

# MARKET SHARE COMPETITION IN THE CHINESE ONLINE GAME INDUSTRY

QUN REN

Thesis submitted in partial fulfilment of the requirements of the Business School of Bournemouth University for the degree of Doctor of Philosophy

July 2010

The Business School

**Bournemouth University** 

# **COPYRIGHT STATEMENT**

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and due acknowledgement must always be made of the use of any material contained in, or derived from, this thesis.

### Abstract

This study investigates the impacts of pricing innovations and other non-pricing dimensions on the market share competition of dominant Chinese online game companies. The empirical context of my research is the strategic behaviour of online game operators (i.e. the companies who operate online games) in the Chinese online game market – the most active market in the world with strong network effects.

According to the literature review, previous pricing studies have focused mainly on the evaluation of traditional pricing theories and their limited validity for the information economy. Velu (2005) pointed out how dominant firms in a market with strong network effects adopt business innovations to sustain their market dominance. This study first investigates the validity of Velu's theory and then aims to develop and expand the theory of pricing practice by discussing how dominant companies integrate pricing and other non-pricing dimensions during market share competition. With the application of an analytical synthesis, this study covers large parts of the traditional economy and information economy literature by linking the concepts of 'within' and 'across' theories of pricing and competition. It finally brings together different theories and adopts Bouwman and MacInnes' virtual web idea as an original conceptual framework to give an insight into how the pricing process and other internal and external factors impact differently on the market share competition.

The study adopts a descriptive multiple-case study strategy including five dominant Chinese online game companies and employs qualitative data collected from 64 interviewees and reliable secondary data from documentations and archival records.

III

The findings suggest that, instead of devoting all their efforts to pricing innovation, the companies have turned to an exploration of their internal resources to enhance their competitiveness. Superficially, as an influential external factor, government regulations have constrained the operation of imported games. The study also discusses two internal themes that influence each company's competitive strength. They are: how to deal with the exodus of talent and how to handle strategic alliance management.

There seems to be no previous research concerning the relationship between pricing innovation and market dominance within a new economy's service sector. As a consequence, this research should provide insights into this academic blind spot and rationalize the diversity of strategic theory within the specific industry.

# List of Contents

Abstract	III
List of Contents	v
List of Tables	XIII
List of Figures	XV
Abbreviations	XVII
Acknowledgement	XVIII

# **Chapter 1 Introduction**

1.1 Background to the Research	1
1.2 Overview of the Global Online Game Industry	3
1.2.1 Global Video Game Industry and its Growth	3
1.2.2 Introduction of the Chinese Online Game Industry	6
1.3 Pricing in the Online Game Industry	9
1.3.1 The Significance of Pricing	10
1.3.2 The Link between Market Share and Pricing	11
1.4 Research Aim and Objectives	12
1.5 Research Approaches Adopted in This Study	14
1.6 Thesis Structure	15

# **Chapter 2 Literature Review**

2.1 Introduction	17
2.2 Pricing in the Traditional Economy	17

2.2.1Traditional Pricing under Different Forms of Market Structures	17
2.2.2 Relevant Traditional Pricing Theories	19
2.2.3 Concept Ambiguity in the Traditional Economy	21
2.3 Limitations of Traditional Pricing Theories	22
2.3.1 Emergence of the Information Economy	22
2.3.2 Related Concept Confusion around Business Model	25
2.4 Related Theories Developed for the Information Economy	25
2.4.1 Key Factors in the Information Business Competition	26
2.4.2 Differences between Virtual World Economy and Physical Economy	28
2.4.3 Online Game Pricing	30
2.5 Theory of Integration -Theoretical foundation for This Study	33
2.5.1 Theory put forward by the UK Department of Trade and Industry	35
2.5.2 Bouwman and MacInnes's Value Web Framework	37
2.5.3 Summary of the External Factors and Internal Factors	39
2.5.4 Development of the Original Conceptual Framework	44
2.6 Other Important Concepts in the Business Competitiveness Study	46
2.6.1 Market Share and Business Competitiveness	46
2.6.2 Porter's Theory of Uncertainty	49
2.6.3 Social Value	50
2.7 A Review of Human Resource Management Theory	52
2.8 Strategic Alliance Management Theory and Related Weakness	54
2.9 Governmental Policy Support on the Online Game Industry	55
2.9.1 Wi's Theory on the Korean Government Policy	55
2.9.2 The Role of Chinese Government	56
2.10 Summary	57

# Chapter 3 Market Share Competition and Chinese Online Game Operators' Pricing Innovation

3.1 Introduction	58
3.1.1 Velu's Propositions	58
3.1.2 Chinese Online Game Market –Ideal Context for Testing Velu's Propositions	59
3.2 Market Share Dynamics in the Chinese Online Game Market	59
3.2.1 Market Share Competition in 2003-2005	60
3.2.2 Market Share Competition in 2006-2009Q2	60
3.3 Pricing Strategy Innovation in the Chinese Online Game Market	62
3.3.1 Less Dominant Companies' Pricing Innovation in 2004- 2009 Q2	62
3.3.2 Dominant Companies' Pricing Model Innovation in 2004-2009 Q2	64
3.4 Pricing Innovation Impact on Game Operators' Market Share Competition	67
3.4.1 Majority of Less Dominant Online Game Companies - Passive Followers	68
3.4.2 Pricing Innovation and Dominant Companies' Market Share Competition	69
3.5 Summary	70

### **Chapter 4 External Factors Influencing the Market Share Competition**

4.1 Introduction	71
4.2 Market Changes	72
4.2.1 Competitions between Rivals	72
4.2.2 Customer Demand	77
4.2.3 Influences from the Social Concerns	78
4.3 Technology	80
4.3.1 Technical Infrastructure- Efforts by the Chinese Telecom Industry	80

4.3.2 Broadband Development in China	81
4.4 Chinese Government Regulations	82
4.4.1 The Development Internet Cafes' and Government Regulations	83
4.4.2 Chinese Online Games' Policy Environment	84
4.5 Summary	85

# Chapter 5 Research Methodology

5.1 Introduction	87
5.2 Research Philosophy and Strategy	87
5.2.1 Positivism and Interpretivism	87
5.2.2 Inductive Approach and Deductive Approach	88
5.2.3 Combination of Inductive Approach and Deductive Approach	89
5.3 Research Design	89
5.3.1 Relationship of Research Design and Research Methods	90
5.3.2Case Study Design in this Study	90
5.4 Data Collection	92
5.4.1 Qualitative Interviews Adopted in this Study	90
5.4.2 Secondary Information	96
5.4.3 Synchronous Online Audio and Video Interview Application	96
5.5 The Use of Template Analysis	97
5.5.1 Producing the Initial Template	98
5.5.2 Interpreting and Presenting Template Analysis	102
5.6 Summary	105

# Chapter 6 Findings from the Five In-depth Case Studies

6.1 Findings: Case Study of Shanda	106
6.1.1 Internal Factors and Shanda's Market Share Competition	106
6.1.2 External Factors and Shanda's Market Share Competition	126
6.1.3 Government Regulations' Impact	129
6.1.4 Discussion of the Shanda Case Study	131

6.2 Findings: Case Study of NetEase	133
6.2.1 Internal Factors and NetEase's Market Share Competition	133
6.2.2 External Factors and NetEase's Market Share Competition	140
6.2.3 Government Regulations' Impact	142
6.2.4 Discussion of the NetEase Case Study	144

6.3 Findings: Case Study of The9	147
6.3.1 Internal Factors and The9's Market Share Competition	147
6.3.2 External Factors and The9's Market Share Competition	155
6.3.3 Government Regulations' Impact	156
6.3.4 Discussion of The9 Case Study	157

6.4 Findings: Case Study of Giant	159
6.4.1 Internal Factors and Giant's Market Share Competition	159
6.4.2 External Factors and Giant's Market Share Competition	168
6.4.3 Government Regulations' Impacts	169
6.4.4 Discussion of the Giant Case Study	170

6.5 Findings: Case Study of Perfect World	1	172
---	---	-----

6.5.1 Internal Factors and PWRD's Market Share Competition	172
6.5.2 External Factors and PWRD's Market Share Competition	181
6.5.3 Government Regulations' Impact	183
6.5.4 Discussion of the PWRD Case Study	183

