, keep dominant positions in the value chains, while Chinese game firms stay in cooperation with the Taiwanese buyers. This reveals that, currently, the technological

skill or the capability to develop a game is the concrete factor in deciding the position of game firms within the value chains. However, the above situations cannot be explained by the imperfect model of value chains.

Thirdly, the commodified process of games has been effectively segmented, by a progress of Fordism in adoption of standard and other codification schemes, while further examining the process of game production within the Asian game industry. In the context of globalization of competition, Asian game firms seek vertical synergies by expanding complex collaborative relationships of production. China has become a factory to produce cultural artefacts while South Korean and Taiwanese game firms outsource their production to location providing cheaper labour costs. The Asian OLG industry has, therefore, been formed by the complementary processes of development and production under specific cultural and economical considerations.

In addition, Asian game companies are only positioned in selected cities, such as Beijing, Shanghai, Taipei or Seoul. This implies that most of the cultural industries are agglomerated in major cities, where the location provides all the supports and facilities to prosper on the basis of their ability to build competitive advantages in cultural-product sectors. The Asian online game firms have different advantages, such as lower cost of production or advanced technological skills, or the experience of game production and keep close regional ties to leverage their competitiveness. Their location in big cities helps with more frequent ties via telecommunication or face-to-face interaction, speeding up the dissemination of tacit information and decreasing the misunderstanding of the processes of division of production. The prospering Asian OLG industry has benefited from close regional ties and makes use of the complementary advantages of each other. Given all the above, the conclusion can be formed that a unique cultural flow of OLG has been formed in the intra-Asian market.

Chapter 9. The Competitiveness of the Taiwanese Online Gaming Industry

This chapter discusses the competitiveness of Taiwan's OLG industry and further analyzes Taiwan's position in the global as well as in the regional markets. The analysis uses Porter's Diamond theory, involving the four variables of factor conditions, demand conditions, related and supporting industries, and business strategy. The discussion anatomizes the current state of the Taiwanese OLG industry and any potential. Furthermore, in-depth case studies will examine two major local players, *Soft World* and *Gamania*, to investigate the competitiveness of Taiwan's OLG firms. The chapter concludes with an examination of the advantages of Taiwan's gaming industry in both a local and regional scope.

9.1 Research problem

This research discusses the unique features of Taiwan's OLG industry, and the use of business strategies in the context of global competition. The OLG industry has been prospering in the intra-Asian market since 2000. As a gaming pioneer, Taiwan has a firm foundation in the interactive entertainment software industry, which means it has the capabilities to develop and produce games as well as operate them. This study analyzes the position of Taiwan's OLG industry from two perspectives: Taiwan's integration into the global market and the specific role Taiwan has in the Asia Pacific market.

9.2 Theoretical framework

In many respects, Porter's theoretical framework has proven to be a valuable tool for analyzing the competitive advantage of the information industry in a country. Porter (1990) proposes that there are four principal determinants of an industry's competitive advantage: (i) factor conditions, (ii) demand conditions, (iii) related and supporting industries and (iv) business strategy including structure and rivalry. When considering the principle factors, they include labour, capital, some technological facilities, and infrastructure. In addition, the systemic nature of the 'diamond' promotes the clustering of a nation's competitive industries. A nation's successful industries are usually linked through vertical (buyer-supplier) or horizontal (customer, technology, channel, etc.) relationships. Based on Porter's research, the study is going to examine how the theories fit into the global production networks of cultural industry, when it is applied to the case of the Taiwanese digital game industry.

9.3 Diamond theories

Upon examining influential factors in the two successful cases of *Soft World* and *Gamania*, Porter's Diamond theories (1990) enable an understanding of how a nation gains competitive industries within that nation.

1. Factor conditions.

The nation's position in factors of production, such as skilled labour and infrastructure, necessary to compete in a given industry

2. Demand conditions.

The nature of domestic demand for the industry's products or service

3. Related and supporting industries.

The presence or absence in the nation of supplier industries and related industries, which are internationally competitive

4. Business strategy (including structure and rivalry).

The conditions within the nation governing how companies are created, organized and managed, and the nature of domestic rivalry.

In addition, two additional variables can influence the national system in important ways, and are necessary to complete the theory. These are *chance* and *government*.

When applied to knowledge-intensive industries, Porter's arguments show that advantages throughout the 'diamond' are necessary for achieving and sustaining competitive success and will form the backbone of advanced economies. Porter theorises the systemic nature of the 'diamond' promotes the clustering of a nation's competitive industry. Clusters are striking features of virtually every national, regional, state, and even metropolitan economy, especially in more economically advanced nations (Porter, 1990, p157).

Knowledge generation and information diffusion needs facilitation from the territorial complexes of innovation. Major cities have the benefit of being sources of wealth in the information age. These urbanized economies are strengthened because they benefit from new communication systems, new technologies, and new media. Castells and Hall's earlier research (1994) implies that dense spatial concentrations of major companies and innovative start-ups, as well as their ancillary suppliers are located in a few technological nodes. These nodes are usually on the periphery of large metropolitan areas and link up with each other by telecommunications and air transportation. All major centers of technological innovation have appeared in, and from, large metropolitan areas, such as Tokyo-Yokohama, Beijing, Shanghai, Seoul-Inchon, Taipei-Hsinchu, and in the USA, the San Francisco Bay area and Los

Angeles-Southern Californian Technopole. The innovative potential of cities is not restricted to information-technology industries but rather extends to a whole range of activities dealing with information and communication. The basis of the economy and institutions of metropolitan regions reveals that a network of metropolitan nodes, based on networking geometry, has formed (Castells, 2001, p 213; pp226-227). According to Porter, the advantage of dispersal, including facility learning and gaining know-how in activities, facilitates a number of sets of increased information flow (1986, p30).

9.3.1. Factor conditions

According to Porter, factors can be grouped into a number of broad categories: human resources, knowledge resource, capital resources, and infrastructure. Factor conditions can be categorized into two forms: home-grown resources (basic factors) and highly specialized resources (advanced factors). Basic factors include natural resources, climate, location, unskilled and semi-skilled labour and debt capital. Advanced factors include modern digital data communication infrastructures, highly educated personnel and university research institutes in sophisticated disciplines (1990, pp76-77). It is clear in Porter's theory that the quality of the labour force is an important factor for the competitiveness of domestic information industries.

9.3.1.1 Taiwan's information and communication industry

During the past 20 years, Taiwan has emerged as a leading producer of high-technology products, from motherboards to LCD monitors, from personal computers to wireless local area networks. Taiwanese companies produce a substantial proportion of electronic devices in workplaces and homes all over the world. Taiwan collectively manufactures over half the global supply of the devices that comprise the core of the worldwide information and communication technology (ICT) industry and infrastructure (Utta et al., 2005). Taiwan's successful transformation from the manufacturer of low value-added products to a producer of high-technology devices is due to close relationships with foreign leading firms and a national policy to move 'up-market' (Dicken, 1992; Sturgeon, 2001).

In 2004, Microsoft established a technology centre in Taiwan, which provided a laboratory for Taiwan's hardware and software firms to test their products. The value of the cooperation attained NT\$3 billion within the two and a half years. In 2006, Microsoft and IBM increased their investments in Taiwan. They separately provide innovative platforms for Taiwan's software firms to develop advanced products. The international cooperation helped Taiwan gain competence to

provide better service and further expand into other markets, such as Mainland China (China Times, 21st February, 2006).

Many studies provide evidence that partnerships with firms from other regions and countries are decisive triggers for innovation (Bresnahan et al., 2001; Saxenian, 2002; Dicken, 2003). Taiwan exhibited a significant acceleration in the production of ICTs during the 1990s. The opportunities within many of the newer clusters within Taiwan show that they have easier interactions with the US market, by providing complementary products. The Taiwanese have been able to take great advantage of the significant US demand for ICT products, services, and components. These 'imitators' of Silicon Valley initially become centres of ICT-related growth and account for the subsequent success, ensuring that success builds on success in a self-reinforcing fashion (Bresnahan et al., 2001, pp837-843). Taiwan, in order to keep its competitive edge in the ICT industry must establish a strong division of labour as had occurred within the electronics manufacturing industry. Companies do not necessarily have to complete the entire process of production, but they can seek to specialize in one area of the process.

While becoming one of the largest hardware-exporting nations in the world, Taiwan is moving to the digital content sector. Digital content is a diverse and wide-reaching sector, including console and PC games, computer animation, e-learning, network services, content processing software, digital audio and video, mobile application services, e-publishing, and digital archiving. Taiwan has many advantages in developing this industry, such as a solid foundation for ICT industries, a thriving publishing industry, a high penetration of cable TV and broadband networks, and world-class production capabilities in its film and advertising industries.

In addition, Taiwanese companies already have a reputation for their animation techniques¹⁰¹. Many animated Hollywood feature films have outsourced Taiwanese companies to complete their design. Taiwan's digital content industry, such as computing animation and multimedia games, maintains close coordination with leading international firms located in Western countries. For example, Wang Film Productions is dedicated to producing animations on behalf of Europe film studios and Hollywood's eight major film studios. With employees numbering 600, Wang Film Productions offers animation creation, including composition, original painting, animation and background setting. Taiwan's position in the global commodity production network is based on accessing critical technological and

¹⁰¹ Yu-Chung Chung, Director of Digital Content Institute interviewed in Taipei on 22nd March 2007.

information resources. However, as Chung asserts, the talent of one company does not make an industry.¹⁰²,

For nearly 20 years, Western animation studios, such as Disney, have established and maintained production facilities in Taiwan and other Asian countries. The usual procedure involves pre-production processes (preparing the script, story board, and exposure sheets) to be completed beforehand in the USA. The production processes (drawing cells, colouring by hand, inking and camera work) are completed in Asia. The post-production processes (film editing, colour, timing and sound) are done in USA. When examining the profit allocation of an animation film in the global business, we see that the concept designers take 30-40 percent of the profits and the distributor takes 50 percent, leaving only 10 percent for production facilities (Day & Lin, 2006). Miller et al. (2001) indicate that East Asian animation and cinema are consolidating in their own 'backyard' and breaking into profitable Western markets. Asian animation firms, in order to complete outsourcing jobs, rely on heavy investments in equipment and the ready supply of an exploitable workforce. Nevertheless, fulfilling outsourcing contracts for USA animation studios has prepared the ground for the Taiwanese to develop other cultural industries, such as game production, while animation provides a preserved pool of talented artists (Custard, 2003, p97).

9.3.1.2 Skilled resource

Porter divides factors into a number of broad categories: human resources, physical resources, knowledge resources, capital resources and infrastructure. Knowledge resources include the nation's stock of scientific, technical and market knowledge bearing on the goods and services (Porter, 1990, pp74-75). Before 2000, only three online games were operated in Taiwan: *Lineage* (South Korea), *Stone Age* (Japan) and *Kings of King* (Japan). *King of Kings* was at least a Taiwanese oriented game. Until 2008, only a few of Taiwan's game developers had the capabilities to develop a 3D Massive Multiplayer Online Game (MMOG). Indeed few Taiwanese game developers can survive in the stiff competitive environment of the OLG industry. Those that have the ability to survive have a fairly robust experience in developing games since the early 1980's, initially with packaged PC and arcade games.

Even so, most of my interviewees in China and Taiwan agree that Taiwanese game developers have the advantage of creating games based on classic Chinese themes. First, the traditional Chinese language is used in Taiwan, so Taiwanese do

¹⁰² Yu-Chung Chung, Director of Digital Content Institute interviewed in Taipei on 22nd March 2007

not need to receive special training as they can easily read ancient Chinese literature. Taiwanese are better at interpreting Chinese literature, because they are all written in traditional Chinese, whereas Mainland Chinese uses simplified Chinese. This version of the language is easier to learn, but creates a barrier to reading the classics. This intangible ability helps Taiwan, with limited resources, to have an advantage in the computer game industry.

Secondly, Chinese culture and classics provide abundant resources for the Chinese game industry to create cultural content, like *the Lord of Rings* to *World of Warcraft* in the Western market. Taiwanese game publishers, such as *Softstar* and *Soft World*, were among the early pioneers in creating games based on Chinese topics and thus gained valuable tacit experience. Likewise, *Softstar* has a unique position, having been the first to develop a *wuxia*-themed RPG series (role-playing games), *Royal Sword* in 1990. This game series was adapted from Chinese mythology and other history-based storylines in ancient Chinese, e.g. Qin Dynasty, Sui Dynasty, and Tang Dynasty. *Royal Sword* has become an enormously popular game series both in the Taiwanese and the Chinese markets. Only Chinese-speaking developers have the capability to create game titles oriented in Chinese culture. Although South Korea and Japan have also created the games based on Chinese topics, such as *Sangoku*, it is hard for them to capture the different character identities and cultural values inside the stories, from the view of the Chinese. The Chinese do not view *Sangoku* simply as a historical novel but a cultural influence because the tale has been embedded into Chinese daily life for a long time. In traditional theater, the mini-stories within *Sangoku* have been adapted into a Chinese opera. In Chinese daily life, many military strategies from the story, such as the empty-town strategy, have become idioms. The appeal of *Sangoku* can explain why a Taiwanese 2D MMORPG based on *Sangoku* was a success in both the Chinese and Taiwanese OLG markets in 2005. Therefore, the know-how to develop a game concept originating from Chinese culture is a definite advantage to Taiwanese game developers¹⁰³.

9.3.1.3. Skilled labour and human resources

The talent of highly skilled labourers becomes the key resource for the growth of productivity for any company in the new economy. Currently, Taiwan has more than 3,000 digital content companies, employing approximately 70,000 people.

¹⁰³ The view was supported by Wang Le, Section Producer of Oak Pacific International, in Beijing on 15th May 2007

They provide digital content business, such as content products for mobile devices, computer games, 2D/3D-animations, software, and streaming video (DCIPO, 2008).

Developing a new game involves a wide variety of skill-sets and support staff involvement. Game development and production requires specialists from several different areas, ranging from game programmers, game artists, game testers and game producers. The entire production process is segmented into several parts. The professionals have to learn something about each other's working methods and share understanding of the development process. Game artists, like game programmers, have to understand the whole cycle of game development and production. The resulting co-ordination helps to avoid overloading of programming support. Art performance in a game's content relies much on the programmers for the design consideration to alleviate programming loading¹⁰⁴. Game artists also need to work with the game's modeller to discuss the game concept. If the game is based on a historical background, it is very important to reflect historical reality. For example, according to game PR Director Tim Ponting, the art designers for a World War II game sought advice from veterans with military expertise about uniforms, weapons and battles¹⁰⁵.

Taiwanese game firms have difficulty in finding qualified game producers and designers who not only understand the game production process, but also keep a watchful eye on good game concepts. This is attributed to the following reasons. First, the courses in Taiwan's colleges cannot satisfy the demands of the gaming industry. By contrast, there is no problem for South Korea in recruiting the skilled workers. Even when a game is under development, South Korean game firms can find a professional in art design or in the software sector at any time. The Taiwanese game firms have to provide in-house training for newly recruited novices, which can take three years for a qualified game producer; furthermore, ensuring talent reserve is available is the responsibility of the game firm. The ICT industry offers high remuneration and consequently attracts many of the talented programmers. Therefore, the recruits entering Taiwan's gaming industry are more interest-driven people rather than the talented. A talented novice is not a prerequisite, since recruits in order to become a professional game producer need a good deal of training. Furthermore, Taiwan's game producers will suffer a significant shortage of highly-skilled programmers over the next ten years because the Government plans to upgrade the ICT industries, moving to semi-conductors and digital-content, in the six

¹⁰⁴ Personal interview with Angus Huang, Assistant to President and Company Spokesman of Softstar Entertainment, in Taipei on 27th March 2007

¹⁰⁵ Tim Ponting, game producer the interview conducted in London on 22nd Jul 2008

year project Challenge 2008. At the same time, Taiwan's annual output of 27,000 Science and Technology (S&T) graduates have plenty of working opportunities with approximately 30,000 jobs moving from the manufacturing sector to the communications related service sector (Hsia, 2004). This may cause a severe problem for Taiwan's game industry to recruit sufficient skilled workers.

According to the Taiwanese interviewees in this research, the issues of recruiting highly skilled workers, attracting them to the OLG industry and keeping them in a network or in the business is a priority issue for the country's policy makers. However, to foster a prosperous industry, official state policies are only on the beginning. In the case of labour flows, the next important levels are the nature and strength of enforcement policies. These policies must persistently support a developing industry, attracting foreign investment and bringing knowledge transfer from the outside.

9.3.2. Demand conditions

Demand conditions in the domestic market are the primary drivers of growth, innovation, and quality improvement. A strong, trend-setting local market helps local firms anticipate global trends. A more demanding local market leads to national advantages. In addition, the size of the industry's segments is important for national advantage where there are significant economies of scale or learning (Porter, 1990, p87). Porter points out that the composition and quality of domestic demand, its size and pattern of growth, helps an industry gain the ability to shape the character and quality and further influence its capability to compete in the international market. Taiwan's domestic game market size is small and growing slightly. According to the Market Intelligence Center (MIC), 65.8 percent of frequent game players are male, with the majority in high school, at university or are university graduates, ranging 15 to 29 years old (MIC, 2007). Game firms value the sophistication of Taiwan's OLG market. Women and younger users under the age of 15 have also increased. At the same time, Taiwan is regarded as an important OLG market by foreign game firms.