6.6 Summary	
-------------	--

# Chapter 7 Cross-case Comparisons, Unexpected themes and Revised Conceptual Framework

7.1 Introduction	185
7.2 Revising the Template	185
7.3 Results of Cross Case Comparison	190
7.3.1 Differences between the Impacts of 'Product'	190
7.3.2 Differences between the Impacts of 'Pricing Innovation'	195
7.3.3 Differences between the Impacts of 'Organizational Structure'	196
7.3.4 Differences between the Impacts of 'Government Regulations'	197
7.3.5 Discussion	200
7.4 Unexpected Theme 1- Exodus of Talent	201
7.4.1Reasons for Talent Exodus	201
7.4.2 HR Problems in the Chinese Online Game Industry	203
7.5 Unexpected Theme 2 - Strategic Alliance Management	205
7.5.1 Have Foreign Online Games Lost their Competitive Advantages?	207
7.5.2 Failure Reasons of Foreign Games' Operation in China	208
7.5.3 Foreign Game Companies' Efforts	212
7.6 The Revised Conceptual Framework	215

7.7 Summary	·	217
-------------	---	-----

# **Chapter 8 Conclusions**

8.1 Introduction	219
8.2 Overview of Findings	219
8.3 Critical Evaluation	220
8.3.1 Derivation of the Revised Conceptual Framework	220
8.3.2 Justification for the Qualitative Data Collection	221
8.3.3 Justification for the Synchronous Online Audio and Video Interview Application	223
8.3.4 Justification for Data Analysis Technique	225
8.4 Contributions for Practice	225
8.4.1 Implications for Policy Makers in the Chinese Government	225
8.4.2 Implications for Chinese Online Game Companies	231
8.5 Research Contributions	235
8.6 Limitations of this study and Directions for future Study	237

<b>References</b>	239
-------------------	-----

# Appendices

Appendix 1 Interviewee details	256
Appendix 2 Interview Guide 1	258
Appendix 3 Interview Guide 2	261
Appendix 4 Pre-interview Email	263
Appendix 5 List of Codes	264
Appendix 6 Example of the Interview Transcript	266

Appendix 7 Examples of Coding: Internal Technology in Game Development	270
Appendix 8 List of Publications	282

# List of Tables

Table 1.1 Global Online Game Revenues 2006-2011	5
Table 1.2 Asia Online Game Market Share in 2006	6
Table 1.3 Online Game Types in China in 2007	9
Table 2.1 The Shift from the Industrial to the Information Age	24
Table 2.2 Changes of the Chinese People	41
Table 3.1 Velu's Theory in the Relationship between Revenue Model and Market Dominance	59
Table 3.2 Top 5 Chinese Online Game Operators' Total Market Size 2003-2006	60
Table 3.3 Top 1-5 Chinese MMORPG operators Market Share Rankings 2005-2009 Q2	61
Table 3.4 When and How Less Dominant Chinese Online Game Companies Innovated their Pricing and Related Market Share Change(s)	63
Table 3.5 When and how dominant Chinese online game companies innovated (2005-2008)?	67
Table 3.6 Dominant MMORPG Operators' Market Share Change(s) before and after their Pricing Innovation (2005-2009 Q2)	69
Table 4.1 IPO Time of Online Game Companies in 2007	74
Table 4.2 Management Team of LineKong	76
Table 5.1 Interviewee Information in this Study	94
Table 5.2 Initial Template Theme Sources for this Study	98
Table 5.3 Effect Matrix: Impacts of Internal and External Factors on Target Company's Market Share Competition	104
Table 6.1 Impacts of Internal and External Factors on Shanda's Market Share Competition	131
Table 6.2 Market Share Comparison between Shanda, NetEase and The9 (2005Q4-2007Q1)	141
Table 6.3 Impacts of Internal and External Factors on NetEase's Market Share Competition	145
Table 6.4 Impacts of Internal and External Factors on The9's Market Share Competition	158
Table 6.5 Giant Market Share Dynamics in the Chinese Online Game Industry (2007Q3-009Q2)	165

Table 6.6 Impacts of Internal and External Factors on Giant's Market Share Competition	170
Table 6.7 Launching Time and Pricing Model Adoption of PWRD Online Games	175
Table 6.8 Perfect World Market Share in the Chinese Online Game Industry (2008Q1-2009Q2)	176
Table 6.9 Impacts of Internal and External Factors on PWRD's Market Share Competition	184
Table 7.1 Key Analytical Summary from Five Case Studies	191

# List of Figures

Figure 1.1 Worldwide Computer Games Market 2005	5
Figure 1.2 Market Scale of Chinese online games 2003-2012	7
Figure 2.1 Framework for Virtual Worlds Research	29
Figure 2.2 The Commercial Development of the Information Economy	36
Figure 2.3 Dynamic Business Model Framework (2006)	38
Figure 2.4 Dynamic Business Model Framework (2009)	39
Figure 2.5 The Original Conceptual Framework- Impact of Internal and External Factors on a Dominant Chinese Online Game Company's Market Share Competition	46
Figure 2.6 Chinese Online Game Pricing Models: Time Based and Item Based (2006-2011)	49
Figure 2.7 Maslow's Hierarchy of Human Needs	53
Figure 3.1 Pricing Strategies adopted by Top 15 Chinese Game Operators in 2008	65
Figure 3.2 Market Share of Time-based Games in China in 2008	66
Figure 3.3 Market Share Trend of Top Chinese online Game Companies (2006-2009 Q2)	70
Figure 4.1 Top 15 Chinese Online Game Companies' Market Size Allocation in 2008 Q2	77
Figure 4.2 Total Broadband Subscribers by Country 2008 Q3	81
Figure 4.3 Internet Penetration Rates of Some Countries in 2009	82
Figure 4.4 Broadband Users in China 2007-2008	82
Figure 4.5 Regular Structure and Interest Groups in China's Online Game Industry	85
Figure 5.1 Process of Deduction	88
Figure 5.2 Inductive Model of Research in a Qualitative Study	88
Figure 5.3 Case Study Methods adapted from Yin	91
Figure 5.4 The Initial Template for the Study of "Market Share Competition in the Chinese Online Game Market"	101
Figure 6.1 Shanda Revenue and Operating Income (2005-2007)	115

Figure 6.2 Sources of NetEase Revenues (2005Q4-2008Q4)	134
Figure 6.3 NetEase Online Game Revenues (2005Q4 - 2008Q4)	136
Figure 6.4 Market Share Comparison of the Top Companies in the First Quarter of 2007	142
Figure 6.5 The9's Revenue Share (2005-2007)	148
Figure 6.6 The9's Revenue and Operating Income (2005-2007)	155
Figure 7.1 Processes of Constant Development towards the Initial Template	187
Figure 7.2 The Revised Template for the Study of "Market Share Competition in the Chinese Online Game Market"	189

Figure 7.3 Revised Conceptual Framework –Impact of Internal and External Factors on a 216 Dominant Chinese Online Game Company's Market Share Competition

# Abbreviations

ADS	American Depository Share
APRC	Asia Pacific Research Positioning Ltd
CAGR	compound annual growth rate
CCP	Chinese Communist Party
CNNIC	China Internet Network Information Center
CYLC	The Communist Youth League of China
DiGRA	Digital Game Research Association
ESRB	Entertainment Software Rating Board
GAPP	The General Administration of Press and Publication
GDP	Gross Domestic Product
IPO	Initial Public Offering
KOGIA	Korea Game Industry Agency
MII	the Ministry of Information Industry
MMOG	Massively Multiplayer Online Games
MMORPG	Massively Multiplayer Online Role Playing Games
MOCG	Multiplayer Online Casual Games
MoC	The Ministry of Culture
NHS	National Health Services
NTT	Nippon Telephone and Telecommunications
OECD	Organisation for Economic Co-operation and Development
OGAAP	Online Games Alliance against Piracy
OTP	One-Time Password
PCU	Peak Concurrent Users
SAIF	the Softbank Asia Infrastructure Fund
RMT	Real-money trade
WTO	World Trade Organization

### Acknowledgement

I would like to thank my PhD supervisor Professor Philip Hardwick for his excellent guidance, continuous encouragement and support at Bournemouth University. Throughout my PhD study, Philip has been my most inspiring advisor, mentor and friend.

I would like to thank Professor Allan Webster and Professor Martin Kretschmer for their insightful advice, ideas and comments which are so helpful in the completion of the thesis. I owe special thanks to Dr Denise Tsang and Dr Lily Sun from the University of Reading and Dr Alan Ellerton, for their inspiration and encouragement which raised my interest in IT Management. I also wish to thank Mrs Denise George, Mrs Kristie Funnekotter and Mrs Emily Cieciura for their administrative and emotional support.

I would like to thank my parents Professor Qilin Ren and Mrs Yanbo Yang, my husband Dr Xiaosong Yang and my daughter Jenny Yang. I am enormously grateful to them for their love throughout and constant support.

Finally, I will say thanks to God for leading me to concentrate on my research and enjoy it. Without him, I know I would not have been capable of completing the thesis on time.

### **Chapter 1 Introduction**

#### **1.1 Background to the Research**

Pricing is generally recognized as being at the root of company philosophy and a company can be seen either as a price taker or price maker whose attitude to pricing may be passive or active (Winkler 1983; Gabor 1988). In the discipline of marketing, product, price, promotion and place (i.e.4Ps) are often referred to as the key elements in the marketing mix. It is generally recognized that among the 4Ps, only price generates income directly while the rest involve cost (Nimer 1970; Fletcher and Russell-Jones 1997; Nojima 2007). That is why in the competition for customers, companies always utilize price as a tactical weapon since the effects of price are "more immediate and direct, and appeals based on price are the easiest to communicate" (Rao 1984). Similarly, the contention that pricing is a critical factor in an organization's market share competition is underscored by empirical study in different regional and global markets among different traditional industries, such as the airline industry, the retail industry and import and export industries (Chintagunta and Desiraju 2005; Skitmore and Smyth 2007). If the price is not right (i.e. too cheap or too dear), all the merchandising efforts might be wasted, leading to newproduct failure or even a decrease in the entire industry's profitability (Gabor 1988, p.3; Simon 1992). If prices are too cheap, sales may not suffer, but the profit accrued by the producer certainly will. If they are too dear, sales will almost certainly suffer, and profits will also fall (Fletcher and Russell-Jones 1997). In these terms, more and more companies realize that "price is a dangerously explosive and complex variable" (Oxenfeldt 1973, p.49) and its importance and complexity merit strategic attention (Dutta et al., 2003). Not satisfied with research that concentrated on pricing in the traditional economy, Nojima (2007) identified the key role of pricing in the digital economy by examining the pricing models for intangible goods in massive multiplayer online games. Furthermore, he maintained that the value of intangible digital content tends to vary widely depending on each consumer, although this has rarely been noticed by other scholars, and he emphasized that online game companies should account for the value that consumers perceive when setting their pricing strategy for intangible content.

Apart from the importance of price setting, pricing decisions are the most difficult to make in marketing as the company may 1) be subject to government regulations, 2) be controlled by a price leader, 3) be as a distributor or 4) lack kinds of resources needed. All the above reasons are interrelated and constrained with each other, and can even vary between different pricing

situations within the same company (Dorward 1987, p.1). In addition, environmental pressures such as technological advancement, customers' increased demand for services and changes in the legal and marketing context may affect the delicacy, complexity and importance of pricing. Previous studies indicate that a great deal of academic research has been focused on the issues of company pricing policy; in particular, on how customers exchange value for benefit, the pricing decision process and analysis of the nature of the price variable and oligopoly pricing (Farley *et al.*, 1980; Thaler 1985; Busby and Pitts 1997).

Although the above mentioned literature can have some implications for organizations' price decision-making, little academic attention has been paid to pricing in managerial practice since few organizations seem likely to implement advice advocated by the pricing literature. Oxenfeldt (1973) regarded it as a 'gap between pricing literature and practice." Bonoma *et al.* (1988, p.359) point out that, instead of identifying the complexity of price during the previous pricing study, scholars used to consider it as a single number. Besides, the dearth of published work on pricing (Silberston 1970) has failed to win recognition in practice and does not offer enough advice to practitioners (Simon 1982, Ingebleek 2007). Nevertheless, this does not mean that little work has been done that is relevant to pricing practice. In fact, researchers from different disciplines have from time to time contributed to the stream of research (Zaribaf 2008; Vinod *et al* 2009; Piercy *et al.* 2010). Unfortunately, a lack of integration across these different disciplines and across time has created a fragmented perspective on the organizational context of value-informed pricing (Ingenbleek 2007).

Three decades ago, Monroe and Della Bitta (1978, p.413) stated that " a lack of descriptive research on pricing practice" can partly explain " the lack of creative development of new approaches to solve marketing problems". They then called for more qualitative research and more descriptive case studies on pricing, which gained support from Ingenbleek (2002, p.161-162).

Diamantopoulos (1991, p.137) attributed the limited progress of pricing study to the misdirection of conventional pricing theory which "stimulated a search for end-state, universalistic and categorical explanations rather than contextual factors in an attempt to identify and explain variations in practices" while the company policy problems should have to resort to the study of inter-firm and intra-firm variations in pricing with the analysis of data collected at multiple organizational levels.

With the aim of achieving mature theoretical pricing, Dutta *et al.* (2003) made efforts to overcome the above limitations. Their main contribution is the development of a resource-based perspective of the process by which prices in companies are determined. They suggest that pricing is a capability "which involves both capturing value and balancing competing interests within the firm". Their conclusion is that value-creating- resources firms should compete by investing in value-capturing resources. Following this resource-advantage theory, Ingenbleek (2002, p.151) also explored how firms can develop successful pricing practice. He deducted that "value extraction is rooted in value creation except in markets with high demand uncertainty. In these markets capturing value is rooted in customer orientation."

The significance of pricing study is rooted in the general company philosophy and is manifested in the study of the online game market, the increasingly popular Internet-based entertainment and service sector. Nojima (2007, p.672) clarifies that, the pricing strategy needs to be revised to explain various price models for digital content, such as online games. Therefore, Section 1.2 is a brief introductory profile of the Chinese online game market and Section 1.3 reinforces the importance of pricing in this area.

#### **1.2 Overview of the Global Online Game Industry**

A video game is a game that involves interaction with a user interface to generate visual feedback on a video device.<sup>1</sup> The video games emerged in the late 1970s. The electronic systems used to play video games are known as platforms. These platforms range from large computers, video game consoles<sup>2</sup> to small handheld devices. An arcade game is a kind of special game which is usually played in restaurants, pubs, video arcades and the game device is a coin-operated entertainment machine. While previously common, arcade games have gradually declined in use.

#### 1.2.1 Global Video Game Industry and its Growth

The video game industry spans the globe and is forecast to be one of the above-average growth segments of the consumer electronics and global entertainment industries through 2011 (see Figure 1.1). Over the last ten years, the computer and video game industry's sales growth has almost tripled and now rivals the film industry. Pricewaterhouse Cooper also predicts that with a compound annual growth rate of 9.1%, between 2007 and 2011, the global video game market

<sup>&</sup>lt;sup>1</sup> AskOxford: video game. Oxford University Press, retrieved on 2007-10-30.

<sup>&</sup>lt;sup>2</sup> The term "video game console" is used to distinguish a machine designed for consumers to buy and use solely for playing video games from a personal computer, which has many other functions, or arcade machines, which are designed for businesses that buy and then charge others to play.

will be valued at \$48.9 billion in 2011. For instance, in 2005 in the USA, it had sales of \$7 billion in comparison with US box office sales of \$8.99 million (Entertainment Software Association 2006). In the UK, game sales of £1.7 billion surpassed music sales of £1.4 billion in  $2007^3$ .

Next generation console games and rapid growth in online and wireless games is sustaining the video game market.<sup>4</sup> " I think the industry has become much more generally accepted as a mainstream form of entertainment over the last couple of years, and that sets it up well for future expansion," said NPD analyst Anita Frazier (Ortutay, 2008). Much of this growing acceptance has been attributed to Nintendo's Console Game Wii and DS. Fuelled by the success of Nintendo's Wii and Microsoft's "Halo 3," more video games were sold in the U.S. in 2007 than in any other year. The total video game sales grew 43 percent, up from \$12.53 billion in 2006 to \$17.94 billion in 2007 (Ortutay 2008)<sup>5</sup>.

Although console and PC based games dominate the market and account for 90% of the market by value, online and wireless games are the fastest growing segments (OECD 2006). Since the introduction of broadband, online games have become an expanding part of the video game industry. Figure 1.1 shows the global market share of different digital game types, which indicates that both online and wireless games have been growing faster and increasing their market shares significantly<sup>6</sup>.

Online games are games played over some form of computer network, which has developed from the initial hard wired terminals, to modems, then to the Internet. Online games can range from simple text-based games to games incorporating complex graphics and virtual worlds populated by many players simultaneously. Many online games have associated online communities, making online games a form of social activity beyond single player games. For instance, in Massively Multiplayer Online Role Playing Games (MMORPG), more than a thousand players can play simultaneously on each server.

<sup>&</sup>lt;sup>3</sup> The data is available from http://www.gamedaily.com/articles/news/report-game-sales-blow-past-music-in-uk/?biz=, written by James Brightman, Accessed 14 August, 2008

<sup>&</sup>lt;sup>4</sup> The data is available from: Global entertainment and Media Outlook 2007-2011, by PricewaterhouseCoopers Consultancy.