What are the features of the Taiwanese gaming market? First, the OLG industry started in Taiwan in 1998, which is earlier than in other Asian countries. The OLG market rapidly became popular, luring a large proportion of the users of the prevailing console games. This was due to the aspect that the game software for PC games could be downloaded for free, differing from console games which were more vulnerable to piracy¹⁰⁶. Console-based systems, such as Sony's PlayStation 3 or Microsoft's Xbox, put video games on discs that could be easily copied. Piracy

¹⁰⁶ Michael Wu, Public Relations Director of Soft World interviewed in Taipei on 15th March 2007

has been a major problem throughout the Asian market. Console games were more popular in Japan and the United States due to fewer incidents of piracy. Console hardware sales have always been relatively robust in Asia; however, software sales have been adversely affected by piracy¹⁰⁷. Additionally, online games rapidly spread in Taiwan and South Korea because of the growing availability of the Internet. Taiwanese game operators have been aggressively running online games since 2000, when for the first time a wide variety of South Korean online games became available in Taiwan. According to MIC, in 2001, about NT\$5 billion worth of computer games were sold in Taiwan, representing a 16 percent increase from the previous year, and a marked contrast with an 8 percent drop in computer hardware sales (MIC, 2007).

Second, the OLG business model has changed, from monthly subscriptions to free-to-play, since 2005. In 2006, the already saturated OLG market grew, after declines in the previous two years. The impulse to drive market growth was the emerging free game model, in which operators made profits from the sales of point-based products. The free-to-play game model is a successful strategy for attracting more users to enter virtual worlds. According to a survey of MIC in 2007, frequent usage game players prefer fee-based games, spending an average of NT\$ 280 a month on online gaming, with a 17% decrease from the previous year. MIC estimates that the OLG market in Taiwan, including MMORPGs and casual games, exceeded NT\$ 300 million in 2007 (MIC, 2008).

Thirdly, the tastes of Taiwanese users are sophisticated and mercurial. Although the RPG is one of the most popular OLG genres in Taiwan, gambling games and music games are gradually becoming the most popular genres. In addition, many MMOG game players also play these advanced casual games because they offer 'bite-sized' entertainment, according to the MIC survey. Casual games in Taiwan are growing at a faster pace due to the popularity of the content and its widespread appeal. Hardcore MMOG players have also shown interest in casual games, helping to fuel that segment's growth.

Finally, Taiwanese are more likely to choose diversified forms of games. In the intra-Asian market, *wuxia* games appeal only to Taiwanese and Chinese game players. At the same time, cute games attract the younger players in the wealthier urban Asian areas, such as Seoul, Tokyo, Hong Kong, and Taipei. Therefore, Taiwan is an important test market for other Asian game publishers when they begin to expand their overseas markets. In addition, different usage habits can be found

¹⁰⁷ Michael Wu, Public Relations Director of Soft World interviewed in Taipei on 15th March 2007

among game players in the inter-Asian market: Japanese players prefer sophisticated game design, South Korean ask for a fair competition platform, and Taiwanese like to have an interactive platform for chatting with other participants during game-play (Economic Daily, 2nd Jan, 2003).

According to MIC, the majority of Taiwan's frequent game players, over 70 percent of them, are more concerned about the quality of game, such as the design of storyline and content, when games become free and more diversified. Other factors, such as image quality, sound effects, and connection speed and stability, are on the list to be considered. Generally speaking, the cute game is one of the most popular game genres, representing 59.2 percent, medieval age 45.7 percent, realistic 38.9 percent and Oriental wuxia 20.4 percent. A back-story based on a medieval age and wuxia are the top two of the most popular story-lines for Taiwanese game players. Other different back-stories, such as scientific fiction, Japanese samurai and modern life, all have their niche markets in Taiwan. Only quality games can attract monthly-paying users. According to Taiwanese operators, Taiwanese players are more likely to gravitate toward new games than remain loyal to existing games. Normally, the game-play experience of a game lasts for about six months, and then 80 percent of game players will migrate to a new game title.

Only the top five of the most popular MMORPGs can make profits in Taiwan's market. The operators must launch a new game product in their game portals every three months to retain the loyalty of their users. Although Taiwan with three million users is a comparatively smaller market, the operators have to renew their game products to satisfy the changing tastes of game players and thus increasing the number of demands for game products. According to Porter, a nation's business firms gain a competitive advantage if domestic buyers or consumers are the world's most sophisticated for a particular product or service. Sophisticated buyers provide a window into the most advanced buyers' needs, which require high standards in terms of product quality, features and service. The need to meet these requirements creates the advantage for local firms to compete with foreign firms (Porter 1990, p89).

9.3.3. Related and supporting industries

When local supporting industries are competitive, firms enjoy cost effective and innovative inputs. Related industries are those firms that can coordinate or share activities in the value chain when competing, or those which involve products that are complementary. The presence of an internationally successful related industry in a country provides opportunities for information flow and technical interchange.

Proximity and cultural similarity make information interchange easier, and further provides new opportunity in the industry (Porter, 1990, pp105-106).

Following Porter's concept of business clusters, in the late 1990s, policymakers concerned with development of cultural industries adapted the term 'business clusters' by linking it to the rising cult of creativity in management, business, and government, and using the term 'creative clusters'. The idea was strongly associated with the Comedia consulting group. Creativity in the cultural industry, explained by Landary and Bianchini (1995), was presented as the key to urban regeneration and the main reason that 'the industries of the 21st century' will depend increasingly on the generation of knowledge through creativity and innovation matched with rigorous systems of control (Hesmondhalgh, 2007, pp142-143). Advantages of urban cities are sustained when their sources are widened and upgraded. Cluster is the idea that the competitive advantage to be gained from learning and innovation is to be found tacit, with locally embedded skills and know-how. Cultural industries are highly sensitive to embedded cultural knowledge whose mobilization depends on being 'inside' a place (O'Connor, 2004, p131).

9.3.3.1 Digital content industries in Taiwan

Taiwan is one of the world's major IT production bases, with a high concentration of skilled talent, technologies, venture capital, and R&D centers in the greater Taipei area. Business Week (June 21, 2004) published a list of the top 100 IT companies worldwide. Taiwan, which accounts for 15 of the top 100 companies, ranks second after the United States, which has 46 companies on the list¹⁰⁸. Now Taiwan is moving from hardware-exporting to digital-content production. With an output of US\$ 4.55 billion in 2002, Taiwan's digital content industry grew by 18 percent compared to the previous year. In contrast to other ICT industries, the digital content industry digitalizes pictures, texts, videos, audios, and data compiled as one, further introducing new products or services. Digital Content Industries (DCIs) in Taiwan include categories, such as videos, games, publishers, and learning by applying sides, which also discriminates core and staff industries. Core industries use applications, such as video and audio, computing animation, multimedia games, e-learning, mobile services, and digital archives. Another application is staff industry which includes content software and internet services (Yu & Tsai, 2007, p327, p331).

Many creative companies and organizations are already engaged in the production and distribution of digital content because of the general usefulness of new technologies. These companies are increasingly being used in traditional

¹⁰⁸ <http://english.taipei.gov.tw>

industries, thus blurring the definition of some sectors. The characteristics of a knowledge-based economy are progressive technology, intensive knowledge capital input and innovation. Compared with the ICT sector, the emphasis of industry in the knowledge economy is not cost reduction or the scale of economy, but rather content with an existing factor that includes the determinant and the acceleration of content innovation which requires much time and heavy capital consumption (Yu & Tsai, 2007, p327, p331).

Even as a developing industry in Taiwan, digital content business continually attracts new entries into the market. These firms, with high expenditure budgets, foresee that their future profits will be more than their current offset costs. This prediction draws further support from the rapid speed of growth in the Internet market. According to DCIPO, Taiwan's digital content industry was valued at NT\$ 340 billion at the end of 2006, growing at an average rate of 15 percent per year for the last three years, and 17 percent over the last year. From 2003 to 2006, investments in the digital content industry totalled NT\$47.3 billion, while funding for international collaboration projects amounted to NT\$9.3 billion. Companies with their own brand of gaming and animation products have been the recipients of the greater proportion of investments in the digital content area over the last two years (DCIPO, 2008).

9.3.3.2. Creative cluster

According to Porter (1990), the presence of an entire cluster of industries magnifies and accelerates the process of factor creation that is present where there is a group of domestic rivals (Porter 1990, p151). Although the concept is criticized as unclear with an ambiguous conceptual foundation, researchers agree that geographic accumulation of placement is seen as the key resource for a cultural industry cluster (Pratt, 2004; O'Connoer, 2004; Scott, 2005). Competitive advantage is to be gained from learning and innovation through tacit, locally embedded skills and know-how. Mechanisms that facilitate interchange within clusters are conditions that help information to flow easily or which unblock information as well as facilitate coordination by creating trust (Porter, 1990, p153).

From the perspective of social geographers, global cities are strategic sites for the management of the global economy and the production of the most advanced services and financial operations. They are key sites for advanced services and telecommunication facilities necessary for the implementation and management of global economic operations. Furthermore, today's worldwide dispersal of operations and system integration can be achieved through digitization. This is precisely

because the combination raises the importance of central functions. Global cities have become strategic sites for the combination of resources necessary for the production of these central functions (Sassen, 2000, p205; 2005, p149).

Taiwan's digital content businesses have formed two basic industry clusters in Taipei, one in the Nei-Hu and Nan-Kang districts, the other in the area spanning Sin-Dian, Jhon-Ghe, and Yon-Ghe. Indeed, the government has identified computer games as a part of the digital-content industry, together with semiconductors, display systems, and biotechnology as priority industries in its six-year national development project named Challenge 2008. To further help foster new talents, an academy specializing in digital content is being planned for the Nan-Kang Software Park in Taipei. The school also seeks cooperation with private businesses and art schools abroad to provide training in the development of computer games¹⁰⁹. Likewise, a similar training centre, the NuART Institute, was formed in 2001 in Taipei through the joint efforts of several leading companies that are in the business of selling computer games or creating animation, multimedia, music and advertisements.

Almost all of the Taiwanese game firms are located in Taipei. The game firms select these areas to establish their offices because of convenient traffic networks and advanced infrastructure under the scheme of polity support. Although advanced technology has decreased the cost of communication, major cities have the advantage of providing more efficient ways to keep inter-links and intra-links, especially close links with foreign partners through the advanced telecommunication system and convenient transportation. This helps the companies to benefit from the market trend to provide contemporary commodified production. According to Sassen (2001), the global city model with the features of the combination of geographic dispersal of economic activities and system integration has become the heart of the current economic era. The transformation has contributed to a strategic role for major cities. Economic activities in the global economy are being organized and re-organized through dynamic networks of relationships within and between business firms (p206).

Big cities are seen as a source for cultural industry clusters. Agglomeration effects are certainly crucial to this linkage of cluster and city. But the functions of cities can add something beyond geographical proximity. Cities sustain the workings of the creative field. According to Scott (2001), the speed and complexity of city life are the key factors to innovation. There exists a rapid, ever-changing circulation of information through the social and economic networks of the city. The presence of

¹⁰⁹ Yu-Chung Chung, Director of Digital Content Institute interviewed in Taipei on 15th March 2007

information not only inspires new insights and new ways, but also preserves traditions and conventions. This is particularly important to the cultural industry.

Florida's research (2005) indicates that places with more human capital grow more rapidly than those with less. In this sense, urbanization is a key element of innovation and productivity growth. To attract people, generate innovation, and stimulate economic development, a place must have three 'T' requirements: Technology, talent, and tolerance. Technology is a function of both innovation and high technology concentrations in a region. Talented people are attracted by places that offer tolerant work and social environment. When an environment is open and attractive to high capital human individuals, this stimulates the kind of creativity and innovation associated with the high-tech industry (Florida 2005, p37; p128). In addition, a particular city or region that is successful in a particular industry is also captured by the same consideration embodied in the 'diamond' theory. The city may gather the most sophisticated buyers and possess unique factor-creating mechanisms and a well-developed local supplier base. Advanced demand for many goods and services in cities will attract the clusters of supporting industries and highly skilled pools of labour (Porter, 1990, p158).

In addition, Taipei has many advantages for developing digital content industries, relying on strong information and communications industries, a thriving publishing industry, a high penetration of cable TV and broadband networks, and world-class production capabilities in its movie and advertising industries. Not only do the information technology hardware and services industries depend in part on digital content to drive demand, the digital content sector is also being boosted by the proliferation of ICT products and services. The symbiotic relationship resulting from the convergence of computers, communications technology, digital content and cable television and broadband, is expected to increase the production value of digital content in Taiwan. For the game firms, they can easily recruit talented workers or other professionals within the city. Taipei, as the biggest city in Taiwan, has the biggest accumulation of institutional infrastructures, such as schools, colleges, research institutions and innovation centres. Game firms can view Taipei as a creative environment with advanced technology to conduct information and adopt new ideas.

More importantly, Taipei is a service centre in Taiwan, combining various commercial activities. Taipei's commercial function provides specialized services related to the commodity chain of online gaming, including publishing, marketing, distribution and operation. At the same time, the city's well-developed societal

environment benefits developing and producing games. According to economists and sociologists, the big cities in the global system provide good social surroundings for large business firms and innovative start-ups in an information-driven business, such as new media. The density of spatial concentration is based on the infrastructures of broadband Internet, airports, super highways and ancillary suppliers, such as research institutions and universities, as well as financial support, such as governmental aid and fund-raising, and the demand of retailing and servicing in the market. In addition, cities are post-industrial production sites for the leading industries and transnational marketplaces where firms and governments from all over the world can buy financial instruments and specialized services (Oakey et al., 2000; Dicken, 2003, pp115-119; Sassen, 2001, p206).

In spite of having a small market scale, from the perspective of foreign companies, Taiwan is a good test-bed to circulate a new game with a controlled budget. This means that Taiwan can be seen as an extension of foreign game firms and as a test-bed for Chinese game firms expanding their overseas markets. Taiwanese game firms have also established close links with their Asian counterparts through collaborative co-operations. These urbanized economies are strengthened because they benefit from a new communication system, advanced technology and new media (Porter, 1986, p30). Global capitalism's economic activities are not only international in scope, but also a process of global organization.

Interchange outside clusters.

Proximity increases the concentration of information. Scott contends the entire local system of production, employment, and social life makes up a geographically structured creative field that acts as a fountainhead of learning and innovative effects under appropriate conditions (Scott 2001, p7). Media firms that cluster together do so for reasons of mutual support, knowledge trading, and trustful exchanges. Cultural producers are 'inside' the circuit of knowledge because they are embedded in local producers and networks (Cooke, 2006, p284). Nevertheless, incremental learning based on tacit knowledge can fail to respond adequately to rapid global shifts. Identifying precisely the product lines and activities that will eventually prove to be successful is very difficult to predict. 'Learning what one is good at producing' may be one of the key elements to the process of economic growth. Clusters are now linked in a highly efficient manner to the larger global companies whose management of risk, innovation, and R&D is increasingly sophisticated. O'Connor's research (2004) verifies that those exogenous clients are the main source to spur learning for companies inside a cluster (2004, p132; p139).

My interviews also provide evidence of a correlation in that despite being located in clusters Taiwanese game firms normally do not exchange business information within the industry. Mutual reinforcement almost never occurs because the Taiwanese game firms are competitive rivals to each other. Nevertheless, all of them keep close contacts with foreign game firms located in South Korea, China, Japan, and the USA. The relationships with South Korean or Chinese game firms are as game buyers and game developers. The Taiwanese firms are looking for a more collaborative relationship with international game publishers through co-investing in a game because within a small domestic market they have limited resources, e.g. outdated technology and insufficient capital, to develop their own game industry. At the same time, these companies aggressively integrate into the regional economy or even the global market. The best way forward is to look for cooperation with outsiders, i.e. international game firms, to participate in the global market.

Global production networks are fundamentally hierarchical, incorporating new organizations and territories into unequal exchanges that maintain their subordinate position, even where growth occurs. If global networks bring resources, then integrating into them is unproblematic for regional development (O'Hearn, 2001). To integrate into the global market, Taiwanese game firms are adept at flexibly adjusting their products to fit different markets. For example, *Lager's* MMORPG, *Fairy Tales*, has exported to both Japan (Asian OLG market) and the UK (European OLG market). According to Philip Chang, Chairman of *Lager*, this cute game was designed to penetrate foreign markets¹¹⁰. To target the Japanese market, the story of the 'Peach Man' was added to the game world but omitted for the UK market. However, the success of exporting *Fairy Tales* into two culturally diverse markets did not generate large profits for *Lager*. International game publishers prefer to allocate higher budgets on marketing and distribution when 'local' distributors control the target market. Consequently only a small proportion of the profit is shared with the Taiwanese game studios¹¹¹.

9.3.4 Strategy, structure, and rivalry

Any competitive advantage in an industry is the context in which firms are created, organized and managed, as well as the nature of domestic rivalry (Porter, 1990, p107). *Soft World* and *Gamania* are two major local players in the Taiwanese market. *Soft World*, the biggest game firm in Taiwan, focuses on the Greater Chinese market. *Gamania* is significant because of its partnership with *NCsoft* in

¹¹⁰ Philip Chang, Chairman of *Lager* interviewed in Taipei on 19th Apr 2007

¹¹¹ Philip Chang, Chairman of *Lager* interviewed in Taipei on 19th Apr 2007

introducing *Lineage* into the Taiwanese OLG market in 1999. *Gamania* also operates many popular South Korean MMOGs in Taiwan.

9.3.4.1. *Soft World*

Soft World is the biggest game firm in Taiwan, with 60 percent of the OLG market share. The firm was established in 1983, starting as a game distributor and selling software products. Now, the firm's business activities have expanded throughout the game production process from game distributor to game developer and game publisher. *Soft World* owns majority share in several subsidiaries including *Game First* (100 percent), *Game Filer* (70 percent) and *Chinese Gamer* (55 percent). Part of *Soft World's* revenues comes from its distribution sector, selling the game products of the subsidiaries and other game companies. Online games are typically sold on standard storage media, such as compact discs and DVDs. These are passed on to customers through retail distribution. Although online distribution has become more common, physical retail distribution is still the main distribution channel for gaming products. *Soft World* owns a strong distribution network of over 10,000 outlets throughout Taiwan. The network includes computer software and PC stores, book stores, about 5000 Internet cafés and the top five convenience stores in Taiwan consisting of about 6,000 locations. Any new product can be displayed at every spot located in Taiwan within two days. In 2007, the net profits of *Soft World* reached NT\$ 870 million, 30 percent from the distribution sector (Commercial Times, Apr 2008). This is due to most of the Taiwanese game companies distributing their products through *Soft World's* retailing system. However, 21-30 percent of profits have to go to the convenience stores where more than 60 percent of game players get the game packages and point cards for game play. To maximize profits, *Soft World* has developed online distribution channels providing the services, including selling game products, point cards, packages and payment methods. Also, the billing system offers an instant service for users to top up through mobile phones, ATMs, credit cards and the Internet.

a. Subsidiary - *Game Filer*

As a game operator, *Game Filer* was established in 2002. Its game portal provides different types of online games coming from South Korea, Japan, China, and other Asian game developers, maintaining the highest volume of internet users. *Game Filer* has always adjusted its market strategies to keep the loyalty of users and attract new ones when running diversified forms of games. With 2.2 million concurrent users, sales revenues of *Game Filer* reached NT\$ 396 million in 2006. With the experiences of operating licensed games, *Game Filer* always holds a

favorable situation to negotiate with foreign game developers, because those game developers believe that the biggest game portal in Taiwan can help their games to enter the Taiwanese market more easily.

In 2004, *JX Online* (China), a *wuxia* romance MMORPG, was launched in Taiwan, appealing to at least 40,000 users, and becoming the most successful Chinese game in Taiwan at that time. Before this, Chinese game products were regarded as low-end properties in Taiwan. **Game Filer** helped **King Soft** establish its brand in Taiwan. In addition, in 2005, another Chinese MMORPG, *Perfect World*, was launched. To promote Chinese games, Taiwanese companies occasionally have to spend heavily on marketing to reshape the games. In the case of *Perfect World*, a Taiwanese supermodel became the spokeswoman for the game, and was paid about NT\$10 million dollars for the endorsement. As a result, this game was identified as a 'trendy' game, rather than a low-end Chinese-produced product¹¹². Interestingly, *Perfect World* was launched unsuccessfully in China in 2004. **Game Filer** obtained the licensed game, adapted it into a free game, and made it a major success in Taiwan. In 2006, a new version of *Perfect World* based on Taiwanese content was launched, and has since become one of the most popular games in China. The newest version was also successfully operated in the Japanese market, where the local operator made significant profits by vending virtual items¹¹³.

Gigas Soft (South Korea) produced *12th Heaven*, a MMORPG based on the *wuxia*-themed genre. This game, with features of easy play and rapid level climbing, targets users over the age of 40 in the South Korean market. **Gigas Soft** largely revised the game to meet **Game Filer's** requirements to fit the Taiwanese market. In 2007, **Game Filer** with an accurate marketing strategy, created a niche market, in which small groups of users were willing to pay more than normal to play; 30,000 game players at approximately NT\$ 1000 each brought in monthly profits of NT\$ 30 million¹¹⁴. Adding the experience in Taiwan, **Gigas Soft** developed *12th Heaven 2* through 3 years' production. In 2008, the game became the most popular *wuxia* game in South Korea, appealing to over 200,000 users monthly. The two companies have further established their partnership to expand into the Chinese market through their synergies. In 2008, **Gigas Soft** sent an R&D team of 20 people to support **Game Filer's** Shanghai office. From **Gigas Soft's** game developer perspective, **Game Filer's** experience is needed to test the complexities of the Chinese market. From **Game Filer's** game operator perspective, an alliance with **Gigas Soft** reduces

¹¹² Andy Lin, Vice President of Game Filer interviewed in Taipei on 27th April 2007

¹¹³ Chun Po Wang, General Manager of Soft World interviewed in Taipei on 29th October 2008

¹¹⁴ Compare this to the NT\$ 280 monthly average of frequent users in Taiwan.

the investment and risk of operating a game in the huge Chinese market by itself.

As a local operator, *Game Filer* defines its role as a carrier, in promoting new foreign games in the Taiwanese OLG market. *Game Filer* holds the advantage of being a pioneer with the experience of getting a good bargain when obtaining a licensed game. This advantage helps *Game Filer* to have more opportunities to obtain a good game or to pay less for the advanced license fee. Wang Chun Po explains *Game Filer* has developed a type of win-win deal¹¹⁵. The foreign firms gain a successful experience in Taiwan's market, which helps them increase their reputation in the international market. Chinese game firms can use the experience gained in Taiwan's OLG market as an intermediary, helping them to expand into other overseas markets. South Korean game developers can absorb Taiwan's operation experiences, and further develop a game product fitting the Chinese market where the demands and preferences of the Chinese market are exclusive¹¹⁶.

b. Soft World's minor subsidiaries

While having been quick to take opportunities to purchase the copyrights of foreign titles, *Soft World* also operates other Taiwanese games. By investing in other Taiwanese game developers and gaining a variety of game genres, *Soft World* has gained great leverage in taking the major share in the Taiwanese OLG market. *Soft World* invests in smaller game firms, but holds less than a majority stake, such as *Userjoy* (40 percent holding) and *Dynasty* (20 percent holding). This type of cooperation helps *Soft World* to obtain games more easily. The games produced by *Userjoy* and *Dynasty* are distributed by *Soft World* and operated by *Game Filer*. *Userjoy* has experience in developing games based on Chinese topics, whereas *Dynasty* excels at role-playing simulation games (RSLG) based on PC platforms. In 2002, two of *Soft World's* subsidiaries, *Chinese Gamer* and *Userjoy*, developed *Three Kingdoms Romance Online* and *JinYong Online*. The former is based on Chinese history and the latter on the popular genre of knight-errant fiction. These two games attracted around 20 percent of the domestic market. Diversified game products from different sources enhance *Soft World's* competitiveness and consolidate its position in the Taiwanese OLG market. *Soft World* has established a network of cooperative subsidiaries each specializing in a particular sector (development, publishing, distribution, and operation), which earn at least 20 percent profits from each sector.

¹¹⁵ Chun Po Wang, General Manager of Soft World interviewed in Taipei on 29th Oct 2008

¹¹⁶ Chun Po Wang, General Manager of Soft World interviewed in Taipei on 29th Oct 2008

c. Game First

In 2005, *Game First* was established to operate *World of Warcraft*, *Blizzard's* global MMORPG hit. *Activision Blizzard*, owned by *Vivendi* (France), is an international game publisher across all categories of interactive digital entertainment. The worldwide game publisher owns the rights of many popular franchises, such as *Warcraft*, *StarCraft*, *Diablo*, and *World of Warcraft*¹¹⁷.

World of Warcraft (WOW), has reshaped the gaming industry around the world, and has more subscribers in China than in the United States. *WOW* offers a fantastic world using a Western mythological storyline, in terms of different fictional characters and the complexity of its design. *WoW*, as a Western cultural product, is an exception in the OLG industry, considering its acceptance by global players. To attract more Asian players, the game developer looks for inspiration of Asian cultural elements to create the content. Shane Dabari, producer of *World of Warcraft*, admits that *The Burning Crusade*, a new version of the game, has included more Asian elements such as weapon design and martial arts plots. Likewise, he rejects the idea that the design of the inside of the dungeon is a representation of the typical Western concept of a castle, but is, instead, a fantasy connecting Western and Oriental artefacts and cultural elements¹¹⁸

While having synergy with an international company, all *WoW's* activities follow the plan of the USA game developer. In contrast to other Asian MMOGs where the game content is revised to meet the requirements of local markets, *WoW* provides simpler content for global users, with the exception of localized language translation. Taiwan's operator only has limited authority to revise the game.

WoW has appealed to a large number of hardcore users in Taiwan since its operation. With 1 million concurrent users, the annual net profits of *Game First* normally reach 26.57 percent¹¹⁹. As a local operator, *Game First* only has to promote the game products, provide the online services, and keep the attention of users. In 2007, the operator found that over 100,000 players left before the new version of *WoW*, *The Burning Crusade* came on the market. Therefore, *Game First's* effect on sales focused on bringing back former players as well as new players. To attract the former, *Game First* launched a promotion campaign, which took three months and

¹¹⁷ Although *Activision Blizzard* is located in Santa Monica, California, 54% of the company is owned by *Vivendi*. The worldwide online and console game publisher holds a leading market position across all categories of the rapidly growing interactive entertainment software industry. Its operation businesses cover the U.S., Canada, the United Kingdom, France, Germany, Ireland, Italy, Sweden, Spain, Norway, Denmark, the Netherlands, Romania, Australia, Chile, India, Japan, China, Taiwan and South Korea.

¹¹⁸ Shane Dabari, producer of *World of Warcraft* interviewed in Taipei on 8th February 2007

¹¹⁹ Hsin Yu Lin, Manager of Investor Relationship Dept of Soft World interviewed in Taipei on 12th March 2007

NT\$10 million. As a result, over 20,000 log-in subscribers show that the promotional activities offering ten days of free play, and advertising and an intensive TV commercial film (TVCF) have a great effect¹²⁰. The successful marketing strategies were one of the main reasons why the new versions of *WoW* continued to generate substantial profits.

d. Overseas expansion

Soft World has maintained its operating business in China since 2005. The game firm is the only one breaking even in the Chinese market, compared to other Taiwanese game firms' losses. *Soft World*, meanwhile, is actively expanding its presence on the mainland, although the market is too complicated to be handled by a foreign operator. So, in 2008, *Soft World* adjusted its market strategies. A hand-picked group of 20 people was sent to China to run a game. *Game Filer*, one of its subsidiaries became the back-up institution providing support, programmers, marketing executives and event coordinators. *Game Filer*, in order to avoid exhausting the finances of their parent company, *Soft World*, and thus to allow *Soft World* to maintain its position of dominance, could not aggressively expand its business in the Chinese market. Chun Po Wang asserts, 'We will get points in the battle field of China by guerrilla warfare, because it is very difficult for an outsider to fight with Chinese local operators'.¹²¹

Likewise, *Soft World* keeps an eye on other Asian markets. In 2008, the company set up a subsidiary in Kaohsiung, to control the investment of gaming production. Developing a MMORPG in Southern China costs only half, around NT\$ 10 million, of the costs in Northern China. The aim of the game studio with a staff of 130, mainly from the R&D sector, is to develop a MMORPG, *Bear Dynasty*, based on Vietnamese culture. A smaller studio of 20 people was set up in Ho Chi Minh City for textural research, providing accurate information about the story background, landscape setting and costume design. Chun Po Wang offers an explanation for this bold investment; the timing is beneficial for Taiwanese game firms in Vietnam's market, because while the Chinese game firms focus on their domestic market, and do not have any spare time to expand into overseas markets; Korea games are designed for the intra-Asian market; and the US games are for the global market. It provides an opportunity for Taiwanese to produce games specifically for the Southeastern Asian market, i.e. Vietnam.

¹²⁰ Marten A. Lee, Manager Marketing and Product Dept interviewed in Taipei on 18th April 2007

¹²¹ Chun Po Wang, General Manager of Soft World interviewed in Taipei on 29th October 2008

If a game has commercial success, the game firm plans to license the game software to other neighbouring countries to maximize profits. According to an observation by Chun Po Wang of *Soft World*, Vietnam and other Southeastern Asian countries, such as Thailand, share similar cultures and have geo-linguistic proximities. As a follow-up to the Vietnamese venture, *Soft World* plans to develop new games specifically designed for other Southeastern Asian users. *Soft World's* core business is, as Chun Po Wang affirms, to develop game products targeting different markets, rather than running a game product in a foreign market¹²².

However, from the view of rivals, *Soft World's* market strategy is too conservative. As a dominant player in the Taiwanese OLG market, *Soft World* was criticized for replicating another's company's successful business model, when one type of game became popular in the market. Even so, *Soft World* still easily achieved the greater market share, by launching a strong market promotion and holding the encompassing networks of distribution. When examining *Soft World's* ability to provide Internet users with some of Taiwan's most popular online games, Chung Hsing Po, CFO of *Soft World* explains the key to success in the new knowledge-based economy is maintaining creativity in the development of digital technology.¹²³ Games are seen as a serious business with heavy investment, and the next stage for *Soft World* is to prolong the constant search for a big money-making game. Chung notes, 'Unlike in traditional industry sectors, profits aren't necessarily a natural result of increased R&D spending and lowered production costs. In the game business, profits are sizable, and growing¹²⁴.

9.3.4.2 Rivalry: Gamania

Nations with leading world positions often have a number of strong local rivals. This is true due to a fragmented industry supported by vigorous local firms. *Gamania* is always regarded as a competitive local rival by other Taiwanese game firms. Starting as a PC game developer, *Gamania* has a reputation for providing innovations in terms of business strategies. *Gamania* is actively seeking different types of games with flexible market strategies. At first, Albert Lui, CEO of Gamania, created a 'price' strategy for their PC game. The PC game was sold at a competitive price through the channel of convenience stores. According to Lui's observation, consumers normally have NT\$ 500 in their pockets when they enter convenience stores.¹²⁵ At that time, the sticker (retail) price of a Taiwanese PC game

¹²² Chun Po Wang, General Manager of *Soft World* interviewed in Taipei on 29th October 2008

¹²³ Chung Hsing Po, CFO of *Soft World* interviewed in Taipei on 27th April 2007

¹²⁴ Chung Hsing Po, CFO of *Soft World* interviewed in Taipei on 27th April 2007

¹²⁵ Albert Lui, CEO of *Gamania*, interviewed in Taipei on 26th July 2007

was NT\$ 750, in contrast to NT\$ 1000-1500 for foreign produced games. For the price of NT\$ 299, *Gamania* provided consumers with an impulse purchase when they found that the game product was affordable. *Gamania* sold 300,000 copies in Taiwan and exported a further 200,000 to South Korea. *Gamania* had struck gold for the first time. The successful model enabled *Gamania* to run its OLG business in Taiwan. First, *Gamania* makes use of the convenience stores in Taiwan to extend its services. For *Gamania*, the stores have become not only the main distributing networks, but also a place to provide services to top up the pre-pay play card. Second, the company maintains many popular South Korean MMORPGs in the Taiwanese OLG market.

Gamania is significant because it has operated a South Korean game, *Lineage*, in Taiwan since 1999. At that time, only three online game titles were operating in the Taiwanese market. *Lineage* is seen as a quality game with sophisticated contents in terms of design and advanced technical support. *Gamania* recognizes that OLG is not a product, but rather a service industry. Over 100 online employees are recruited to provide live in-game service, such as arbitrating disputes between players. In-time customer service has proven to be a good way to sustain game players. Now, the service has become an intangible asset for *Gamania* to compete with other Taiwanese game firms. After *Lineage* gained a major success in Taiwan, *Gamania* raised its monthly subscription fee by 23 percent to NT\$ 369. The move did not cause subscribers to cancel their subscriptions. *Lineage* has become for *Gamania*, a 'cash cow' with a net profit of 60 percent since 1999. In 2008, the revenue of *Gamania* increased due to the stable revenues generated by *Lineage* and two other games, *Maples Story* and *Kart Rider*.

The success of *Lineage* provided substantial profits for *Gamania* in 2001 and 2002. *Lineage* is based on an adventure story in the medieval age, appealing to hardcore users. In 2004, *Gamania* published *Mabinogi*, a cute game targeting younger women. In 2005, *Gamania*, by co-investing with *Joyon*, a South Korean game developer, published *Gersang Online*. The trade themed game was based on trading activities in the 1590's in Eastern Asia. Players create a character by select one of eight different merchants, ranging in nationality from Chinese, South Korean, Japanese to Taiwanese. While pretending to be an Asian merchant, each gamer has to take a route through different countries and manage their business within the intra-Asian market. Although the trade-themed MMORPG only maintains 10,000 users in Taiwan, it is more popular in South Korean markets where it appeals to more than 50,000 game players. By being bold in launching different types of games, *Gamania*

struck gold again with *Maple Story* and *Kart Rider* which have been published since 2005. *Maple Story*, an adventure game with cute design, appealed to over 110,000 users who were mainly under the age of 15. *Kart Rider*, a cute casual game, was operated in Taiwan's market. In a simple way, the game asks players to drive the 'kart' fast, overtaking their rivals. The relaxing game play allows game players to socialize simultaneously online and offline, as opposed to the serious MMORPGs, such as *Lineage*. *Kart Rider*, with easy access, appeals to 70,000 users, including an equal number of women and men, with an average age above 25 whose demographic is more representative of middle-class Taiwan. This cute game is played competitively online without the existence of a persistent online realm. *Gamania* surprisingly found office workers also joined the racing game, simply for quick entertainment. The IDC's 2007 survey shows the revenue of the Taiwanese OLG market increased by 40 percent in 2006. This increase was due to the new market segments created by *Maple Story* and *Kart Rider*.

Furthermore, the Taiwanese operator has consolidated its position by having close ties with South Korean game firms and extending its overseas markets. First, *Gamania* has amplified the market segments in Taiwan by running more diversified forms of South Korean-produced games. Now, four top South Korean game companies, *NC Soft*, *Nexion*, *Gravity* and *NHN*, have all set up partnerships with *Gamania*. *Gamania* subdivides their operating department into different sections. Section 1 is responsible for the game products coming from *NC Soft* and *Gravity*, and Section 2 for *Gravity*. A *Gamania* subsidiary, *Taiwan Index Corporation*, runs *NHN*'s game products. Different games operated by *Gamania* are in competition with, not only with games operated by other Taiwanese companies, but also among different sections inside the *Gamania*. After the success with the South Korean game firms *Gamania* decided to replicate the success and exploit other overseas markets, including China, Hong Kong, and Japan¹²⁶. According to Porter, new companies serve new segments and try new approaches that older rivals have failed to recognize or in which they are too inflexible to respond. New business formation is also vital to the upgrading of competitive advantage, because it feeds the process of innovation in an industry. Intensive domestic rivalry depends on new business formation to create new competitors (Porter 1990, pp122-123).

a. The success of *Maple Story*

Maple Story, with limited promotion costs, has generated substantial profits for *Gamania*. In contrast to other games, *Gamania* decided not to use TV

¹²⁶V. Huang, Director of 2nd Division interviewed in Taipei on 12th September 2007

advertising which would cost a large amount of money. They sent free CDs to elementary students who were their target users, which enabled them to download the game's software. The promotion activity cost only tens of thousand of dollars. *Maple Story* became a major success due to its appeal among the youth game players. Furthermore, *Gamania* made an alliance with Taiwan's Yahoo, on the basis that major portal sites always attract the attention of users and could, therefore, bring more customers into the *Gamania*'s portal. This win-win deal generated profits of over NT\$ 1 million for *Gamania* in a week, while Yahoo earned NT\$ 1000 million through the co-operation agreement in 2005¹²⁷.