<sup>&</sup>lt;sup>5</sup> The data is available from: http://www.msnbc.msn.com/id/22718374/, written by Barbara Ortutay, with the title of Nintendo tops video game sales in 2007, Success of Wii and 'Halo 3' drive record \$17.94-billion year

<sup>&</sup>lt;sup>6</sup> The data is available from: http://www.itu.int/WORLD2006/forum/Digital\_Content.pdf.

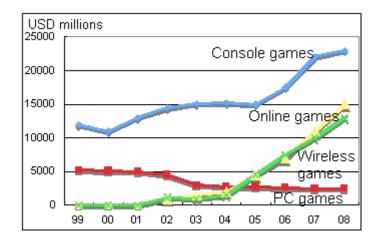


Figure 1.1 Worldwide Computer Games Market 2005 (OECD, 2006)

#### Forecast of Global Online Game Market (2007-2011)

According to the latest Strategy Analytics outlook, the global online games market generated \$5.2 billion in 2007 and is projected to grow with a compound annual growth rate (CAGR) of 25.2% in the 2007-2011 forecast period to reach \$ 11.8 billion by 2011, approximately double the total games software market in 2007<sup>7</sup> (see Table 1.1) and account for of the whole video game market.

Global Online Games	2006	2007	2008	2009	2010	2011	CAGR
Total US\$ (billion)	3.82	5.15	6.92	8.85	10.56	11.75	25.2%

"The main driver for sustained growth in the online games market will be the continued uptake of broadband services around the world", said David Mercer, principal analyst at Strategy Analytics (Strategy Analytics, 2007). "Additionally, the very lucrative revenues opportunity in both the massively multiplayer segment and the electronic sell through market will continue to attract new entrants into the online games market."

Over the past ten years, Japan and Korea have been the global centers for online game production. The investigation from InfoCom 2008 showed that in 2007, 50% of the global online game revenues were generated in Asia, while North America accounted for 30% and Europe 20%<sup>8</sup>. China has transformed its role from the biggest consumer of imported games into

<sup>&</sup>lt;sup>7</sup> The data is available from: http://www.marketingcharts.com/interactive/online-games-to-generate-one-third-of-game-revenues-by-2011-1736/ with the title of: Online Games to Generate One-Third of Game Revenues by 2011 <sup>8</sup> The data is available in March 2008, from: http://www.totaltele.com/View.aspx?ID=9541&t=1, with the title of : Asia generates half online game revenues, written by InfoCom GmbH

a game producer since 2006. In 2006, Asia's online game market totalled around \$3 billion, of which 32 percent was generated from Korea, 33 percent from China, 27 percent from Japan and 8 percent from other countries (see Table 1.2).

Country or Area	Market Share
Korea	32%
Japan	27%
China	33%
Other countries	8%

Table 1.2 Asia Online Game Market Share in 2006 (KPMG<sup>9</sup>, 2007)

In 2005, the Asia Pacific online game market (excluding Japan) reached USD 1.45 billion and is expected to be at least \$6 billion in 2010<sup>10</sup>. The online video game market is becoming one of the big drivers of telecommunications and IT services growth, particularly in China where the growth in subscribers is now paralleling the growth in the Internet and mobile subscriber markets. Online games are already one of the big drivers of the entertainment industry, and poised to be the big area of industry growth over the next decades. The combination is producing a profound set of challenges as well as the industry struggles to find business models that work appropriately across the converging entertainment and communications sectors.

#### **1.2.2 Introduction of the Chinese Online Game Industry**

Software piracy is rampant in China. In terms of this, many foreign game companies have been reluctant to enter the country's market with single player or console games. Nintendo <sup>11</sup>claimed in February 2008 that China remains the main source of manufacturing pirated Nintendo DS and wij games. This has resulted in its refusal to release any original products in the country.

Apart from the piracy problems, the other reason is expense difference. A user might spend \$40 on a year's worth of online gaming, rather than spending hundreds on a console system and games to go with it.<sup>12</sup> Instead, since the early 2000s, the subscription-based revenue model has enabled Massive Multiplayer genres of games to avoid software piracy. As mentioned in Section 1.2.1, the incomes of the online game operators depend on selling titles from subscription fees and virtual-item sales rather than the purchase price of the title itself. Also,

<sup>&</sup>lt;sup>9</sup> KPMG is a global network of professional firms providing audit, tax, and advisory services, with an industry focus. It has more than 123, 000 people worldwide.

<sup>&</sup>lt;sup>10</sup> The data is available from: The video games market in China: Moving online, KPMG, 2007

<sup>&</sup>lt;sup>11</sup> The data is available from: "Nintendo Asks U.S. to Address Video Game Piracy Problems Worldwide"., available from: http://www.gameinfowire.com/news.asp?nid=11713

<sup>&</sup>lt;sup>12</sup> The data is available from: ET, 2007, *Market Spotlight: Chinese Online Gaming*, Available from: http://news. moneycentral.msn.com/ticker/article.aspx?Feed=AP&Date=20071214&ID=7945513&Symbol=US:SNDA

with the possession of the second largest base of internet subscribers in the world, China's online game industry has developed rapidly with the internet popularity and government support. According to the report of CNNIC (China Internet Network Information Center), the revenues of Chinese online game industry are RMB 05.7 billion<sup>13</sup>, which accounts for half of the total revenues of China's internet service industry<sup>14</sup> (CNNIC 2008b).

#### Not Much Negative Sign under the Financial Crisis

The statistics of iResearch show that revenues generated in the Chinese online game market reached RMB 20.8 billion in 2008 with an increase of 52.2% year on year. It is expected that the growth rate of the online game market will continue growing at 20% or more each year before 2012 (iResearch 2008)<sup>15</sup>.

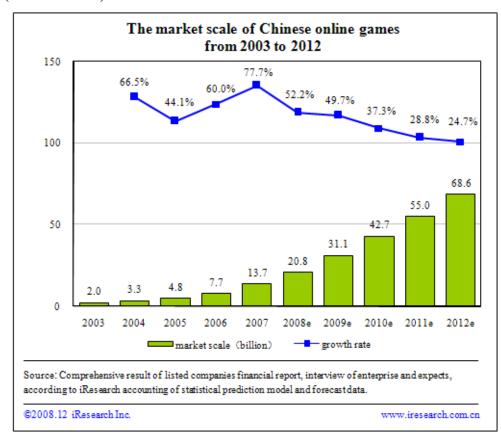


Figure 1.2 Market Scale of Chinese online games 2003-2012 (iResearch, 2008)

<sup>&</sup>lt;sup>13</sup> The data is available from: http://news.xinhuanet.com/internet/2008-02/20/content\_7633921.htm, Newspaper of Communication and Information, Feb 20, 2008

<sup>&</sup>lt;sup>14</sup> Internet service in China include: basic internet access services (Internet Service Operators, or ISPs) and application services, such as on-line advertising, web portals, search engines, instant messaging, internet games, weblogs (or blogs), and b2b (business to business) and c2c (consumer to consumer) electronic commerce, etc.

<sup>&</sup>lt;sup>15</sup> The data is available from: http://english.iresearch.com.cn/views/Digital\_Entertainment/DetailNews.asp?id=9014

However, it is almost impossible to increase more rapidly. iResearch predicts that the whole revenues of Chinese online games will reach RMB 68.6 billion in 2012.

#### **Online Game Types in China**

The electronic game industry in China is principally divided into two segments: online games and offline games. Online games refer to games that are played on devices that can access on the Internet, generally through a broadband connection. They can be played individually or in large groups of players from different locations simultaneously in the same game which enables them to interact in a game world. Downloading of certain software is usually required in order to access the game and players from different locations can play a game together. Offline games refer those games that do not require an Internet connection to play, including personal computer, console and handheld games. Online games in China are broadly classified into two general categories: 1) Massively Multiplayer Online Games (Including Massively Multiplayer Online Role Playing Games, or MMORPGs), and 2) Online Casual Games.

#### • What are MMORPGs and how to play?

One NetEase MMORPG game is used as an example here. MMO games can be accessed from any location with an Internet connection by registered users of the NetEase website. Game players may enter the NetEase network with a password and a user-ID, after downloading the NetEase's installation software or buying such software on a CD-ROM.

Game players select a character (or avatar) when they begin the play. The avatars can be hunters, traders, miners, healers, knights... etc. The avatar can enhance itself with weapons, food and money which indicate different levels of skills and abilities, all of which may be carried over into subsequent gaming sessions. Game players usually develop their characters according to the options they choose within the construction of the game. The games are continuous, and players accumulate features, advance in levels and communicate with other game players that are playing on the same network server through instant messaging or chatting features. The interactive and group-oriented nature of MMORPGs creates a sense of community among users and game players usually form groups to design strategies so as to achieve collective objectives. The large size of MMORPG's user base contributes to user loyalty and helps to attract new users.