Designed as a free game, *Maple Story* introduced a cash system allowing users to purchase points with real money. The cash can be used to obtain virtual game items that other users normally would not have. Players can buy point cards to the value of 5, 10, 25, or 50 dollars in Taiwan's convenience stores. Different characters in the game are purposely designed with the same hair style and same costume. Game players simply pay NT\$ 20 dollars for different hairstyles each time. The game-play also encourages users to add virtual items to distinguish their character's identity in the games. The customized service based on a convenient cash system was one of the reasons for *Maple Story* being so profitable for *Gamania*¹²⁸. The interesting aspect is that the virtual cash system has generated more profits than the traditional monthly subscription charge.

b. The failure case of *EverQuest*

In 2002, *Sony*'s MMORPG, *EverQuest* was introduced to Taiwan by *Gamania*. *EverQuest*, released in 1999 in the U.S., remains a blockbuster for *Sony*, with around 250,000 users. Many of the elements from *EverQuest* have been drawn from text-based MUD (multi-user dungeon) games, which in turn, were inspired by traditional role-playing games such as *Dungeons and Dragons*. In *EverQuest*, players create a character by selecting one of 16 species in the game, which range from elves, dwarfs, and ogres of fantasy, to humans, cat-people and lizard-people. Players also select each character's adventure occupation, such as wizard, ranger or priest. The Chinese version of *EverQuest* had been localized to fit the taste of Asian game players. The process of localization involved more than simple language translation. A series of pre-production activities included adjustment of characters, dubbing and language translation. The language alteration carefully involved the

¹²⁷ Hank Su, CFO and Spokesman of Gamania Digital Entertainment interviewed in Taipei on 3rd April 2007

¹²⁸ Hank Su, CFO and Spokesman of Gamania Digital Entertainment interviewed in Taipei on 3rd Apr 2007

spoken dialogs of the supporting characters and technological matters to translate language from alphabet characters to pictogram Chinese. Although, *EverQuest* gained a sizable following in the USA, the game failed to attract a market share in Eastern markets, neither in Taiwan nor in China. *Gamania's* 2005 financial report revealed that the net loss was NT\$ 226 million reflecting the expectations of *EverQuest* around Asia, including Taiwan, China, and South Korea were too high. The game was shut down in 2006 as only a small number of game players subscribed to the game which failed to off-set the heavy operating costs.

EverQuest is based on Western strategy-themed genre. For the Chinese and Taiwanese users, the content of *EverQuest*, based on preferences of Western players, was too difficult to follow, although the revision retargeted the Asian market. In contrast to Western players who prefer quests given by non-player characters, Taiwanese game players prefer killing monsters and defeating antagonists. The failure of *EverQuest* supports the argument that MMOGs only cross cultural barriers and to appeal to players with different cultural backgrounds with great difficulty.

c. Gamania in other Asian markets

Gamania has aggressively tackled other potential markets, including China, Hong Kong and Japan, since 2001. From the viewpoint of *Gamania*, Taiwan is a 'plate' market in which the tastes of users are always changing, and can be manipulated through accurate marketing strategies. At the same time, Taiwan's game operators have to survive in a very competitive surrounding filled with competitive rivals who emerge at anytime and provide game substitutions. *Gamania* believes that it can survive in any market because its abilities have been sharpened in the domestic market. Since 2000, *Gamania* has expanded their investments to overseas markets with great confidence and large investments. *Gamania's* first step was to enter the neighbouring market of Hong Kong, which is seen as an extension of Taiwan. Consequently, *Gamania* has operated its business in Hong Kong without any difficulty.

In 2001, *Gamania* set up its Japanese subsidiary, *Japan Gamania (JG)* with an investment of NT\$ 800 million. Japan for *Gamania*, is a potential market well worth being cultivated, for the the following considerations. First, the Japanese video game industry and its domestic market are quite mature. It might be easy to expand an OLG business in the Japanese market because Japanese consumers are used to varied types of digital gaming titles. Second, Japan has a firm foundation in game development, with a pool of skilled labour, so *Gamania* would not have any trouble recruiting professional workers. Third, the well-established broadband Internet

infrastructure in Japan is seen as a prerequisite to developing an OLG business for *Gamania*.

Nevertheless, *Gamania*'s expectation was too optimistic. During that time, only a few game portals were set up in the Japanese market, lagging behind other Eastern Asian countries, such as Taiwan and South Korea. Most importantly, Japanese consumers were not prepared to accept online entertainment, so it was difficult for *Gamania* to bring its advantage of marketing strategy into full play in the Japanese market¹²⁹.

JG's losses in Japan for the period 2002-2005 reached NT\$ 150 million. After many painful years, *JG*'s Taiwanese parent company decided to adjust its marketing strategies in a localized perspective, setting up cooperation strategy with a Japanese game firm. This decision has resulted in *JG* experiencing revenue growth since 2006. In 2008, *JG* is expected to improve its operating performance by adopting different strategies and providing oriented game products to meet the requirements of Japanese users, along with the possibility of turning a profit.

d. *Gamania*'s Self-produced game

Although *Gamania*'s annual revenues have reached NT\$ 4 billion, its net profits have decreased since South Korean game developers began to ask for higher license fees. *Gamania* decided to create their own gold mine, by spending annually NT\$ 10-20, 000 million, 5 percent of annual net profits, to develop its own game, because the profits for operating a self-produced game is double that of operating a South Korean-licensed game. *Gamania* recruited 140 people for its newly established R&D department, engaging in content development, design, programming, testing and marketing. In 2007, *Gamania* doubled the R&D staff, from 140 to 300, to attain the goal of developing ten games within three years. This strategy indicates that *Gamania* was determined to overcome the technical barriers inherent in game development and transform from a game operator into a game developer.

Technical problems in the development process proved to be costly tasks for *Gamania*. The company's advantage lies in its ability maintain online services rather than to build a virtual world. Issues of designing a storyline and integrating characters and other designs into the game system require the skills of an experienced R&D team. First, the Taiwanese operator had to learn, from scratch, about the techniques of a game's development. *Gamania* spent a lot of time

¹²⁹ Hank Su, CFO and Spokesman of Gamania Digital Entertainment interviewed in Taipei on 3rd April 2007

grappling with the technological problems of 3D engine design, including modelling, animating characters and the environment. Second, the R&D personnel management lacked an adequate management structure in the development process, causing delays to complete the games. Each of *Gamania*'s two MMORPG productions cost more than NT\$ 20,000 million (US\$625 million). To acquire the necessary skills, Albert Liu, CEO of *Gamania*, admits that the company had no choice but to burn money to propel the development of the games:

The experience of building a virtual world is just like building a house. We knew nothing about building a house, but we were forced to do so. And you never know how to build a house unless you participate in doing one. The tacit knowledge inside has to be accumulated progressively. Starting from zero, *Gamania* finally through several failures had its ability to develop a virtual world¹³⁰.

In 2007, *Gamania* launched its first self-produced 3D MMORPG, *Bright Shadow*, at a cost of two years and NT\$ 70 million. According to *Gamania*, the revenues of *Bright Shadow* in the game's first three months were no more than NT\$ 3 million. The company optimistically predicts that the game could break even within a year.

9.3.5. Governmental support

The role of government in Porter's model is to act as a catalyst; to encourage companies to raise their performances, stimulate early demand for advanced products and to focus on specialized factor creation. Government can improve or detract from the national advantage. The role of the state is seen most clearly by examining how policies influence each of the determinants. For example, regulation can alter domestic demand conditions, and investment in education can change factor conditions. Most importantly, policies implemented without consideration of how they influence the entire system of determinants are as likely to undermine national advantage as enhance it (Porter, 1990, p73).

9.3.5.1 Governmental policy

Currently Taiwan's digital content industry is identified by the government as one of 'two star industries in the Two Trillion'. The 'Twin Stars' plan includes computer animation, digital games, e-learning, mobile applications and services, data streaming and video conferencing, interactive television, digital archiving, digital publishing, digital broadcasting, digital music, multimedia software products, and services. In addition, Taiwan's government now plan for a four year project,

¹³⁰ Albert Liu, CEO of Gamania interviewed in Taipei on 26th July 2007

investing NT\$1 trillion, building real and virtual industrial parks to promote the industry, and establishing digital content colleges to introduce the newest technology, and directing human resources from the liberal arts field into this sector to develop new talents. The production value of this industry is expected to reach NT\$370 billion (US\$10.95 billion) by 2006, with the number of businesses reaching 3,000 and the export ratio increasing from its current 12 percent output to more than 30 percent.

In addition, to lessen the skill gap between high-tech industries, Taiwan's game firms develop training programs helping to retain skill sets. For example, Acer, a Taiwanese computer manufacture, plans to set up a semi-conductor and digital-content academy to educate professionals (Hsia, 2004). In financial support, venture capital in Taiwan is going to aid these creative companies at the national level, in contrast to funding in the USA and European countries, which encourage new start-ups. The strategies in Taiwan are to raise funds by government, which includes tax incentives, loan support, introducing foreign investment, and different industry alliances (Yu & Tsai, 2007, p332).

Furthermore, with the evolution and convergence of communications and media technologies, the government is actively promoting several cross-agency initiatives to spur the development of Taiwan's digital content industry. In January 2007, the Executive Yuan convened a meeting of the Digital Content Industry Promotion Task Force Committee, announcing plans to assist Taiwan's digital content industry output to reach NT\$ 600 billion by 2011. Using the industry output as a target, the government, from 2007, will aim for an investment amount of approximately NT\$ 25 billion per year in the digital content industry, with NT\$ 10 billion coming from international cooperation. The plans have also set additional targets for 2011, with digital content industry exports comprising 30 percent of output and growth of 4 percent for self-copyrighted products. Of these products, digital games, computer animation, digital video and sound, mobile applications, e-learning, taken together, would see a growth of 40 percent (DCIPO, 2008).

The interviewees in this research confirm the role of the state in facilitating the Taiwanese game firms to upgrade their ability to develop video game titles. The state provided a series of incentive policies, encouraging the Taiwanese to cooperate with Japanese game publishers. The Taiwanese government also set up a joint investment platform, which invited the Japanese to Taiwan for possible cooperative opportunities. On the domestic front, a capital-friendly environment was created for the indigenous game industry. The game firms could gain financial aid to improve

their facilities, including a series of activities involving technological equipment and more software engines to meet the demands of the global market. Besides that, Japanese game firms are invited regularly to share their experiences and knowledge with Taiwanese game developers.

The aim of all of the measures was for creating cooperative opportunities for Taiwanese game firms to tie-in with the global markets. Globalization is advanced capitalist globalization, since a hegemonic role is played by the north Atlantic rim countries and Japan in the development of these non-national transnational practices. States in peripheral areas have to increase the level of their political integration with other states in order to offset the destabilizing consequences of global interconnectedness. As a result, it could be that the practices of transnational development, a trend of economic globalization, generated immense flows of capital, services, people, information, technologies, ideas and regulations, and transcend individual nation-states in developing economy (Lash and Urry, 1994, p280).

9.3.5.2 Supporting infrastructure

In Taiwan, people prefer to play games at home, unlike in South Korea and China, where more than 70 percent of game players play in Internet cafés. Through well-structured broadband Internet access, they can also select the online entertainment they want. The importance of the Internet is now taken for granted in Taiwan. Research by the Department of Commercial Affairs shows that Taiwan's business to consumers (B2C) market in 2002, grew almost 60 percent to NT\$38.9 billion when compared with 2003. The value of Internet based activity is estimated to attain NT\$90 billion in 2006. In 2005, a survey of the Focus on Internet News and Data and Innovation Diffusion Enabler and Activator of Advanced e-Commerce Institute (ACI-IDEA-FIND) shows that more than 25 percent of respondents use the Internet 15 hours per week. Of this sample of high-speed internet users, key variable factors are gender, men form nearly 60 percent; age, over 15 years form nearly 70 percent; attained level of education, secondary forms almost 80 percent; marital status, single people form 74 percent (The Economic Daily, 12th Aug, 2005). At the end of 2006, there were 4.55 million broadband Internet accounts in Taiwan, equating to a penetration rate of 78.72 percent. The dominant method of Internet access is DSL (87 percent), cable modem (8 percent), fiber optic line (4 percent) and leased telecommunication lines (1 percent). According to the World Broadband Statistics 2006 Q2 report by Point Topic, Taiwan ranked third in DSL penetration of phone lines at 29.3 percent, just behind France and Finland. In terms of DSL accounts, Taiwan ranked 10th with a total of 3,835,000 users. These statistics confirm

that Taiwan is able to provide an advanced communications environment for high quality e-services available at home, office and school, in the community or on the move (DCIPO, 2008).

Broadband Internet infrastructure development programs were initially introduced in the government's Knowledge Economy Project, National Information Infrastructure (NII) Promotion Program and e-Taiwan Program. Thereafter, the Broadband Duct Construction Project was established in 2003 to facilitate the creation of a seamless broadband Internet environment, encouraging fair competition and promoting the telecommunications and digital content industries. Later the Mobile Taiwan (M-Taiwan) program was introduced with the aim of building an environment for wireless broadband applications and to provide users with unfettered e-services. Under the M-Taiwan Program, NT\$30 billion has been allocated for the Broadband Duct Construction Project, which aims to eventually lay 6,000 kilometres of broadband pipeline across the island. These public ducts will be leased to telecommunications operators for the deployment of broadband Internet (such as optic fibre) networks. This will greatly improve the bandwidth and quality of last-mile connectivity in Taiwan and stimulate genuine competition among local network services providers (DCIPO, 2008).

However, the digital content industry in Taiwan still has many barriers to break, like resource allocation, financial support and technological innovation. As researchers Yu and Tsai (2007) suggest, the government should first improve the environment, provide the needs for the industry and bridge the relationships between industries, talent pools and the market. Most importantly, inducements for industry's and customer's needs must be taken into account. When the above targets are reached the mechanism of value-identification can be established (Yu & Tsai 2007, p336).

9.3.6. The role of Chance

Chance events are important because they provide discontinuities that allow shifts in competitive positions. They can nullify the advantage of previously established competitors and create the potential that a nation's new firms can supplant them to achieve the competitive advantage in response to new and different conditions. Several possibilities are particularly important in influencing competitive advantage, including acts of pure invention, discontinuities in input costs and surges of world or regional demand (Porter, 1990, p124).

Global technological networks offer potential opportunities for the business nodes in peripheral areas. There remain many spaces and creative opportunities for

the small scale of economy to challenge trends toward more hegemonic and monopolistic global media structures. Taiwan's game firms face a growing neighbouring OLG market in China. Taiwan used to be regarded as a springboard to the Mainland Chinese market from the viewpoint of foreign investors. Empirical evidence suggests that Taiwanese and Mainland Chinese audiences usually have common interests on mass cultural productions such as popular music and TV series, because of the geography and culture proximity. However, a stricter supervisory framework for cross-strait economic exchanges has been working. Taiwan companies have been waiting for years for the government to lift restrictions on mainland investments.

Even so, many Taiwanese game firms, such as *Gamania*, *Wayi* and *Soft Star*, have actively expanded their businesses into the Chinese market, with profitable success in the initial few years. However, almost immediately, these game firms all experience business reverses due to under-estimating the complexities of the Chinese market and, most importantly, China's protection policies. Now, most of these firms have either closed or downsized their offices in China. In May 2008, Taiwan's new president, Ma Ying-Jeou, took office with a historic offer to reopen dialogue with China, and promised to seek closer economic relations with Mainland China and an eventual peace accord. The new policies may provide a new opportunity for these companies who are always ready to re-enter the Chinese market.

From the Taiwanese point of view, the Chinese market is too big to give up on, as the large-scale market will provide greater possibilities for successful firm. The issue of gaining access to the market may become a crucial strategic variable in the future. Taiwan's game firms will seek another type of coordination with Chinese game firms when they expand their businesses. This is because these Chinese game firms dominate their domestic market. Cooperation will leverage the competitiveness of Taiwan's game firms and reduce possible risks.

9.4 Conclusion

This chapter discussed, the bright future of Taiwan's OLG industry using Porter's Diamond theory. The body of Diamond theory has its merits. Nevertheless, when dealing with the cultural content sector, other perspectives must be employed as well. On dealing with a small economy involved in globalization, the range of perspective must be extended beyond the entrepreneur and its competitiveness. The main theoretical work has to be broadened to other academic fields, e.g. global value chains and the urbanity within globalization. By following the above context, it may

provide other empirical evidences to explain why and how Taiwan's OLG industry possesses competitive advantages under the conditions of global competition. Taiwanese game firms make use of the mobilizing sources, e.g. foreign capital and technological knowledge transfer, and combine its advantage to provide a service for local users, further increasing their niche markets in Taiwan. Furthermore, interlinks existing among intra-firms in the Asian market help the Taiwanese to leverage their strength to compete with rivals in the global race. The following paragraphs discuss the unique role of Taiwan in the regional economy and how it integrated into a value-added Asian OLG industry.

First, Taiwan has potential human resources that possess the capabilities to create cute games and Chinese topic games. However, Taiwan lacks supportive surroundings, such as abundant capital, advanced technology, or a large-scale market, and sufficient human resources to develop a competitive game in the regional market. The rapidly changing Asian OLG industry causes Taiwanese game firms to have flexibly adjusted business strategies. Therefore, the Taiwanese are forced to integrate into a regional market when game firms gain mobilized sources from cooperation with other Asian partners. In addition, the research shows that all of these companies are agglomerated in Taipei, where advanced telecommunication systems and specialized services can be provided. The geographic advantage speeds up the knowledge exchanges between the Taiwanese and other Asian companies. Under these beneficial circumstances, the cooperation of technology, management and other aspects will benefit the creation and consolidation of competitive advantages for Taiwan's OLG industry.

In addition, according to Porter, geographical proximity enriches the depth of a particular knowledge when entrepreneurs help each other in a mutually reinforcing process (1998, pp149-157). However, the interviews imply that Taiwanese game firms, despite being in clusters do not keep close contact. The inter-firms exchange rarely happens in Taiwan's market because they regard each other as rivals. By contrast, these firms establish close relationships with foreign game firms within the regional market or global market. Related research supports the notion that successful local cultural clusters not only rely on 'creativity', but also on the access to a range of formal knowledge, i.e. global markets, larger companies, clients, and distribution (O'Connor, 2004, Cook, 2006).

Second, the advantage of Taiwan's OLG industry lies in the operator sector rather than the development sector. The Asian OLG industry has been segmented into several sectors of game developers, game publishers, game distributors and

game operators. The value of the operator has shifted to providing specialized services. Local operators predominantly design localized content and provide online services to users. The Taiwanese game firms run a diversified licensed game, which has nourished a sophisticated domestic market. Different types of games have increased the segments of the base of game players in Taiwan. There are not only the hardcore users, such as *wuxia* game players and medieval-age game players, but also the smaller groups of users, such as Japanese samurai game players and love-simulation game players. Porter argues the more significant role of segment structure in the domestic market is in shaping the capability of a nation's firms (Porter, 1990, p87).

Third, Taiwan is an important market, from the perspective of foreign companies. Taiwan's market is seen as a good test bed by foreign game firms who plan to enter the greater Chinese market, or by Chinese game firms who want to expand their overseas market. Taiwan is used to being a springboard to the Chinese market for other Asian game firms. Even so, China has been developing a complex market which cannot be entirely applied to Taiwan's experience. By contrast, Taiwan has become an important market for Chinese firms. Chinese games are inclusively designed for the preferences and tastes of Chinese game players. *Game Filer's* case shows that the content of Chinese games is remodelled into a competitive product in the intra-Asian market after adding Taiwan's experience. The tacit knowledge from the Taiwanese, involved with the added plot and virtual item design, helps Chinese game firms understand the demands of an urban market close to other Asian markets. Taiwan has, as a result, been transformed from a springboard into an intermediary.

Finally, the Chinese will become the largest group of Internet users, which helps its OLG market to be the largest in the world. It provides the opportunity for the Taiwanese game firms to increase their markets because Taiwan stands in a geographically advantageous position having cultural compatibilities with China. At present, the cultural content continues to be marked by very specific 'market' boundaries on the demand and consumption fronts, even though the global market has the advantage of new technologies to produce the content and controlling distribution (Preston, 1997; Preston & Kerr, 2002). It can be explained that when an industry is taking the challenge of globalization in the race for competitiveness, regionalism is the priority. Also, related research verifies that flexible strategies employed by advanced service providers and digital content providers in local areas have contributed to economic growth in regional systems (Nagy, 2005, p229; Yu &

Tsai, 2007, p336). Moreover, a question is further posed that the function of integration into regional economy is to resist globalization or, by contrast, to be embedded in a global production and service system. However, more follow-up empirical research is needed to reply to the above question.

Chapter 10 Analysis of the study

10.1 Introduction

The purpose of this chapter is to analyze the study's major findings, content arguments and theories, and spell out the theoretical implications of the findings upon the study of global competition of the online gaming (OLG) industry on the global-regional-local analytic framework in media globalization studies.

In the light of its theoretical concerns, this chapter is divided into four parts. The first introduces the study's objectives; the second analyzes the structure of the Asian OLG industry and the co-operation agreements among Asian game firms, which imply a value chain has been established in the regional economy; the third examines the theoretical implications of the study: the position of the Taiwanese OLG industry in the regional market; the fourth points out that global competition has brought major changes to the Asian OLG industry, including synergy, integration, outsourcing, and the usage of game intellectual property (IP). The conclusion is that the major players in Asia's OLG market will have to form a variety of alliances to resist their global competitors.

10.2 Aims of research

This study answers two main research questions. First, is the Asian OLG industry integrated into the global market, standing in a locked-in hierarchical position? Or does it play a unique role, providing value-added services in the Asian Pacific market? In addition, the study is going to answer the following key questions: what are the characteristics of Taiwan's game firms and what is their position in the regional market under the conditions of global competition?

The core of this study is divided into two parts. The first part includes Chapters 2 and Chapter 3. Chapter 2 explores game theories, and the relationship of game genre and game platform. The discussion explores the importance of technology which creates an imaginary world and, at the same time, constrains game-play. Chapter 3 analyzes the differences between Western and Asian game cultures, focussing on game genres of Asian MMORPGs, i.e. *wuxia* and cute games, which are designed specifically for Asian users. The second part includes Chapters 6, 7 and 8. Chapter 6 explores the nature of the game industry, reviews the existing research and examines the development of Asian game industry, including Japan, South Korea, China, and Taiwan. Chapter 7 examines the commodified process of the OLG industry, including production, publishing, distribution and operation, and anatomizes crucial determinants influencing the operation of the OLG business; and

Chapter 8 analyzes the relationship between the foreign game developers and Taiwanese game operators upon a regional value chain analytical framework. The third part, Chapter 9 applies Porter's Diamond theory (1990) to a study of Taiwan, including an examination of Taiwan's two major players, *Soft World* and *Gamania*.

10.3 Asian OLG industry

Before 2002, only a few MMORPGs are operated in the Asian market. Taiwan's game firms made substantial profits in both Chinese and Taiwanese OLG markets by revising Japanese licensed games or developing Chinese *wuxia* themed games. However, since 2002, Taiwan's advantages have lost value as an intensively competitive arena has emerged in the Asian OLG industry. The rising dominance of South Korea in the Asian OLG market, the emergence of the Chinese OLG market, and alliances with global competitors from the USA and Japan have all contributed to the increase in competition.

Analysis of the development of the Asian OLG industry indicates that Asian game firms have established a complex variety of relationships with different game industries, where they are able to use their individual unique strengths. Although Taiwan fails to establish a truly independent game industry, Taiwan's game firms have negotiated alliances with the bigger regional players in South Korea, Japan and China, as well as with distant global players, including the USA.

10.3.1 South Korea

South Korean game developers have become the dominant players in the intra-Asian market. Among the pioneers in the Asian game market, South Korea game developers have solved the technological problems inherent in designing and maintaining massive multi-player online role playing games (MMORPGs), even gaining the skill to provide massive backend server support and impervious server security. Technology remains a determining factor in games which are made available to players. Certain technologies have specific capabilities. According to Dovey and Kennedy (2006), three aspects of technology are determined in relation to computer games: the effects of working and the upgrade culture; the effects of technology on different orders of realism during the game-play; and the structures of the game engine on production, which highlights the characteristics of the game (Dovey & Kennedy 2006, pp51-52). Based on the advantage of advanced technology, South Korean game firms are accelerating their market development and continue to be a centre of game development in the Asian market.

South Korea has dominated the Asian OLG market since 2002. South Korean game firms have the capabilities to provide diversified forms of content and advanced Internet technology to support game operation. Chen contends that the South Korean firms' formula for successful regional distribution is to make the game familiar to the target users and get local game designers who know the local users well, especially in Chinese market (Chen, 2006). When further examining the circulation of South Korean produced games, we see that most of them are only operated in the intra-Asian market. South Korean cute games and medieval epic games accounted for the major market shares in Japan and Taiwan. When China was emerging as a huge OLG market, South Korean game firms immediately sensed that it was necessary to produce games specifically based on the tastes and the choices of Chinese game players. South Korean game developers were able to provide MMORPGs based on Chinese *wuxia* or historical stories, such as *ChungChun* (Romance of Three Kingdoms), *Silk Road*, and *12th Heaven*, for Chinese users.

Nowadays, South Korea game firms possess the capability to create games, license them and make localized adaptations for other Asian game operators. These facets enable them to keep a leading position in the Asian OLG industry. The South Koreans have, also, developed a business model in the regional market: the same game title can be operated in different Asian markets and the South Korean game provider offers a bundled service for Asian game buyers. Chapter 7.3.2 and Chapter 8.3.1 discuss the case of South Korean game providers and Taiwanese game buyers, and detect an unequal relation as South Korea controls the product supply and the technological support, and further stands in a dominant position in the value chains. Further collaboration may exist only when the South Korean game studio need finances in advance.

10.3.2 Japan

Compared to South Korea which is aggressive in providing Internet content, Japan consumes much more than it produces. The techniques of Japanese MMOGs still lag behind other Asian competitors. Few Japanese licensed games have been operated in the Asian market, and South Korean Internet PC games still take the major market share. In 2007, *Saga* announced it would shut down its online business in China and close the operation of two games, *TongTong online* and *Rainbow Knight*. These failures do not reflect the competence of Japanese game firms, but do reflect that China's OLG market is self-contained and insulated against intrusion by global competitors (see 10.3.3).

Japanese games have a perceived sense of status with the history of success

of the console games in the Asian market, especially in Taiwan. *Wasabii*, a Taiwanese game operator, obtained *Koe*'s licensed *Dynasty Warriors*, adapted from Chinese *Sangoku*, at the astronomical price of US\$1 million. Chapter 8.2.2 examines the relationship of Taiwanese game buyers and Japanese providers and presents the relational value chains that have been established in a long lasting hierarchical relationship. The case of *Softstar* reveals that Taiwanese local operators have to resolve all the issues Internet technologies and content revision, while their Japanese counterparts hold the rights to license game IP, provide little or no post-sales services but also take 30 percent of the annual revenues.

The key advantage, for Japanese game firms, is the IP of existing video games. In the Asian game market, a new game based on a popular Japanese IP can reduce market risk and keep established game players moving away from video games. Therefore, other Asian game firms have difficulty in looking for more coordination to bargain with the big regional players. This is largely because the Japanese game firms hold many branded IPs in themes and characters of games which they have built up over more than 20 years. Even as a laggard in developing its OLG industry, Japan has its advantage in the regional market. This is discussed in Chapter 6.3.3 and Chapter 8.3.2.

10.3.3 China

China's game firms started in the OLG industry as game operators. In 1999, China's *Shanda* ran its first MMORPG, *Legend of Mir*, gaining a significant success in the domestic market. The Chinese OLG industry has been booming since then and Chinese game firms have developed the capabilities to develop their own game products, and license the properties to the overseas market.

The Chinese market is dominated and controlled by its national OLG industry. Indigenous game firms have the capabilities to develop game titles, appealing to more Chinese users than South Korean produced games which used to account for 80percent of the market share. China's OLG industry is recognized as one of the fastest-growing in the world (iresearch, 2007). Although China has emerged as a competitor in the Asian OLG market, these game products are only circulated within the Greater Chinese market, while South Korean produced games can be easily accepted by not only Asian game players but also by Western game players, especially their medieval epic games and cute games.

The failures of South Korean, Japanese and Taiwanese game firms in China's OLG market indicates that the Chinese market only accepts games based on the preferences of Chinese users. Most importantly, China is a very complex market.

All of the successful Chinese-oriented MMOGs can provide content fitting the demands of the users, for example, the trade system in *Zengtu*, the feature and costume systems in *Perfect World*, and the enlarged ‘chat box’ in *Fantasy Westward Journey*. Although these designs did not originate in China, it is Chinese designers who discovered the interesting features and combined them with Chinese martial arts versions. In addition, while the 3D games are well accepted in the wealthier cities, more 2D products have appealed to the mass of users in the second tier cities. At the same time, simpler content is provided to reach low-end users, the core mass market. Only the Chinese can design the content based on the varied demands of the users who are in different socio-economical statuses. While other Asian markets can accept the same game with localized adaptations, China has become a self-sufficient market. This is discussed in Chapters 2 and 6.

10.3.4 Taiwan

This research examines how Taiwan’s game firms enhance their competitiveness as their business environment becomes unpredictable. To leverage their particular strengths, Taiwan’s game firms have established different sorts of collaborative relationships with Asian partners who are also competitors. In addition, Taiwan’s game firms increase the efficiency of market scale by expanding their overseas markets, because the scale of Taiwan’s OLG market cannot support an independent OLG industry. These factors have helped Taiwan to have a unique position in the regional economy.

a. The advantage of Taiwanese game firms as game operators

Although Taiwan has the capability to produce and run a game, the quantity cannot satisfy the demand of domestic OLG market. Various licensed games are operated in Taiwan, where the OLG industry has become a regional economic activity. The OLG business in Taiwan has become a game portal business. For Taiwan’s operators, the demands call for not only the quantity of games with a high rate of rotation, but also for quality with diversified forms of content. This is because the free game has become the business model in the intra-Asian market. Although the model of free play has enlarged the market size, it has not led to more players wanting to pay or players wanting to pay more during game-play. A significant side effect of the free game model is the shortening of the game-play experience. Game operators always have new games, almost at intervals of three months. Game portals have become entertainment centres which maintain at least four different types of games at one time to appeal to different groups of audiences. This is discussed in Chapter 7. It shows that high market demand has enhanced the

strength of Taiwan's game firms because they have had to provide comprehensive services to satisfy a sophisticated domestic market, further improving their competitiveness in the regional market.

Taiwanese game operators are keen at selecting game products and promoting new game titles with accurate market strategies as they face critical customers. The case of *Gamania*'s expansion to other Asian markets mentioned in Chapter 9, shows that Taiwan's successful operating experience can be applied to other East Asian cities, from Hong Kong to Tokyo. For Taiwanese game operators, the urbanity of the Asian market has two similar features: the markets are easily manipulated and the users are very particular in their tastes and preferences. First, these markets can be manipulated through different forms of advertising and frequent media exposure while a new game title is introduced. A 'blitzkrieg' strategy to promote and to run a game has proved effective not only in Taipei, but also in other Asian metropolitan cities. Secondly, these urban users have sophisticated tastes for game, such as cute design, delicate image and casual content. Understanding the features of the Asian OLG market paves a way for Taiwanese game firms to expand their overseas markets. Cultural postmodernism is shaped through the mediation of the link between culture and economy via the new middle class (Lash & Urry, 1994, p109). Featherstone explains that contemporary city lifestyles are more actively formed by demarcated groups with a fixed set of dispositions, cultural tastes and leisure practices (2007, p93).

b. An intermediary

Taiwan used to be positioned as a springboard into the Chinese OLG market before 2002. Since then, Taiwan's position has dramatically altered. The Chinese game industry has emerged under governmental protection, leading Chinese operators and developers to control their domestic market. With a pattern of rapid growth, China has become a huge market with more complicated features which cannot be explained by the model of the Taiwanese OLG market. Consequently Taiwanese game firms lost their dominance in the Chinese market, see Chapter 7.4.

Taiwan has, now, become China's most important export market. Before 2004, Chinese-oriented game titles were termed as low-end cultural artefacts. Taiwan operators took Chinese produced games to access the lower-end users in Taiwan's market as in the case of the *Third Prince* see Chapter 8.2.3. However, Chinese games have improved. From the viewpoint of Taiwanese game players, Chinese produced games are not substantially inferior to South Korean produced games. Therefore, China's game firms are important game suppliers able to make

games based on Chinese topics. This reflects the fact that language appears to be more important than geography in uniting users who have similar geo-linguistic backgrounds. This discerns the Chinese cultural sphere from others in the Asian market.

After the inclusion of their experience in Taiwan's OLG market, these Chinese game firms have become more competitive in the Asian market, which is discussed in Chapter 9.3.4.1, as in the case of *World Perfect*. With the socio-geographic feature of predominant urban areas, Taiwan is a market close to other Asian Pacific markets. Experience in Taiwan's OLG market is a key for any Chinese game firm to enter other markets, when Chinese game products are constrained within their exclusive domestic OLG market. The role of Taiwan's game business has, therefore, been transformed from a springboard into the Chinese market into an intermediary for Chinese game firms who want to explore the overseas OLG market.

c. A close tie with these different industries

Chapters 6, 8 and 9 discuss the unique features of Taiwan's game industry. The Taiwanese game firms have established close links with foreign firms, involving a set of collaborative co-operations. No longer constrained by the small scale of the domestic OLG market, Taiwan's game firms have flexible roles to incorporate into the regional economy. Taiwan's game operators seek synergies with Chinese game firms or South Korean game studios. The cooperation to develop a game product has formed an integrated economic activity. The Taiwanese can obtain product game based on the demands of the Taiwanese OLG market; the South Korean game studios can gain financial support in advance and the Chinese game firms can gain knowledge transfer from Taiwan.

Taiwan's game industry has maintained a unique position rather than a dominant position since the Taiwanese game firms set up close ties with the regional players and global players. First, Taiwan's firms have become a second-party developers to cooperate with international game publishers enabling the Taiwanese to gain more resources or advanced knowledge. By providing special services, the Taiwanese are able to bargain with the global players to co-brand their games. Second, in order to decrease the cost of production, Taiwan has shifted its game production to China. Taiwan can keep its core development to design a game based on an idea from the international firms. The advantage of Taiwan's game industry is based on its long experience in game production, frequent contacts with outside players, and its geographical position, which is central in East Asia. Taiwan's

geographical position makes it easy to contact other Asian partners and accelerates Taiwan's integration into the regional economy.