8

• What are online casual games?

Multiplayer Online Casual Games (MOCG) are online computer casual games in which a number of players interact with one another in a virtual world and are usually pitted against each other in a friendly, dynamic, and fun competition. By comparison, casual games usually have a few simple rules which make it easy for a new player to begin playing the game in just minutes. They require no long-term time commitment or special skills to play, and there are comparatively low production and distribution costs for the producer. In addition, the casual game market is becoming further diversified. Music games, sports games and electronic sports games are all active in the Chinese online casual game market. Table 1.3 shows the types of Massive Multiplayer Online Game classification in China in 2007.

Game Type	Game Number	Game Number of Each Type /Total Game Number
Strategy Game	5	2%
Massive Multiplayer Role Playing Game	142	71%
Education Game	1	Less than 1%
Racing	5	2%
Shooting	7	3%
Sports Ball Games	4	2%
Online Platform	30	16%
Music and Dancing	8	4%

Table 1.3 Online Game Types in China in 2007 (CNNIC, 2008)

Nowadays, the online game industry is dominated by realistic style games such as *World of Warcraft (or WoW)* and *EQ2* which feature relatively adult graphics and target male adults. Other MMOGs feature cartoon style graphics which target younger and female game players in the Western countries. The online game industry in China is entering a transition phase from 2D to 3D games.

### **1.3 Pricing in the Online Game Industry**

This section explains firstly why this research focuses on pricing and then demonstrates the research aim, objective and research questions.

#### **1.3.1 The Significance of Pricing**

The two widely used pricing models in the global online game industry are the pre-paid subscription model (such as, pay hourly, daily or monthly) and item-based model through which a game is free to play at the basic level and items are sold to enhance the game players' strength in the virtual games and generate revenue to the game operators (Castronova 2006; Nardi and Harris 2006). In addition, it is important to know whether these predominant pricing models can secure the revenue streams to sustain the industry's future growth. The pricing models in the Chinese online game market comprise: the traditional time-based model, the item-based pricing model which became prevalent in 2006 and the in-game advertising model in which the revenues are generated from embedded advertisements. Currently, the in-game advertising model is still in its initial stage and not widely used. Here, I would like to introduce the two primary pricing models in the Chinese online game market.

#### Time-based Pricing Model

The Chinese online game industry began to take off in 2001. Till 2005, the top two Chinese online game companies, NetEase and Shanda contributed 57 percent of the market share of the Chinese online game industry (Morgan Stanley, 2005). Prior to 2005, nearly all MMORPGs adopted the time-based model (which is also called pay-to-play model or subscription model). Under this model, game players purchase pre-paid cards to play for a fixed number of hours or for an unlimited amount of time within a specified number of days. The pioneer of the Chinese online game industry, Shanda developed this pre-paid card (or called Point card) which was hard to duplicate and became the first Chinese online game operator who successfully adopted this subscription-based model and was followed by other Chinese online game operators.

#### Item-based Pricing Model

17 Games, a business unit of CDC Corporation (NASDAQ: CHINA) was the first firm in China to adopt another model, when operating a gamed named *Yulgang* in China in July 2005. This model is called the "free-of-charge model", the "virtual item sales model" or the "item-based pricing model". Shanda prefers to call it the "Come-Stay-Pay", or CSP pricing model. Under this model, users are able to play the basic functions of an MMORPG for free and may choose to purchase in-game value-added services, including certain in-game items and premium features, which enhance the game experience. In this thesis, these two models are referred as the "time-based pricing model" and the "item-based pricing model" respectively.

The third pricing model which emerged recently is called in-game advertising (IGA) model. When applying the in-game advertising model, the revenues are generated from the embeddedadvertisements. Currently, in-game advertising model is still in its initial stage and not widely used.

Starting from 2006, China's online game market have been kept transforming from the exclusively time-based pricing model to the item-based pricing model. It is the second time that Shanda has acted as the most influential driver in the Chinese online game market for business model innovation. An increasing number of online game operators followed suit and announced that they would operate their games under the item-based model. By the end of 2007, over 80 percent of online games in the Chinese market adopted the free-to-play model, relying on virtual item sales to generate money (Cui 2007). It is also revealed that only13 percent of game players play time-based games.

The year 2007 was a landmark for the Chinese online game industry, as in this year four online game companies in China were listed in HKSE, NASDAQ and NYSE. Several other online game companies such as 9You, Netdragon and Suzhou Snail are on their way to being listed abroad. Shi Yuzhu, the CEO of Giant claimed that the whole industry's market revenues increased by 70 percent annually during the past three years due to the successful transformation of the pricing model. The shift of pricing model not only strengthened the mature game operators, but speeded up the growth of the new operators.

From mid 2007 to early 2008, NetEase and The9, who had stuck with the use of the time-based pricing model, began to apply the item-based model into their new games. It might appear that the item-based pricing model becomes prevalent and the time-based pricing model became obsolete. However, some dominant game operators began to adopt the time-based pricing model in 2008. Looking back the Chinese online game industry development during the past years, it is evident to see the pricing innovation is closed linked to the market share competition, which indicates the importance of market share competition during the pricing study.

#### 1.3.2 The Link between Market Share Competition and Pricing

Many scholars stress the importance of market share competition and link market share competition with price when exploring the organizational competitiveness studies. Porter (2008) pointed out the important role of "market share" many times in his discussion of competition. Porter's five-force framework is a convenient means of exploring the economic factors that

affect the profits of an industry. The five forces are: rivalry among existing competitors, threat of new entrants, threat of substitute products or services, bargaining power of suppliers and bargaining power of buyers. When discussing "threat of new entrants", Porter (2004, p.80) stated that, "New entrants to an industry bring new capacity and a desire to gain market share that put pressure on prices, costs and the rate of investment necessary to compete." He (2004, p.234) then identified that "one common problem in emerging industries is that pioneers expend excessive resources defending high market shares and responding to competitors who may have little chance of becoming market forces in the long run." When discussing the industry development trend, Porter indicated that slowing growth means more competition for market share. He added further that: "With companies unable to maintain historical growth rates merely by holding market share, competitive attention turns inward toward attacking the shares of the others." Increased competition for market share is always followed by "the outbreaks of price, service, and promotional warfare...during transition to maturity" (Porter 2004, p.238). Besanko, Dranove, Shanley and Schaefer (2007, p.314-315) concluded that "internal rivalry refers to jockeying for share within a market." And "a firm reduces prices if it believes it can gain market share by doing so."

#### 1.4 Research Aim and Objectives

A business organization's stakeholders include the owners, suppliers, customers, directors, employees, owners (shareholders), and government as well as its agencies, which can affect or be affected by the organization's objectives, actions and policies (Freeman *et al* 2007; Qiao and Liu 2006). According to stakeholder theory, business is about how stakeholders and managers interact and create value. The interaction between stakeholders and the firm is a reciprocal one (Brammer and Pavelin 2006; Freeman *et al.* 2007). Huang and Kung (2010) suggest that 'managers of firms with higher market shares tend to place greater value on environmental performance'.

Kim and Mauborgne (2009) point out that "whichever type of strategy is chosen, an organization's success will depend on creating an aligned set of strategy propositions targeted at three different sets of stakeholders: buyers, shareholders, and the people working for or with the organization." "All stakeholders are not equal and different stakeholders are entitled to different considerations. For example, an organization's customers are entitled to fair trading practices but they are not entitled to the same consideration as the firm's employees (2009, p.74)."

Porter (2008, p.92) and Besanko *et al.* (2007, p.314) both recognized some common mistakes in conducting industry analysis. One pitfall (Porter 2008, p.92) is "paying equal attention to all of the forces rather than digging deeply into the most important ones." In terms of the above advice, the author decided to focus on the study of competition among existing competitors on the price dimension and non-price dimensions.

Thus, this research aims to investigate and provide insights into the impact of pricing innovation and other non-pricing dimensions on the market share competition within a service industry in the information economy. This is achieved by developing a framework which depicts the key internal and external factors that affect the market shares of the dominant online game companies in China.