In addition, this study verified the importance of established modern surroundings for Taiwan to support the development of its game industry. Almost all of the Taiwanese game firms are located in Taipei's two industrial clusters: one in the Nei-Hu and Nan-Kang districts, and the other spanning Sin-Din, Jhon-Ghe and Yon-Ghe. The game firms select these areas to establish their offices because of convenient traffic networks and advanced infrastructure under the national scheme of policy support. Taiwan's digital content industry is strengthened by urbanized economies which provide specialized services, new communication systems, advanced technologies and new media. The features of a modern city help Taiwan's firms to frequently contact other Asian partners and internationals. Interestingly, these firms do not keep in contact with each other as Taiwanese firms view each other as rivals. In addition, this research discloses the fact that the Taiwanese game firms upgrade their capabilities not from the inside with links of inter-firms generating innovation knowledge, but from the outside with foreign firms providing knowledge transfer.

10.4 Global competition

The Asian OLG industry has been formed as a regional activity by adopting vertical integration. Also, the current Asian OLG industry faces global competition. To obtain advanced internet technology techniques and sophisticated production knowledge, China and South Korea have upgraded their capabilities through buyouts. At the same time, USA based *EA* and *Blizzard* have entered the Asian market by using different forms of corporations, e.g. synergies and buyouts. Close relationships can be found between USA based game firms and other Asian game firms, mentioned in Chapter 6.3. Different types of alliances between and with the Asian game industries can be seen as a form of integration into a global economic system or as resistance to the exploitation of multinational corporations.

10.4.1 A value chain in the Asian OLG industry

In the Asian market the OLG business has segmented into different sectors, controlled by different players. A business model is established when the game developer provides games to other local operators, and the responsibility of the operator is to publish any new game in the market. Games in China and South Korea are retailed through Internet cafés, whereas in Taiwan convenience stores are the major distribution channel, also in contrast to the Western retailing system.

Operators like *Shanda* and *The9* have become large game firms in the Chinese OLG market, whereas Western game publishers hold the dominant position through the entire game process of production. This has been discussed in Chapters 7 and 8. The role of operators in the OLG business has become more important because online gaming has moved from technology-leading products to service products. Only local operators understand what types of content appeal to the local consumers. Localized adaptation is a complex process, containing not only language translation, but also the rearrangement of characters and internal events. Game contents have to be re-designed and revised to fit the demands of different audiences with specific cultural backgrounds. This has further set up a flow of cultural products in the intra-Asian market, and the whole business chain is controlled by different game industries.

To minimise the cost of production and maximize the profit, inter-links among Asian game firms have been established in the regional economy. Outsourcing has become a feasible way for Asian game publishers or game studios to provide concrete assets for the final products. Chapter 6.3 discusses two types of outsourcing in the Asian game industry. To reduce production costs and increase production volume, South Korean game firms aim at China's cheap labour market to leverage their competition. At the same time, a two-step outsourcing exists among Japan, Taiwan and China. Japan's game publisher provides finances and the game concept, Taiwan makes the game creation, and China completes the game production, which leads to a new cooperative relationship. Taiwanese and South Korean game firms have shifted game production to the Chinese Jang-Zhe area, and Japanese game publishers have sought cooperation with second-party developers in the neighbouring countries. These factors are the reasons why the OLG market has become intensively competitive for both the game studios and the large firms. According to Lush and Urry (1994), the culture industries have come more closely to resemble straightforward commodity production centres. Culture industries in the Western market are becoming a business of service rather than a production business, as production is increasingly outsourced to leave a core of finance and distribution functions (Lush & Urry 1994, p142).

For a long time, the Japanese video game industry has consisted of a close interwoven network existing between game machine producers and game software developers. Now, a new generation game requires high investment and sophisticated software support, but a shorter game-play experience. The heavy cost to create a game has changed the ecology of the OLG market. Chapter 6.3.1 unfolds a

collaborative cooperation between Japanese and Taiwanese game firms. Japanese video game developers look for overseas cooperation, outsourcing their game production to a lower cost location. For these Taiwanese companies, whether experienced or new, creating a game title for the international players means they can gain the resource and finance in advance, although they may sacrifice their idea to create a game content to cope with the market.

Taiwan and South Korea's outsourcing is also due to economic considerations, as Jang-Zhe can provide more specialized services than any other place in China. First, Shanghai and other cities in the Jang-Zhe area have developed faster than other areas in inner China. The well-developed infrastructures and telecommunication systems is an incentive to attract these foreign firms to set up their offices along the south eastern coast of China. Second, one of the best Chinese academies of fine arts is located in Zhejiang, providing skilled technicians in artefact and graphic design for game production. Finally, the support of the local state engaged a series of measures, such as tax-deductions and the establishment of a Science Park, as an allure to foreign as well as indigenous game firms. Third, shifting game production to China can help South Korea and Taiwan to understand the Chinese market. For other Asian game firms, shifting the production place to China and recruiting Chinese designers is the first step in exploiting China's huge market.

Most importantly, there has been a degree of technology transfer to the local population through training in specific skills and techniques when a South Korean firm or a Taiwanese firm employs local Chinese workers, or a Japanese publisher finances a Taiwanese game studio. Japan releases the know-how of video game production, which used to circulate internally. To decrease any misunderstandings, the Japanese producer and the Taiwanese R&D teams have to frequently contact each other. At the same time, Chinese workers gain the know-how of game development through the exchange of innovative knowledge, particularly from Shanghai to Seoul or from Tokyo to Taipei, as all these cities possess modern infrastructures, which help innovative knowledge and information disseminate quickly, further decreasing the possibility of misunderstanding. According to Lash and Urry, cultural capital or information-processing capacities in information structures can be accumulated (in training and education) and spent as information flows are applied to problem solving (1994, p108).

An international value chain is formed based on the modernized processes in different local nodes. The features of the Asian OLG industry indicate complex

relationships of these game firms in a hierarchical pattern. When examining the inter-dependent relationships of these Asian game firms, we see that the partner holding the technology and capital will hold the dominant position in the value chains. It may be expected that the interest of the small game studio could be reduced as the international game publisher holds the market.

10.4.2 A formed regional economy

The research tries to illustrate that these different Asian game industries, which have developed independently, are now moving into close relationships. Game developers must keep close contact with game operators because they have to localize content. This happens between the game publisher and the second party game developer too. These game firms all agglomerated in modern Asian cities. This is due to the Asian OLG business relying on commodity production, advanced internet technology, and a quick retailing system, all of which are based on a modern environment, which maintains the incorporation of regional economic activity. This rarely happened in the past.

Selected cities, such as Beijing, Shanghai, Taipei, Seoul, and Tokyo, can provide necessary supports for game firms, such as specialized services, advanced telecommunication systems, well-established infrastructure, convenient traffic, and most importantly, professional workers. The node's interactions become frequent when the game has to be finished in an efficient way in terms of time and quality. The modern environments are constructed and institutionalized at the same level. It benefits these Asian game industries to keep a close regional tie to leverage their competitiveness in the regional market. It has benefited the mobility of commodity production when it has to connect the sources from different places. Inter-connected local economies reveal that a place-specific network plays an important role in forming an inseparable Asian game industry. In addition, a number of themes associated with 'globalization' and new information and communication technologies discuss the role of places and spatial relationship. Indeed, time and space become important in diffusing a value system. High-level professionals, especially, require face-to-face interaction, when a product process needs multiple simultaneous input and feedback.

Previous research points out the importance of modern processes due to the fact that it helps the locals in peripheral areas to easily integrate into a global system. Now, the diffusion of modern electronic-based information technology speeds up the economic transformation forming an information economy that has affected global commodity chain transformation. Dense spatial concentrations of major companies

and their ancillary suppliers are located in a few technological nodes in which information technology and specialized services are provided. Therefore, the innovative potential of cities is not restricted to information-technology industries; rather it extends to a whole range of activities dealing with information and communication. According to Castells (2001), networks of metropolitan nodes exist based on networking geometry. Furthermore, when regional ties facilitate competitive production clusters, global ties provide an input of external know-how and access to new markets, and prevent a cluster from becoming inflexible (Fuchs, 2002; Ohmae, 2005).

10.4.3 The global players

Chapter 9.3.4 discusses the case of the *World of Warcraft (WoW)* operation in Taiwan's OLG market. The cooperation between *GameFirst* (Taiwan) and *Blizzard* (USA) shows Western game firms keep their dominant position in the global market. *Blizzard* with the superior technological skills, maintains the dominant position, controlling all the procedures to prevent its core techniques from flowing outwards. Holding the advantages of sophisticated content design and stable internet technology has helped *Blizzard* to overcome all the barriers impeding entry to the global market. Only American games can be operated in different local markets with simplex content, accepted by Western and Eastern game players at the same time.

The global players have, recently, on entering the Asian market rejected the traditional route of licensing their games, choosing, instead, to set up joint ventures¹³¹. For example, the synergy between *EA* (USA) and *The9* (China) allows the latter to have exclusive publishing rights for *EA*'s games in China. The above has been discussed in Chapter 6.3.4 and Chapter 9.3.4.1. The discussion verifies the Asian OLG industry face new game rules when the international overseas (i.e. USA and Europe) game firms hold the leading market positions. First, all the supporting facilities and processes to run a game must be done under the oversight of international overseas technical personnel. Second, all the activities in a local market require the approval of the foreign based partner, in advance. Third, international overseas game publishers ask for higher shares of the profits when the traditional license fee only gives 70 percent of the annual revenue to the game operator. As a result, within a 'carrot and stick' incentive system lacking any carrots, the local operators have no choice but to collaborate closely with USA and European game publishers. The local operator stays in a subordinated position, adapting itself into

¹³¹ In 2005 *Soft World* (Taiwan) and *Vivendi* (France) on a 70:30 share holding ratio set *Game First* to operate *WoW* in Taiwan. In 2006 *EA* (USA) and *Neowiz* (South Korea) partnered to launch *Fifa online*. In 2007 EA bought 15 percent of the shares of *The9* (China).

the global organization.

American and Japanese game firms control the greater share of the scarcest resource in the global OLG market, IPs for popular games. These game IPs orient from existing successful game series in which high market awareness has already been established. A new game based on a branded IP can gain a higher license fee. Chapters 6.2 and 6.4 provide an extensive discussion of the importance of IPs in the Asian OLG industry. Normally, content innovation and securing access to markets are key challenges. According to Kline et al. (2003), existing cultural goods reduces marketing costs because the building of awareness, the most expensive process, has been already done. Only USA and Japan's MMOGs based on existing IP with high market awareness can bring the greatest profit for the game publisher highest license fee. For example, Taiwan's *Gagamedia* has paid US\$ 3 million (normally US\$1 million) license fee in advance to obtain *Hell Gate London*, produced by the *Flagship Studios* (USA). Kerr's research suggests that growth of licenses, combined with consolidation in the digital games industry is making it increasingly difficult for new ideas and third-party developers to enter the global OLG market (2006, pp69-70). When IP games, such as *Mario Kart*, *Final Fantasy* or *Tomb Raider*, are configured by their own structure of user, the commodified digital culture could become profitable through licensing the game themes and characters. At the same time, larger companies are content to build brands, produce sequels and license properties between their different media operations (Kline et al, 2003, p227).

Big Asian firms also buy out foreign game studios to gain experiential knowledge or quality game properties, when facing global competition. This detail is unfolded in the cases of *NCsoft* (South Korea) and *Kingsoft* (China), in Chapter 6.3.2 and Chapter 8.3.3. In 2006, *Kingsoft's* buyout benefited its capability of game production through borrowing Taiwan's experience on how to develop a game concept. In 2007, *NCsoft* obtained a US professional team and the full ownership of its game property through a buyout. For these big firms with large cash reserves, synergies and buyouts are a short cut to gain advanced knowledge transfer, when they need to enhance and upgrade their capabilities.

Cultural products now account for a steadily rising proportion of modern business activity and international trade. Big game firms are supreme, controlling the resources including the technical setting, cultural capital, finances and market. On the other side, the difficulties of Asian small and medium game firms have been increasing as they are faced with global competition. These Asian game firms will still stay in the arena; however, they have to adjust their business strategies,

becoming either a second-party developer or a game operator and seek cooperation with big players in the regional market. According to Hesmondhalgh (2007), new types of relationships between different companies have emerged. There are increasing numbers of strategic alliances between cultural industry companies and large corporations in other industries. The oligopolistic corporations that dominate capitalist forms of production can mobilize huge resources to campaign on behalf of their interests and gain more attention than any others (Hesmondhalgh 2007, p187).

Globalization has decreased the disparities of different local OLG markets. The Asian firms follow the Western industrialized business model, which is very profitable, decreasing the cost of production and alleviating the risk of investment. However, it also provides good opportunities for multinational co-operations to avoid the barriers of local markets. The study finds that a regional economy has formed in East Asia to resist multinational co-operations which bring in huge amounts of capital and try to reshape the regional game industry. At the same time, different Asian game industries still have to keep global ties to maintain flexibility, as in buyouts by South Korean game firms and Taiwanese game firms outsourcing the services. Mergers and buyouts have enabled global media corporations to acquire advanced digital technology from smaller companies or move into other local markets. As expected, the research shows that major media conglomerates do invest and participate in the newly developing OLG markets.

10.5 Conclusion

This research is structured into three different levels in accordance with its research objective and theoretical concerns: global, regional and local. The global has little weight in this study because the research focuses on how local and regional game industries in the intra-Asian market develop their business based on a globalizing system. However, since the global climate is more or less shaping the nature of the media industries, it is necessary to understand the changes happening in the Taiwanese game firms as well as in the other Asian gaming firms from a global perspective. Most importantly, this research pays close attention to the nature of the Asian OLG industry, the relationships of different game firms, and the exclusive position of Taiwan. The theories of globalization are used to account the following findings.

First, the Asian OLG industry has established a value chain, i.e. game suppliers and game buyers, to control the risk of heavy investment. At the same time, Asian game firms seek vertical synergies by expanding complex collaborative

relationships. A cross-national value chain in the regional economy implies a different role for profit-sharing in the whole game business. While analyzing this research from a regional scope, we see an active intra-regional flow of games, which is embedded in the global system, existing among the inter-firms in the Asian countries. Although the Asian OLG industry represents a cultural-linguistic market centred in one region, the content still needs to be localized when the game products are circulated in different Eastern Asian markets. The role of local operators has become even more important than that of game developers. It is important for the researcher to recognize the implication that the local game firms in regional markets have been interlinked on the same level of the modern environment, further forming an integrated economic activity, the Asian OLG industry.

Second, the Asian OLG industry currently faces intense global competition. With the advantages of capital and technology, American and Japanese (and European) game publishers can enter the Asian market overcoming any barriers, through synergy with local operators. These global players know how to make more profits in the game market, because they hold the scarcest and most valuable resources; the capabilities to develop complex engines and the existing game IPs. This helps them to maintain their dominant positions in the global gaming industries.

At the same time, Asian game firms also seek to consolidate their advantages through the ways of integration, outsourcing and buyouts. A place-specific network accelerates different types of alliances and speeds up the dissemination of information. A value chain in the Asian OLG industry has established in the regional market. It benefits big game firms standing in a higher position, controlling capital and the market and forces small game firms to cooperate with the large game operator or game publisher to create games based on the demands of markets rather than originality. Consequently, only big Asian game firms have the financial strength to resist the global players, and this increases the possibility that oligopolistic co-operations will dominate the market.

Finally, this research clarifies the position of Taiwan, which has merged into an integrated global market, and takes a specific role in the Asia Pacific market. Although Taiwan's OLG industry depends on external factors, Taiwan's game developers and game operators have found their differentiated values in the regional economy and global strategies for integration of the regional market.

To gain resources, Taiwanese game developers have to be integrated into a global system. With the foundation of experience in game production, the Taiwanese game firms have been transformed into a content provider for the

international game firms. To minimise the cost of production, Taiwan viewed China as its backyard. Taiwan's game developers made the most of their geographically advantageous position to gain subcontracts from major companies. The game firms then completed the core development and shifted game production to low labour cost China. Taiwan's game firms are better equipped to deal with the commodified process of digital culture in the global market, which helps it keep its resources away from the global players but to gain the knowledge transfer from outsiders.

Taiwan used to be regarded as a springboard to enter the Chinese market. Only within the last few years has the Chinese game industry fostered the capabilities to develop, operate their own game titles and license their games to the overseas markets. However, Chinese games are only circulated within the constrained Chinese cultural sphere. When other Asian game industries incorporated into a regional market, China became a different national cultural market. Now, Taiwan has become China's most important export market. This is not because Taiwan is China's biggest overseas market. Taiwan has formed its position as an intermediary between Chinese game firms and foreign markets, rather than a springboard for foreign game firms to enter the Chinese market. Only after experiencing Taiwan's OLG market did Chinese products come to be accepted by other Asian game players. This reveals the fact that Taiwan's experience enables the Chinese product to conform to urban markets because Taiwan represents a sophisticated, advanced and wealthy free market economy, whereas China's OLG market is closed and protected.

The following chapter, the conclusion, will review the research objectives, theoretical framework, study method, and the summaries of the findings and discuss the limitations of the study.

Chapter 11 Conclusion

Chapter 11 reviews the research objectives, theoretical framework, investigation structure, and data collection methods of the study and summarizes the research findings. The thesis ends by pointing out the original contributions that the study makes to the field of Asian online games, and globalization studies and its theoretical implications, indicating the research's limitations and future study.

11.1 Research objectives and theoretical hypothesis

The research uses two master narratives, political economy and cultural studies to examine and analyse the current situation of media production and media business in the context of global competition. Groups of theoretical hypotheses are contested according to the issues of economic, social and cultural concerns. These theoretical accounts have been developed through the literature in the Anglo-American context to explain the nature of cultural industry and media globalization, which is used to examine the evidence of the online gaming (OLG) sector in Taiwan and in other Asian countries.

The research background

The Asian OLG industry has been changing rapidly since 2002. The competition has become intensive since 2005. This is discussed as follows:

1. In the contemporary world, a new online game requires heavy investment in technology, operations and marketing. The Asian OLG business has been divided into sectors of developers, publishers, distributors and operators in contrast to the traditional way, in which the developer made and ran (operated) the game.

South Korea has become a game centre in Asia, creating diverse forms of games and increasing the market segmentation in the intra-Asian markets. Being a game provider, South Korea provides a packaged service, including technical support, localizing content and subsequent revisions, for local operators. Subsequently, other Asian game operators have to publish the game product, maintain a virtual world, and most importantly, promote online activities to maintain the freshness of the world and the loyalty of the users.

When game-play became free in the Asian market, the quality of game products declined and the loyalty of users decreased. Game operators made profits by selling virtual items rather than through subscription payments. A new business model, the free-to-play, appeared. It is important for game operators to deploy accurate market strategies for a new game to capture their audience in the first three weeks. For local

game operators, the only way to make quick profits is to increase the number of interactive online players at the very beginning. It, therefore, becomes possible to break on investments and make profits.

2. From a regional view, we see that an active intra-regional flow of games exists among South Korea, China, Japan, and Taiwan. Specific game genres are designed for the preferences and tastes of East-Asian game players. Medieval age games, cute games and Chinese *wuxia* games are three of the most popular genres. Asian-style fantasy games have an appeal to Asian hardcore users. Cute games originally from Japan, attract the young and female players. Girl's cute games present a very different type of content, stressing mutual aid and social interaction, and attract users who are residents in different Asian metropolitan areas. Children's cute games provide an adventure world filled with ease and comfort. The rise in casual and cute game can be read as 'simple games', termed by the researcher Hjorth (2006). The *kongfu* themed massive multi-player online role play games (MMORPGs), based on the tastes of Chinese users, are inclusively circulated in the Greater Chinese OLG market, and find difficulty in crossing the cultural border to attract other Asian audiences.

3. When OLG industry moves to capital and technological competitiveness, only few Taiwan's game firms have the ability to cross the barriers to satisfy the demands of Taiwan's users. In 2005 diversified forms of licensed games, such as *World of Warcraft* (USA), *Perfect World* (China), and *Maple Story* (South Korea) entered the Taiwanese market. According to of the IDC 2006 survey of Taiwanese game firms, the revenues of the OLG business in Taiwan rapidly increased by 40 percent, compared to 8 percent of the previous year. Offering different types of games increases the structural base of game players and enlarges the market size in Taiwan. Most importantly, the sophistication of the Taiwanese market represents the epitome of the Asian game market.

Theoretical hypothesis

Groups of theoretical hypotheses are contested according to the issues of economic, social, and cultural concerns.

In the **political economy approach**, four theoretical accounts are used explain the nature of the commodity processes. They include:

1) Different forms of corporate concentration, both growth and concentration, are central features of the contemporary communication map;

2) The institution of cultural production is organized hierarchically. The power of independence, or autonomy, is not assumed because media organization plays a role as economic and ideological filter;

3) The creative personnel are always constrained by media organizations or institutions which practice under the influence of social and economic power, when they shape cultural resources to a new purpose. In Bourdieu's work, the mass media produce standardized products are controlled by the levels characteristic of those occupying 'the field of power' (Bourdieu 1993, cited in Hesmondhalgh, 2006, p214). In addition, Miège (1987) tries to identify a set of social logistics relating specifically to the processes of production and labour that contribute to the supply of cultural commodity (p274);

4) The working practice in cultural production, especially in the animation sector and film sector, represents a way of offshore production. Miller et al. (2001) termed the outsourcing of cultural production as the New International Division of Cultural Labour.

In the **cultural studies approach**, two theoretical accounts explain the relationship between the texture and media consumption:

1) Globalization as a phenomenon with dimensions that are revolutionizing arenas as diverse as the media, culture, and states. This research attempts to find out the answer of how the local media businesses are encountering an entirely new mode of production based on the control of information and the flow of capital by western players; Sinclair's research (2004) confirms that a two-tiered global system has emerged. English is the language of the international film blockbuster, but low-budget cultural production can be made in almost any language for the home market and the nearest cultural-linguistic market, with the occasional breakout global hit. US based and other global media conglomerates are attempting to position themselves in the technological vanguard in other cultural linguistic markets. Much of the literature on globalization moves beyond the notion that nations are groups, to being distinct 'worlds'. Several theories have raised the need to consider modernity as a crucial aspect of globalization. Modernization theorists point out that an urban, industrial milieu is a sort of school for modernity. Iwabuchi provides an explanation of why Japanese popular culture was accepted by the young Taiwanese audience, the main reason being that Japanese material is seen as having a more modern format while still being recognizably familiar within the Asian context (Iwabuchi (2002) cited in Strabahaar, 2002, p689).

2) Cultural artefacts continue to be marketed with very specific boundaries, including ethnicities, regions, languages, communities, and habits (Hoskins et al., 1997); Huntington (1993) has hypothesized a limited number of 'civilizations'. The Chinese market can be broadened to a 'Confucian' cultural influence, the Arabic market to an Islamic market, and the Western civilization to Christianity. Within the Greater Chinese arena, audiences in different locales express different attitudes toward fashion, imagery, and music. In a theory of media flow, Curtin (2007) accounts the histories and strategies of Chinese TV and film enterprises that aim to become central players, not only in the Greater Chinese market, but also in the global Chinese market. Chinese media practices within Chinese enterprises often differ significantly from their Western counterparts. The business has confronted difficult challenges in creating and promoting transnational products within diverse Chinese communities rather than a coherent Chinese culture (Curtin 2007, p23).

Finally, two models are used to examine the relationships between the Asian game industries and the position of Taiwan's OLG market at the regional and global level. It includes:

1) The 'global value chains', developed by Gereffi et al., (2005), increases our understanding of the changing nature of international trade and industrial organization. The global value chains framework focuses on the nature and content of the inter-firm linkages, and the power that regulates value chain coordination, mainly between buyers and suppliers. There are several basic types of value chains governance, including the modular supplier, the captive supplier, relation supplier and the hierarchical. The collaborative relationship between buyer and supplier probably moves from one to another typology, or de-links when the stability of the value chains is changed by new technology, or when new demands from leading firm buyers arise (Gereffi et al. 2005, p79; pp84-85, p98).

2) Porter's Diamond theory (1990) is used to examine the competitiveness of a national industry. In Porter's Diamond theory factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry are important factors in determining how one nation can gain in a competitive industry. In addition, the systemic nature of the 'Diamond' promotes the clustering of a nation's competitive industry. A growing cluster can easily attract entrepreneurs. This process will broaden to encompass related industries, when one competitive industry helps to create another in a mutually reinforcing process (Porter 1998, pp149-157).

11.2 Research design and data collection

The research structure is divided into two parts: 1) the commodified process of game product and the patterns of cultural behaviour are reflected in the cultural industry itself through its research objectives and theoretical concerns; 2) critical political economy and cultural studies.

The study focuses on: 1) the nature of the Asian OLG industry, the characteristics of these Asian games and the features of the Asian game market; 2) the unique characters and competitive advantage of Taiwan's OLG industry in the local and regional markets, even in the face of intense global competition; 3) Taiwan as a springboard for foreign game firms entering the Chinese OLG market or, as an intermediary, a value-added experiment, for the Chinese expanding into other Asian OLG markets.

The study used two data collection methods, documentary research and semi-structured interviews.

A semi-structured interview is developed with interviewees during data collection, and not merely by the researcher in the interpretation. During the interview, the reconstruction of the research objective is used, instead of propagating an unconditional approach to a given objective. Different types of questions, regarding the current digital game industry, are extensively expanded upon during the interviews, allowing the researcher to deal more explicitly with presumptions. The structure-laying technique also offers a model for structuring the content of interviews in which different forms of questions were used (Flick, 2002, pp83-85). Second, the process of documentary research often involves some or all of conceptualizing, using and assessing documents. The major part of the research is for cross-checking the oral accounts and to provide some knowledge of descriptive content.

A series of in-depth interviews was carried out in Taipei, Beijing and Shanghai from January to October in 2007. Fifty-nine face-to-face semi-structured interviews were conducted during the fieldwork. The objective was to analyze the development of Taiwan's OLG industry from the point of view of its international competitors. Twenty-eight Asian games firms, including the major companies in Taiwan, China, Japan and South Korea were examined using two main approaches: critical political economy and cultural studies. A wide range of online game protagonists, including executives, entrepreneurs, journalists, scholars, government officials and analysts, were interviewed. The first two groups are primary sources; the others are used as secondary sources. The study limitation in the context of data

collection was that only one Taiwanese official was interviewed. The state role in the development of Taiwan's game industry can only be understood through the governmental annual reports and 'white papers'. 'White papers' are used to describe the symptoms of the problem, an unconnected situation among the academics, the industry and the government, rather than to clarify the deeper causes behind the problem and its consequences.

Related sources include annual financial reports from game firms, websites, newsletters and trade newspapers.

In addition, the research adopts the case study method to understand the competitiveness of Taiwan's game firms. Case study methods involve an in-depth, longitudinal examination of a single instance or event. It provides a systematic way of looking at events, collecting data, analyzing information, and reporting the results. The research method helps researchers gaining a sharpened understanding of why the instance happened, and what might become important to look at more extensively in future research. Information-oriented sampling, as opposed to random sampling, is used in this research. This is mainly due to the fact that typical or average cases are often not the richest in information. Extreme or atypical cases reveal more information because they activate more basic mechanisms and more actors in the studied situation. Random samples emphasizing representativeness will seldom be able to produce this kind of insight; it is more appropriate to select few cases chosen for their validity. Therefore, case study is seen as a research approach, situated between concrete data-taking techniques and methodological paradigms (Lamnek, 2005).

With experience in game production, Taiwan's game firms possess capabilities across all categories of the interactive entertainment software industry. Diversified forms of games have their niches in Taiwan's market manifesting its sophistication. Based on the above features, the study designed in-depth case studies of the competitiveness of Taiwan's OLG firms using two major local players, *Soft World* and *Gamania*.

11.3 Research finding

This research tries to find the current status of the Asian OLG industry, identifying the emerging trends of this industry and further recognizing the position of Taiwan in the regional and global OLG markets.

First, interactive OLG in Asia has formed a regional market. The rapidly growing online entertainment in the Asian market is segmented. The audiences can

be categorized by ethnicity, gender, age, and socio-economical backgrounds, such as rural or urban players, Chinese and non-Chinese audiences.

1). Diversified forms of game-play have been prospering the regional market and nourishing the development of the Asian gaming industry. Most importantly, Oriental games are produced for the preferences of Asian users. Asian game players in wealthier areas are looking for casual and relaxing content, and Chinese prefer combat games, which provide virtualized social competition through killing and fighting. This study finds that an active cultural flow of game is circulated in the regional market, which can be distinguished. When OLG became free-to-play, Asian games became simple, easily replaced and customized, compared to Western games which maintained consistent quality and sophistication.

2). Specific game products are only circulated in constrained markets where culture is a very important factor in influencing the audience's decision. This has formed cultural-linguistic markets in which their audiences share the same or similar languages, interwoven histories, and broadly overlapping cultural characteristics. This observation draws support from the following cases: *Sangoko*, of which more than one hundred different types of games have originated from a Confucian-rooted cultural influenced area (Japan, South Korea, Taiwan and China) since the 1990s. Cultural-linguistic markets are emerging in Asia at a level smaller than the global, but larger than the domestic.

Second, the sophistication of Taiwan's market presents a unique feature in the regional market, while compared to other local markets. Taiwan has a sophisticated market in which local users accept diversified types of game genres, ranging from Chinese *wuxia*, cute, Japanese Samurai and Western fantasy games. Taiwan's market is constituted by a fragmented structure of game player base rather than a homogenous market. With a similar cultural-linguistic background, Taiwan has become a niche in Chinese culture. Taiwan is also seen as a modern OLG market where Japanese cute games have an appeal to Asian urban users. The sophistication of Taiwan distinguishes its position in the regional market. Taiwan is seen as an extension for foreign game firms and, at the same time, it is a test bed for Chinese game firms expanding their overseas market.

11.4 Original contribution and the implications

The political economy approach is used here to examine the nature of the Asian OLG industry.

1). Module value chains are established between Asian game developers and other local operators. The Asian OLG market is controlled by Asian enterprises which separately make profits in different sectors. Most importantly, technology, market, and capital have become three deciding factors of the position of these different Asian industries in the regional market. While Japan holds cultural capital and South Korea holds technical skill, both stand in a dominating position in the value chains. China's cheap labour cannot be accounted as a genuine advantage in the process of commodified game product, although this research does find the quality of labour is significantly more valuable. The political economy approach explains why Taiwan can adjust its position to integrate into the regional economy even though it does not have enough resources to develop an independent game industry.

2). Asian game firms have formed a relationship of game provider and game buyer in the regional market, moving to explicit cooperation. The outsourcing in the Asian OLG industry presents a different perspective than the new international division of labour (Miller et al. 2001), illustrating that Western cultural industry has shifted their production to outsider, normally in the countries or areas with lower labour cost. South Korea's outsourcing to China is based on the consideration of proximity to the market rather than lower labour costs. South Korean game firms employ Chinese workers to develop a new game to target the Chinese market which does not conform to other Asian markets. It verifies Mosco's research (2007), which discerns that employees located near their market, rather than the cost of cheaper labour, becomes a factor to attract outsourcing in cultural industries. In addition, the cooperation between Taiwan's game developers and Japan's game publishers shows another type of relationship. By providing specialized services, Taiwan's game studios has a right to co-brand with the Japanese after publication, which shows that the position of second-party developers has moved up in the value chains. Worthy of note is that outsourcing in the intra-Asian market cannot be explained as economic exploitations, but rather, as collaborative co-operations in hierarchical relationships existing among these different Asian gaming industries.

2. This research attempts to find what an emerging Asian OLG market implies: a regional market subordinated within a Western hegemony global media system, or a specific cultural-linguistic market, differing from the Western-centred market? Media business is encountering an entirely new mode of production based on the control of information and the flow of capital by Western players. However, empirical analysis in this research does not support the relationships between the theoretical claims about global markets and local adaptations. The results show that

a three-level set of relationships (global, regional, national) exists in the East Asian game market, which presents a more complex relationship under the global climate.

1). Western medieval epics that were originally designed for the hardcore users in the Western market attract both the Western users and the Asian users. Now, the East Asian game market can be seen as an overall market, in which the same game with localized adaptation can be operated in different local markets. Cute games and fantasy games are two popular genres. Cute game originates from Japanese video games' characters and themes, which were originally designed for penetrating Western young players. The Eastern version of medieval epic game presents a cultural hybridity, a mediating element in the chain of transnationalization of American dominated popular culture. Asian fantasy epic games attract more Asian users than Western games. The overall Asian game market can be seen as a sub-global market, in which these Asian cultural artefacts use the Western format in an Asian version.

2). The *wuxia* themed genre in the Asian market is exclusively circulated in the Greater Chinese arena. When further analyzing the top ten selling online game titles in the Chinese market in 2006, almost half of them are based on a Chinese historical topic or popular *wuxia* stories (iresearch 2006). China has become the largest market to produce, circulate and consume this specific game genre. Chinese *wuxia* game distinguishes an existing 'national culture' in the intra-Asian market.

At the same time, the empirical evidence, however limited, reveals that only one specific Chinese topic, *Sangoku*, has a broad influence to other East Asian users, which supports that the notion that the East Asian OLG market can be described as cultural.

3). The sophistication of Taiwan's OLG industry makes it unique in the regional market. The features of the market are advanced, urban and varied, which has helped it to easily integrate into a regional market, and even a global market system. On the other side, culturally, Taiwan can be seen as a niche in the Chinese culture. Taiwan represents other sub-national markets as the relatively sophisticated urbanites of the East Coast, and the more primitive audience of smaller places. This gives it a special role in the mediation between the Chinese game enterprises and the global markets. As a local player in the Greater Chinese market, Taiwan's specialty gives it a unique role, in contrast to the traditional local role, termed by Euro-American scholars, where the global means the actor of 'North' and local is 'South', or global equals 'universal' and local is 'national'.

3. In the last part of this research, the model of Porter's Diamond theory is used to discuss the competitiveness of Taiwan's OLG industry. Four factors are applied to examine the quality of Taiwan's gaming industry. The study further provides a modification on Porter's Diamond theory.

1). First, this research discerns factor conditions, including human resources, knowledge sources, capital resources, and infrastructure, as an essential role to shape the competitiveness of a national industry. The established advanced infrastructures speed up Taiwan's incorporation into a global chain system involving innovation, mobility, distribution, and consumption. Furthermore, Taiwan's ability is based on its flexibility in taking the main source from outside, and knowledge transfer from global players. The modern requirements can be seen as an accelerator for a node located in peripheral areas where it seeks integration into a globalized system. In addition, according to Porter, the quality of labour force can be seen as a most essential internal factor. It may not be applied to the case of Taiwan because they cannot provide cheap labour or enough professionals to support a digital content industry. Most notably, the study verifies the importance of exogenous sources, especially when a small economy has scarce required sources. It further confirms O'Connor's finding (2004) that clusters are now linked in a highly efficient manner to the larger global companies.

2) In Porter's study, the potential demand condition stresses the importance of the huge development space of the market, helping to shape the strength of an industry. Taiwan's case shows that a small scale market may not constrain the competitiveness of its national industry. The intense competition in a national market has sharpened the capability of its industry to compete with foreign firms. The cases of *Gamania* and *Soft World* extending their overseas markets show that Taiwan maximizes profits by increasing the efficiency of market size. In addition, Taiwan's game firms have set up collaborative relationships with other Asian game industries and global players. Taiwan makes use of two levels of relationships to leverage its strength under the challenge of global competition. When regional ties facilitate the competitiveness of a cluster, global ties provide input of external know-how and prevent a cluster from becoming inflexible.