Using the five dominant Chinese online game companies in a multiple case study, the research objectives are:

- 1) To understand the nature and characteristics of pricing strategies within the context of the traditional economy and the information economy.
- 2) To investigate the existing research and state-of-the-art practices in the application of pricing strategies to indentify and integrate other internal and external factors which impact on market share competition. Particularly, an original conceptual framework will be developed to indicate what factors affect an online game company's market share competition.
- 3) To identify and investigate the validity of Velu's (2005) theoretical propositions by examining when and how the dominant Chinese online game companies innovated their pricing models.
- 4) To identify and examine the limitations of the original conceptual framework. With the use of template analysis, five qualitative case studies will be employed to explore the different effects of all internal and external factors of each dominant Chinese online game company on its market share competition respectively and identify the extent of each factor's impact. Also, to explore and describe the differences and similarities of the impacts of internal and external factors towards each company's market share competition with cross-case comparisons.

- 5) To contribute to this research, a revised framework will be developed. This revised conceptual framework will not only articulate the key internal and external factors which affect the dominant Chinese online game companies' market share competition, but also illustrate the links between them.
- 6) To evaluate the research findings of this study by justifying the validity, credibility and reliability of the devised framework, the approaches of data collection and data analysis techniques.

#### 1.5 Research Approaches Adopted in This Study

The chosen research philosophy indicates a researcher's own approaches and attitude towards research. Two dominant philosophies in the business and management research are: positivism and interpretivism.

This research follows the interpretivist philosophy and utilises qualitative research which can provide more density of information and innovative approaches (Seaker et al. 1993). Easton (1992) suggests the use of case studies to investigate large numbers of industry actors and their complicated relationships because case studies can handle rich sources of data and multiple forms of data collection. Gammelgaard (2004) also agrees that case studies are the ideal methods in the systems approach. Therefore, a cross-sectional case study is employed to explore the pricing dynamics in the Chinese online game industry. The case studies include a sample of main online game operators (top five online game operators in market share ranking). The material in this thesis is based on the data collected directly and indirectly. Indirectly collected data are mainly from analysis of company and online game industry during the past ten years. In addition, semi-structured interviews with representatives from the online game companies conducted primarily between 2007 and 2009 are the source of directly collected data. Interview topics incorporate their strategies in pricing, marketing, human resource management and other areas which are related to the business competition. Usually, interviews were around 45 minutes in length, though some were shorter or longer. Additional interviews were also conducted with other online game talents who had the rich experience in game development or game operation in or outside the five game companies in China. These interviews were invaluable to this thesis. The research methodology employed is discussed in detail in Chapter 5.

#### **1.6 Thesis Structure**

The rest of the thesis is organized into seven chapters as follows. Chapter 2 reviews the relevant traditional literature on pricing practice, their application limitations and also discusses related concepts, such as, internal factors and external factors which facilitate the understanding of organizational competitiveness in the traditional economy and related information economy. Based on the above-mentioned theoretical foundations, an original conceptual framework is designed at the end of this chapter.

Chapter 3 investigates the pricing innovation in the Chinese online game market, discusses and compares the effectiveness of pricing innovation upon dominant and less dominant companies' market share competition. During the overview, Velu's propositions are testified and their application limitation is revealed.

With the aim to have a better understanding of the dynamic changes, Chapter 4 concentrates on discussing the roles of external factors which influence market share competition in the Chinese online game market.

In Chapter 5 the research methodology is clarified with details. How to select samples for interviews is discussed, which is followed by the explanation of data analysis process.

Chapter 6 illustrates the evidence of the data collection and presents the findings based on the five single-case studies.

Chapter 7 assembles the results of the five single-case study and makes cross-case comparisons with the aim of finding out differences and similarities of the impact of each internal and external factor towards each company's competitiveness. Firstly, different dominant firms are pointed out to be experimenting with different approaches as their strategies for consolidating and sustaining their competitiveness, which echoes Porter's competitive strategy theory in emerging industries. Then, it is noticed that two unexpected themes stand out, which all the Chinese online game companies have to confront. One theme is 'Talent exodus', which is followed by the question of 'How to deal with the talent exodus?'. The second unexpected theme is 'Strategic alliance management', which is followed by question of 'How to understand strategic alliance management? '. At the end of Chapter 7, the revised conceptual framework is depicted which is followed by the discussion of the similarities and differences between the original and the revised conceptual frameworks.

Chapter 8 presents conclusions by integrating the critical evaluation, contributions, limitations and the direction for the future work. It firstly provides a critical evaluation of the research findings and the chosen research method and data analysis techniques. And then, this chapter addresses the implications for practice and the contributions to knowledge. Following the acknowledgement of the limitation of the current study, the directions for future practice and research are also provided.

### **Chapter 2 Literature Review**

#### **2.1 Introduction**

For the past two and half centuries, competition and pricing have been as the heart of economic theory (Bridel 2001). Inspired by the economists' efforts, scholars from other disciplines have undertaken pricing studies in the areas of law, psychology, management, marketing and anthropology (Wasson 1974). Although scholars from different disciplines tend to use their own approaches, their aims are always the same: to gain a better understanding of the determination of relative prices between goods and services. Presently, scholars from different disciplines have proposed a certain number of models to evaluate the pricing theories.

This chapter firstly reviews some commonly well-cited traditional pricing theories and then discusses the limitations of applying traditional theories to understand the information economy. In order to provide and gain a better understanding to pricing development within the context of information economy, pricing theories developed for the information economy are examined alongside other concepts and theories regarding the organizational competitiveness. The chapter ends with the presentation of a conceptual framework, which is developed from the literature review and will be adopted as the theoretical foundation for the case studies.

#### 2.2 Pricing in the Traditional Economy

For many years, profit maximization was traditionally assumed to be the single goal of the firm, and economists concentrated their study of pricing on the type of market in which the firm operates (Bridel 2001). According to traditional economics, the decisions about the quantity to produce and the price to charge are related to different forms of competition. Perfect competition, monopolistic competition and oligopolistic competition all confront the firm with their special problems (Parkin *et al.* 2002, p.202). Here is a brief review of price settings in different market structures as exhibited in the existing body of theoretical and empirical knowledge.

#### 2.2.1 Traditional Pricing under Different Forms of Market Structure

• In a market structure of perfect competition (Parkin *et al.* 2002, p.208), majority of companies sell the same products to many buyers; no entry barriers; no advantage

over new ones between existing firms and well-informed prices available between sellers and buyers.

Firms in perfect competition are price takers and are incapable of influencing the price because each of them produces only a tiny fraction of the total output and buyers know very well the prices of other firms. If they ask for a price over the market price, no one will buy from them. On the other hand, if they ask a price below the market price, they will give away their revenues although they can win new buyers.

- A monopoly is a firm that can offer a good or service that has no close substitute in the market. "A major difference between monopoly and perfect competition is that a monopoly sets its own price. Compared with competitive firms, a monopoly restricts its output and charges a higher price which exceeds marginal cost (Depken 2005, p.170)". A monopoly always gains persistently greater market share than what is expected under perfect competition. If a monopoly raises prices too high, it may face pricing pressure from potential rivals who may enter the market and can provide the same good, or a substitute, at a lower price.
- An oligopoly is a market structure in which a small number of sellers dominate the market. It lies between perfect competition and monopoly position. When making decisions, each oligopolist needs to consider the likely responses of the other market participants. In some situations, the firms may employ collusion or market sharing to raise prices and restrict production. In other situations, the rivalry between sellers in an oligopoly can be fierce, with relatively low prices and high production, which could lead to an efficient outcome in the same way as perfect competition.

With regard to the different kinds of market structures, a certain number of different models, especially those aiming at investigating the interactions in the context of game theory, have been put forward (Skouras *et al.* 2005). Based on the competition theory, some industrial economists focus their research on investigating economies of scales, barriers to entry or exit from a market, governmental intervention through prices and other controls and product differentiation (McGee 1988; Tirole 1989).

# 2.2.2 Relevant Traditional Pricing Theories

In the 1970s, the research interests of economists shifted to consumer research and behaviour theory which indicates their agreement that "the secret of improving pricing effectiveness lies in understanding how pricing works in industry and how customers perceive price (Ross 1984, p.146). Rather than organizing the pricing theory research by discipline, two streams of empirical research on pricing practice are discussed below.

#### Literature Based on Customer-value

Scholars try to "explore some techniques, by which firms may engage in value-informed pricing, i.e. by which they measure value, willingness to pay or reservation price (Ingenbleek 2007, p.442)." Winer (2005) points out that the three terms of 'measure value', 'willingness to pay' or 'reservation price' can be used interchangeably since they all try to express the same idea of "a maximum which a customer is willing to pay for a market offering". Some economic researchers and marketing strategists are active in the study of customer value. Ofir (2004) examines how organizations can assess the customers' willingness to pay. Within the same context, a number of scholars have investigated issues such as: the effectiveness of price discounts and coupons on sales as well as other different kinds of price promotions (Madan and Suri 2001; McGoldrick et al., 2000), the relationship between the consumers' gender and culture and their perceptions of price increases (Maxwell, 1999), the effect of price bundling on the perception of value (Naylor and Frank, 2001). Reviewing the customer-based pricing literature, two major drawbacks come to mind. One is that above mentioned studies tend to argue how organizations rely on non-profit objectives (such as customer satisfaction) rather than on the need to make at least a satisfactory level of profits. The second drawback is that this stream of literature tends to present what organizations are doing instead of emphasizing whether these practices are effective or not.

#### Literature Based on Organizational Decision

It should be noted that the behavioural approach is widely used by scholars from marketing and other disciplines in pricing research. It emphasizes the actual process by which prices are determined in practice (Skouras *et al.* 2005, p.367). Related research topics are: pricing objectives, pricing methods adopted (cost-based and demand-based) (Dolan and Simon 1996; Zeithaml and Bitner 2003), the pricing policies applied (Ansari *et al.* 1996, Naylor and Frank 2001), efficient pricing and price discrimination (Holdren and Hollingshead 1999; Mitra and Capella 1997; Monroe 2003), public utility pricing (Hoffman and Bateson 1997) and price collusion (Diamantopoulos 1991). Some economists, especially industrial economists have also

recognized the interrelationship between price and the non-price elements of product development and advertising (Lancioni, 2005; Nagel and Hogan 2006; Tuli *et al*, 2007). Though a certain number of scholars approach pricing practice from different perspectives, it cannot be denied that many of their findings after many case studies more or less repeat the insights of previous research.

# Pricing and Competition

Many scholars have effectively linked pricing with competitiveness by arguing that pricing theory is in fact a theory of (price) competition (Robinson 1953; Forman and Lancioni 2002; Cavusgil *et al.*2003). Emphasizing that price is only one factor of competitive behaviour, they agree that an independent study of pricing will give only a partial understanding at most. Therefore, the need to study pricing in the context of a general theory of competition is highly advocated. Hunt and Morgan (1995) emphasize the significance of pricing in marketing strategy and they also argue that pricing should be studied from the viewpoint of competition because the marketing strategy literature shows a trend to evolve towards a process theory of competition.

It is important to notice that within the marketing discipline, pricing could hardly be discussed without considering the other elements of the marketing mix. The role of price within the marketing mix remains an important topic for marketing academics. More specifically, the marketing literature has underlined the need for pricing strategy to be incorporated into the overall marketing strategy. Thus, it has been argued convincingly that pricing decisions cannot be made in isolation without taking into consideration the product, distribution and promotion aspects of the marketing mix, indicating the need for a coherent and integrated marketing strategy (Adcock *et al.* 1998; Kotler 1997).

Many studies use survey questions to examine the relative importance of pricing in the marketing mix (Morris and Fuller 1989; Avlonitis and Indounas 2005). By applying the survey approach, some scholars (Myers 1997; Chia and Noble 1999; Forman and Lancioni 2002) conclude that organizations tend to pay more attention to value-creation factors than to pricing. Fletcher and Russell-Jones (1997, p.25) point out "the price is the only one of the above elements that brings in revenues and the rest involve costs!"When discussing factors which distort the prices that an organization sets, they suggest that the following external factors and internal factors should be considered. External factors include: competition, legislation,

customer's demands, changing market, and technology; internal factors are: costs, profit targets and growth (Fletcher and Russell-Jones p.34-35).

Parallel with the above perspective of the relationship between pricing and marketing mix, Nagel and Holden (2002, p.274) argue that pricing strategy involves more than just setting a price; instead, it also involves product line, promotion and distribution decisions which work together to comprise a firm's marketing mix. Although the pricing process is a unique and specialized marketing activity, it is in fact an integral part of a larger effort which needs all the elements of the marketing mix to work together effectively. Each element of the marketing mix has its own task.

Nagle and Holden (2002, p.1) further point out that the one way to ensure a firm's pricing decision is to reject early those ideas which cannot satisfy customers' willing intensions; on the other hand, the firm's management team should establish a coherent set of pricing policies and procedures in line with the firm's strategic goals.

Just as Diamantopoulos (1991) remarks, contributions of empirical studies on the issues of how price decisions are made in firms are limited. The weakness of most literature focuses on describing what firms are doing, rather than analyzing why some price practices are successful and others are not.

# 2.2.3 Concept Ambiguity in the Traditional Economy

The surge of "business model" research at the end of the 1990s coincides with the advent of the Internet in the business world and "the steep rise of the NASDAQ stock market for technologyheavy companies" (Osterwalder *et al.* 2005, p.7). The topic of business model is widely discussed with various purposes in the domains of strategy, management, online business and information systems (Pateli and Giaglis 2003). At the very beginning of research into business models, a certain number of authors only aimed to define the concept (Timmers 1998; Magretta 2002) and classify them, and some researchers develop taxonomies of specific business models for certain industries (Rappa 2004). Then, the research turned to outlining the details of business model components (Linder and Cantrell 2000; Chesbrough and Rosenbloom 2000) and applying business models (Petrovic and Kittl 2001; Magretta 2002). Represented by Gordijn (2002) and Osterwalder (2004), some scholars show their research interest in proposing the business model components conceptually based on evaluation and test. During recent years, more and more research aims to apply business models to the creation of innovation and competitive advantages in organization. However, due to the variety of approaches and the diversity of methodologies (Lambert 1980), the business model literature is still quite patchy and there is still no well-accepted authoritative definition of a business model (Andries and Debackere 2006).

In addition, not being clear of the difference between strategy and business model (Magretta 2002), some scholars have utilized these two terms interchangeably to refer to everything that can facilitate a firm to create competitive advantage (St ähler 2002). By comparison, more and more literature not only recognizes the link between business model and strategy but underscores more of the distinctions between them as well (Magretta 2002; Mansfield and Fourie 2004). Magretta (2002) states that "business models shows how the pieces of a business fit together, while strategy also includes competition." "To some extent, the business model is always regarded as an abstraction of a firm's strategy and has the possibilities to be adopted by many firms" (Seddon and Lewis 2004). In contrast, the study of strategy should include the strategy execution and implementation, while the business model emphasizes more about how a business works as a system.

# **2.3 Limitations of Traditional Pricing Theories**

Presently, the global economy has been undergoing a fundamental and constant transformation. The emergence of the information economy is largely attributed to the availability of the disruptive technology – Internet. The Internet shook the basis of companies in the traditional economy and altered the links of their value chain (such as the service and distribution channels) and therefore has changed the competitive landscape in many industries. With the Internet, for example, the services offered by banking system and online shopping can last 24 hours a day. Another unique advantage of Internet service is high accuracy. According to the statistics of USA's Cisco, "Prior to the creation of Cisco's company website, as many as 33 percent of customer orders were inaccurate; however, the website eliminated nearly all the errors (Afuah and Tucci 2001, p.78)." In addition, the Internet gives customers nearly all the information available and offers more opportunities to compare and show their intentions. It should be noted that the emergence of the information limitations will be discussed below.

# **2.3.1 Emergence of the Information Economy**

Afuah and Tucci state (2001) that the firms in the information economy could be suppliers to the Internet, service providers or Internet users. Each firm may use its unique Internet pricing model, but they have one goal in common. That is, their pricing models are designed to make money for their firms in the long term. In order to make money, a firm must target the right customers (i.e. market segments) and keep offering the customers something that can underpin the customer value and something that its competitor(s) can not offer (Porter 1985).

Targeting dynamics in the context of digital technology, Atkinson (2002) defines the term "new economy", as "a combination of technological developments, powerful personal computers, high-speed telecommunications, and the Internet which has created a new market environment." Porter (2004, p.215) brings forward the definition of "emerging industries", which refers to the newly formed or re-formed industries that have been created "due to technological innovations, changes in cost relationships, new customer requirement, or other economic and sociological changes." He further illustrates that many emerging industries are the creations of the 1970s, such as, solar heating, video games, fibre optics, personal computing, bio-separation media and word processing. It is evident that the emerging industries that Porter mentions are still active members in the new economy. From this sense, the new economy and Porter's emerging industries have similar meanings with the "information economy", the "network economy" or the "knowledge economy". Therefore, this kind of economy is referred to as the "information economy" in the rest of this thesis.

Many authors have compared the differences between the traditional economy and the information economy. Negroponte (1995) argues that, "the transformation from the traditional economy to the information economy is about shifting wealth creation from the creation of atoms towards the creation of goods and services based upon digital bits." Earl (1999) points out that the most prominent change is the shift from market-place where buyers and sellers meet for transaction to a market space where the transactions can be done online without the need of physical contact. Following the market-place, "other factors in the traditional organizational structure, such as hierarchies, scarce physical resources, machine/craft workers, real estate will alter remarkably (see Table 2.1)."