3). According to Porter, geographical proximity enriches the depth of a particular knowledge when entrepreneurs help each other in a mutually enforcing process. However, exchange between business firms rarely happens in Taiwan, and this does not support Porter's research. Clusters in a peripheral sphere have to be linked in a highly efficient manner to the large global companies whose management of the

processes of risks, innovation and R&D is increasingly sophisticated. Besides that, Taipei's urbanization is a key element for developing cultural industries, as big cities become an important place for entrepreneurs to recruit professional employees, buy specialized services, and interact with outside customers. These Taiwanese game firms can generate cultural products conforming to the outside market as they have benefited from urbanized economies- a new communication system, new technology, and new advanced media.

4). Government is seen as one of two additional variables in Porter's opinion. At least, this research provides empirical evidence, which verifies the importance of government. Revealed by Taiwan's case, the role of government is not only to support infrastructure, but also to provide an improved environment, which bridges the connections of different gaming industries, outside sources, and consumption. On the other hand, to protect its national industry, China is the only market affected by political power setting restrictions on foreign investors. When the polity force interferes with market regulation, its national industry is shaped only by internal market and local knowledge. A self-contained Chinese game market shows that the power of the nation-state plays an important role in whether or not culture industries will shape, sustain, or renew the characteristics of form.

11.5. Limitations of the research and future research

Following the research objective, the study has chosen to limit its main analysis to the changes of Taiwan's gaming industry: game operators have become game buyers in the regional market and game developers have been transformed into second-party developers in the global market. The focus is the challenges of Taiwan's gaming industry, and its relation to other Asian gaming firms. It is difficult to provide an overview observation of the Asian OLG industry in this research. In addition, it may not provide a valid explanation of how the USA and Japan keep their competitiveness in global market. The implications of the emerging OLG industry in China and its possible influence, in terms of culture, economy, and market in the regional economy are not this study's focus either.

Limitations of the research

The study's time frame is from 2002 to 2008, when the Asian OLG industry was transformed into a regional economic activity. First, different local markets have interlinked into a regional market. Second, Asian gaming industries are constituted with a complex set of relationships. Third, global players entering the Asian market change the ecology of the Asian gaming industry. And the challenges

will continue and intensify in the following years. However, while this research attempts to discover how a regional and a local cultural product market are formed under the climate of globalization, a few issues related to technology control and merger, and the role of global players have not been fully discussed. They are important because of the following reasons:

1). New technology of game production. New technologies have been continuously invented to upgrade the sophistication of game play. Games engines play an important role in game production in providing a flexible and reusable software platform in which all the core functions are needed to develop a game application. Using a commercial engine helps game developers reduce costs, complications, and time-to-market. Western companies have the capabilities to develop complex game engines, which places them in an important position within the highly competitive digital game industry. Asian game studios have to rely on outside technology support, such as from Australia and the US. A new rule of profit allocation in the whole business chain may be generated when the technology provider asks for annual profit-sharing rather than a royalty fee in advance.

2). Convergence of video game and PC internet game. Now, the console game firms, such as *Sony* and *Microsoft*, prepare to join the battle. *Sony*'s Playstation 3 is going to provide a format for playing multiplayer games. The new competitors will increase the competition of the digital gaming industry. The attention span of game users on a game product will become shorter when more game products can be applied on cross-platforms. Each side will face the possibility of losing their old users. This can be explained as a state of 'perpetual innovation', termed by Kline et al. (2003). This is more likely if no one company has a clear advantage in this industry that leads it to believe it will win a standard war (Kline et al., 2003, p55). This may imply that heavy investment is not a guarantee of market, but rather, increased risk.

3). Global competition. The global players (USA and Japan) own the capital and scarce resources, further controlling the distribution channels and global market. These international companies easily maximize the profits of their cultural products across different media platforms. For *Microsoft* or *Sony*, these global companies have an exclusive position in the global market by developing game machines. Even in Japan, only a few selected software publishers have close relationship with the platform developers, and this enables them to have a head start in game production. This is a challenge for other Asian game studios which always have to adjust their designs to accommodate the game machine, when information exchange takes almost

three month. At the same time, local game firms may face the growing challenge of globalization, being forced to cooperate with a bigger publisher, rather than providing original design.

Future research

Finally, further future research would supplement the limitations of the finished study.

1). the nature of the Asian OLG industry continues to change. It can be observed in the following prospective:

The force of capital in value chains in the gaming industry. Capital in the gaming industry is composed of cash, technical knowledge, and cultural capital. To guarantee the quality of games, new MMOGs will rely on the support of complex engines. To minimise the risk of investment, using licensed intellectually property (IP) is seen as an emerging trend. The licensed IP could come from existing videos, comics, or movies. Consequently, large firms more easily hold the resources by making different alliances, which increases the possibility of conglomerates. Future study should examine whether these game firms become bigger, and how they adjust their strategies under intense competition. This may pose a further question: will the future integration of the gaming industry be vertical, horizontal or diagonal?

The force of culture in the Asian gaming industry. The Asian gaming market is currently seen as a sub-global market. By examining the case of the Asian gaming industry, a few subjects can be explained as a trend that a cultural-linguistic market has been emerging. Varied forms of games, based on the preferences of Asian users, can be expected to do well when existing western genres cannot match the increasing demands in the Asian Pacific market. Asian developers may take game concepts from interwoven histories, popular cultures or similar customs and habits. Further study, based on the current foundation, would find out if a wider cultural-linguistic market, larger than national (domestic), will be formed in the future.

The force of polity in a national industry. China is the only country that takes action to monitor and regulate publication of online games, which limits the expansion of foreign competitors in China and promotes its local game development. Governmental action in the form of protection and initiatives provides the 'greenhouse' effect enabling Chinese game firms to rapidly develop their capabilities. Future studies may focus on the influence governmental force has in protection rather than in attracting foreign investments. Under governmental protection, what is the present nature of Chinese games, especially in terms of game product features and Chinese game player characteristics? Most importantly,

research has to find ways to verify the correlation between the culture industries and the role of nation-state in shaping, sustaining, or renewing forms of identity and other possibilities.

2). What possible influence will the USA and Japan bring to a formed Asian OLG industry? When US American game firms seek synergies with local Asian game firms, will there be a global-local system with simplex content and language translation, or a two-tiered global system with more western game products based on the preferences of Asian users? Future study is needed to examine whether the Asian market is integrated into the global market in the future and how these Asian game industries can confront US firms threatening their borders.

Currently, Japan is an internet product consuming country rather than a producing one. When Japan enters the OLG business, what types of relationships will exist between Japan and other Asian game firms: game publisher and game developer, or game developer and game operator? Most importantly, what will be the position of Japan in the value chain in the future?

Furthermore, South Korea and China are currently important players in the intra-Asian market and recently both countries game firms have participated in a series of buyouts to upgrade their competencies. Further study will focus on whether these Asian gaming industries can resist global competition, or whether the regional market will play an integral part in the global market when the major regional players merge together or collaborate.

3). As a main research subject, Taiwan in the regional market has been termed as a local player, a sub-national market and an intermediary position because of its uniqueness. Future study should focus on how the Taiwanese extend their overseas market while maintaining dominance in their domestic market. Research will find out whether Taiwan will keep its advantages, as a game operator or a game developer, in other Asian markets. In addition, China has become the major player to provide and consume Chinese topic games. Taiwan's gaming industry will incorporate into China's OLG as a either sub-national market or it will make a differentiation and create other types of game, a topic worth studying in the future.

11.6 Conclusion

This research finds that a regional integration has formed in the Asian gaming market, when a commodified process of game product has occurred. The different Asian industries have established cooperative relationship to leverage their strengths as the OLG business requires heavy investment and its investment risk has risen. A

cultural flow of game product can be found in the regional market when Asian users have their preferences. Furthermore, the case study of Taiwan presents an epitome reflecting the changing nature of the Asian OLG industry. The research further explores different relationships of game developers and game operators under the global-regional-local analytic framework and verifies the unique position of Taiwan in the intra-Asian market.

The OLG industry has become a competition arena for capitalists. To maintain their dominant positions, major regional players perform buyouts or other types of integration. With huge capital reserves, international media giants can easily gain the necessary technology and professionals through alliances between other media. Now, multinational co-operations have been observed in the interactive entertainment software industry, such as with French media cooperation *Vivendi* merging with the American *Activision* and *Blizzard*. These cases imply that the regional market could become a part of the global market, sooner or later. The situation may arise that a game product's origin may not be easily identified because the commodified process of game production has become a simplex media system of Japanese concept and Taiwanese design, using Chinese low cost labour, Western marketing and Western capital and Chinese consumption.

Appendix: the breakdown of the 59 interviewees

Listed in the format of:

Informant's number; Name; Occupation; Interview place or interview way, Interview date; Recorded or Unrecorded

Taipei

1). Analyst, commentator and government officer

001, Chu-Hui Lui, Analyst, Institute for Information Industry, Market Intelligence Center (MIC) 22nd Jan 2007, conducted at her office, recorded.

002, Jay Yang, Research Manager, IDC, conducted at his office, 24^h Jan 2007, recorded.

003, Ing-Wei Her, Reporter, Commercial Times, conducted at a coffee shop, 6th and 13th Feb 2007, recorded.

004, Yu-Chung Chung, Director of Digital Content Institute, conducted at his office, 22nd March 2007, unrecorded.

2). Taiwanese game firms

Wayi International Digital Entertainment

005, Robert Huang, Chairman, conducted at a private place, 27th Apr 2007, unrecorded.

006, Ren Ren, CEO, conducted at a private place, 27th Apr 2007, unrecorded.

007, David Huang, CFO, conducted at a private place, 27th Apr 2007, unrecorded.

008, Vera Wu, Product Center/ Director, conducted at her office, 27th Apr 2007, recorded.

009, Natalie Lo, PR Specialist, conducted at her office, 27th Apr 2007, recorded.

Soft-World International Corporation

010, Michael Wu, Director of PR Department, conducted at a private place, 15th Mar 2007, recorded.

012, Hsing Po Chung, CFO, conducted at his office, 27th Apr 2007, unrecorded.

013, Hsin Yu Lin, Manager of Investor Relationship Dept, conducted at her office, 12th Mar 2007, recorded.

014, Chun Po Wang, General manger, conducted at his office, 29th Oct 2008, recorded.

Chinese Games International

015, Eric Chen, Marketing & Operation Dept. Manager, conducted at his office, 6th Mar 2007, recorded.

016, Leu Shyue Sen, CEO, conducted at his office, 3rd Oct 2007, recorded.

Game First International Corporation

017, Marten A. Lee, Manager Marketing & Product Dept, conducted at his office, 18th Apr 2007, unrecorded.

Game Filer

018, Andy Lin, Vice President, conducted at his office, 27th Apr 2007, recorded.

InterServ International

019, Jim S. Tsai, Production VP/ CCO, conducted at his office, 3rd May 2007, recorded.

International Games System

021, Paul Chiang, President, conducted at a news conference, 31st Mar 2007, recorded.

021, Andy Huang, Assistant Manager, conducted at his office, 21st Mar 2007, recorded.

Softstar Entertainment

022, Eric Lee, President, conducted at a news conference, 10th April 2007, recorded.

023, Angus Huang, Assistant to President and Company Spokesman, conducted at his office, 27th March 2007, recorded.

024, Alex Row, R &D Division Assistant Vice President, conducted at a news conference, 24th Jul 2007, unrecorded.

025, Chiu Jung Chun, Project Leader, conducted at his office, 7th May 2007, recorded.

026, Shin-Rei Woo, Music Composer, conducted at a recording studio, 27th March 2007, unrecorded.

XPEC Entertainment

027, Aaron Hsu, Chairman, conducted at his office, 3rd Apr 2007, recorded.

028, Eva Chen, Executive Assistant to CEO, conducted at her office, 3rd Apr 2007, recorded.

029, Wonder Lin, Vice President, Marketing & Business Development, 3rd Apr 2007, conducted at her office, recorded.

Unalis Corporation

030, Fiona Hsiung, Chief Operating Officer, conducted at her office, 12th Apr 2007, recorded.

MacroWel Technology

031, Calvin Lin, General Manager, conducted at his office, 9th Mar 2007, recorded.

Lager Network Technologies

032, Philip Chang, Chairman, conducted at his office, 19th Apr 2007, recorded.

Userjoy Technology

033, Michael Shin, President, conducted at a news conference, 4th Jul 2007, unrecorded.

034, Jacky Chang, Vice General Manager of second division, conducted at his office, 1st Aug 2007, unrecorded.

Gigamedia Limited

035, Judy Kuo, Senior Vice President, conducted at a coffee shop, 12th Apr 2007, unrecorded.

036, Tony Lin, Sales & Marketing Senior Vice President, conducted at a news conference, 20th Sep 2007, unrecorded.

Gamania Digital Entertainment

037, Albert Liu, CEO & Chairman, conducted at a news conference, 26th Jul 2007, recorded.

038, Hank Su, CFO and Spokesman, 3rd Apr 2007, conducted at a coffee shop, unrecorded.

039, Alan Kuo, Chief R&D Office, conducted at a news conference, 12th Sep 2007, unrecorded.

040, V. Huang, Director of second division, conducted at a news conference, 12th Sep 2007, unrecorded.

Taiwan Index Corporation

041, Arnold Ho, COO, conducted at a news conference, 26th Jul 2007, unrecorded.

3). Japanese game firms

Mistwalker

042, Hironobu Sakaguchi, Producer, conducted at a news conference, 25th Apr 2007, unrecorded.

Bandai Namco

043, Yoshinari Mixushima, Art Director at Content Production Headquarters, conducted at Digital Content Institute, 30th Jul 2007, unrecorded.

Collabo

044, Yoji Kawaguchi, Managing director, conducted at Digital Content Institute, 20th March 2007, recorded.

Signal Talk

045, Takafumi Kaya, CEO, conducted at Digital Content Institute, 20th March 2007, unrecorded.

4). Korean game firms

Webzen

046, Coco Chen, Senior Assistant Manager, conducted at a coffee shop, 7th May 2007, unrecorded.

NHN Games Corp

047, Kim Byoung Gwan, CEO, conducted at a news conference, 26th Jul 2007, unrecorded.

5) US and European game firms

Blizzard

048, Shane Dabari, Producer, conducted at a news conference, 8th Feb 2007, unrecorded.

Digital Bros

049, Rami Galante, CEO, conducted at a news conference, 9th Feb 2007, unrecorded.

050, Sem Moioli, Director, conducted at a news conference, 9th Feb 2007, unrecorded

Beijing

1). Commentator

Oak Pacific International

051, Wang Le, Section Producer, conducted at a coffee shop, 15th May 2007, recorded.

2). Chinese game firms

Beijing Perfect World

052, Li Hai Yi, Oversea Dept Manager, conducted at a coffee shop, 13th May 2007, unrecorded.

Kingsoft

053, Liu Wei, Director of Human Resources, conducted at his office, 16th May 2007, unrecorded.

054, Bruce Ren, Chief Operating Officer, conducted at his office, 16th May 2007, unrecorded.

055, Lan Yu, CEO, local operator, conducted at a coffee shop, 13th May 2007, unrecorded.

Shanghai**1). Commentator****China popular computer week**

056, Frank Xing, Senior editor, conducted via Skype, 27th May, recorded.

2). Chinese game firms**Shanda**

057, Confidential, Manager, conducted at a coffee shop, 20th May 2007, unrecorded.

Zengtu

058, Wang Ya, conducted via e-mail, 4th Jun 2007.

3). Korean game firm**Webzen**

059, Scott Lee, Vice President, conducted at his office, 22nd May 2007, unrecorded.

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<http://www.digitalcontent.org.tw/Eng/guidebook.php> (accessed Apr, 2008).

6. Game portal websites

Taiwan

Chinese Gamer: <http://www.chinesegamer.net/>
Gamania: <http://tw.gamania.com/>
Game File: <http://www.gameflier.com/company/index.asp>
International Games System: <http://www4.gametower.com.tw/index.aspx>
Interserv: <http://www.interserv.com.tw/>
Larger: <http://member.lager.com.tw/>
MacroWel: <http://www.omg.com.tw/>
Softstar: <http://www.softstar.com.tw/index.aspx>
Soft World: <http://www.soft-world.com/>
Unaliss: <http://www.gump.com.tw/>
Userjoy: <http://www.uj.com.tw/uj/index.aspx>
Wayi: <http://www.wayi.net/>
Xpec: <http://www.xpec.com.tw/>
Other related sources
Gamer: <http://www.gamer.com.tw/>
UDN: <http://mag.udn.com/mag/dc>

China

Kingsoft: <http://www.kingsoft.com/>
Perfect World: <http://www.wanmei.com/>
Shanghai Giant: <http://www.ztgame.com/>
Shanda: <http://www.snda.com/>
The9: <http://www.the9.com/>
Netease: <http://www.163.com/>

South Korea

Gravity: <http://www.gravity.co.kr/>
NC soft: <http://ncsoft.net/global/>
SonoKong: <http://eng.sonokong.co.kr/>
Webzen: <http://webzen.com/>

Japan

Koei: <http://gamecity.koei.com.tw/>
Nintendo: <http://www.nintendo.com>

US

Blizzard Entertainment: <http://www.blizzard.com/us/>
Electronic Arts: <http://www.ea.com/>

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Economic Daily (2005) 1st Jan.
Economic Examiner (2007) 9th May.

Economic Examiner (2007) 25th May.
Economic Examiner (2005) 20th August.
Xinghau news agency (2007) 4th June
Xinghau news agency (2007) 11th July.