According to the Harvard Law Review (2001), nothing is newer than the existence of information goods. "The technological revolution impacts the cost and distribution of such goods in a way that fundamentally alters how their purveyors must operate." Detailed differences lie in the concept of divergence between the new economy and the traditional economy, such as the concept of "returns" and "marginal cost".

23

Industrial Age				Information Age	
from:				to:	
Market-place	$\rightarrow$	Doing business	$\rightarrow$	Market space	
Hierarchies	$\rightarrow$	Organizing business	$\rightarrow$	Networks	
Scarce physical resources	$\rightarrow$	Economics in business	$\rightarrow$	Limitless digital resources	
Machine/craft workers	$\rightarrow$	Populating business	$\rightarrow$	Knowledge/intellect workers	
Real estate and plant	$\rightarrow$	Infrastructure in	$\rightarrow$	Information and	
		business		communications technology	

Table 2.1The Shift from the Industrial to the Information Age (Earl, 1999)

The understanding of the traditional economy is largely based upon the assumptions of diminishing returns (Harvard Law Review 2001, p.1623). That is to say, "products or companies that get ahead in a market eventually run into limitations, so that a predictable equilibrium of prices and market shares is reached (Arthur 1998)." Such limitations here consist of the increase of marginal costs, declining access to raw materials and exhaustion of consumer demands (ibid, p.76). This assumption applies very well for the traditional manufacturing and resource-based economy, but it is ineffective in the knowledge-based new economy. Contrary to traditional goods, the costs of innovation and product development in the new economy are extremely high. However, what usually follow the high initial fixed costs are the negligible marginal costs associated with mass-production. The resource base of the information economy is another notable feature which distinguishes the traditional economy from information economy. Contrary to the scarcity of physical resources, the cost of producing additional copies is negligible and digital bits can be reproduced limitlessly (Turner 2000, Shapiro and Varian 1999). Another example is that, it normally takes a software developer millions of dollars to develop a software application while the copy selling to customers is almost zero because this software is posted on the web free for customers to download. They summarize the characteristics of a knowledge-based pricing strategy as products with high fixed costs and low variable costs.

The cost structure in the information economy has made the economists and strategists rethink their traditional literature, especial the part on pricing because firms can enjoy increasing rather than diminishing returns. In Section 2.4, theories which are related to pricing in the information economy will be reviewed and discussed.

# 2.3.2 Related Concept Confusion around Business Model

Confusion over the meaning of the term 'business model' is manifested in the information economy. During the last ten years, e-business models have been one of the increasingly popular topics in the literature of business, management and computer science (Pateli and Giaglis 2003). Nevertheless, there is still a lack of a standardized and accepted definition of an e-business model. An e-business model is simply the approach a company takes to become a profitable business on the Internet (CyberGuru 2004). But the terminology confusion results in certain concepts being used ambiguously<sup>16</sup>. The concepts that are interchangeably used include: business model, strategy, business concept, revenue model, and economic model. The direct negative result related to the confusion is that "when researchers told about business models, they did not refer to the same thing (Linder and Cantrell 2000). Or, when some people talk about business models, they only mean part of a business model." Turner (2000), Rappa (2001) and Timmers (1998) classify the aspects of e-business models as including e-shop, eprocurement, e-auction, e-mall, virtual communities, content provider, and information broker etc. Nevertheless, Osterwalder et al. (2005) points that an online auction is not a business model but just a pricing mechanism, which is part of a business model. He also points out that a virtual community is not a business model itself, but part of the customer relationship.

With respect to the melting pot of definitions, Pateli and Giaglis (2003) insist that there is a need for new ways to evaluate business models. Weill and Vitale (2001) remark that e-business should "leverage on firm's intangible assets, which are recognized as ongoing business processes, customer perceptions, and IT infrastructure", whereas Afuah and Tucci (2003), and Osterewalder and Pigneur (2002) stress that a business model should be a holistic concept which consists of the elements of pricing mechanisms, customer relationships, partnerships, partnering, and revenue sharing. Weber (2007) echoes the aforementioned points by saying that "The sharing of knowledge, awareness, reputation, relationships, loyalty, customer skills are factors that are more and more important for firms."

# 2.4 Related Theories Developed for the Information Economy

During the transformation from traditional economy to the information economy, a number of traditional concepts and theories are identified to be very important by researchers for the information economy study, such as pricing and customers' requirements. Besides, as the pioneer of the virtual worlds, massive multiplayer online games motivate researchers to study the virtual economy and to differentiate it from the traditional physical economy. Therefore, the

<sup>&</sup>lt;sup>16</sup> The data is available from: http://forums.techarena.in/guides-tutorials/6051.htm

key factors of pricing and customer requirement in the information economy will be explained as follows. Then, the differences between virtual world economy and physical economy as well as the development of online game pricing will be discussed in this section.

# 2.4.1 Key Factors in the Information Business Competition

#### Significance of Pricing

Shapiro and Varian (1999, p.22) summarize the cost characteristics of information goods as follows, such as 'costly to produce, but cheap to reproduce', 'high sunk cost and low marginal cost', and 'no natural capacity limits for additional copies'.

All of these cost characteristics of information goods indicate that the information market will not and cannot look like the perfectly competitive markets in which there are many suppliers with the similar products to offer but lacking the ability to influence prices (Shapiro and Varian 1999, p.22). In short, the information market has little relevance to traditional markets. Given the industry differences, Shapiro and Varian offer two pieces of suggestions towards companies' competitive strategy in the information economy. First, a company should differentiate its product if it is in a differentiated products industry, and second a company should try to achieve cost leadership if it is a dominant company in the industry (ibid, p.25). No matter what strategy the information company adopts, Shapiro and Varian emphasize the importance of two factors in the firm's competitive strategy implementation in the information industry. One is pricing, and the other is the requirements of consumers (one of the stakeholders). Their explanations are listed as follows:

- "Pricing policies are central to successfully implementing either competitive strategy. To succeed, the company must be either a price and cost leader based on the scale; or charge the information goods based on the consumer value." (ibid, p.25).
- Even if you can dominate the market and outperform competitors, you have to worry about pricing since you have to price your products to maximize their value and satisfy the stakeholders' expectations of high investment returns (ibid, p.25).

After emphasizing the importance of pricing in competitive strategy in the information economy, Shapiro and Varian (1999) add that: "since people have widely different values for a particular piece of information, value-based pricing leads naturally to differential pricing."

Furthermore, they advocate the e-company to create different versions of their goods and sell each version for a different price, which allows the company to extract the maximum value of the product from the market.

### Significance of Customer Value

Lynch (2006, p.104) clarifies that "since customers generate the revenues that keeps the organization in existence and deliver its profits, customers are crucial in corporate strategy." Shapiro and Varian (1999, p.3) state that information goods must be priced according to consumer value, not according to the production cost. In their opinion, "whatever industry player wins various market segments, consumers are likely to be the ultimate winners."

Now that information is available so quickly and inexpensively, lots of people complain about an overload of information because the Internet offers expanded choices to internet users. Nobel prize-winning economist Herbert Simon (1997) explained this phenomenon when he wrote that "a wealth of information creates a poverty of attention." "Over the short term, enterprises will have to compete hard for a limited number of online consumers who are increasingly armed with better information (Turner 2000, p.59)." It is easy to identify Internet-based consumers are becoming more and more powerful and the information economy is becoming more buyercentric (ibid p.72). How to gain access to millions of customers, how to catch their attentions, how to attract them to pay for information goods willingly are important questions.

Shapiro and Varian advocate that (1999, p.14), "once you have a large enough customer base, the market will build itself." As to how to achieve critical mass (and take over the market), whether a company can satisfy consumer expectations is crucial. Shapiro and Varian (1999, p.14) suggest that during competition, each company in the market with relevant network effects would try to convince customers that their product will ultimately become best, while rivals' products are incompatible. Similar with many other information industries, online game incumbents will consolidate the "collective switch costs" as a way to prevent customer attrition (ibid, p.184). Considering the limitation of having superior technology for a company to succeed in an industry with network effects, they stress the importance of using marketing tools to "ignite the positive feedback." In addition, if the customers are price sensitive due to their limited income, the incumbents would be forced to cut prices.

Different types of customers need different forms of communication so as to secure competitive advantage for the organization. Lynch (2006, p.185) summarizes some essential ways for communication:

- To integrate the desires of customers and other stakeholders;
- To examine the competitor activities for identifying issues surrounding competitive advantage;
- To take into account innovative approaches to develop new areas of advantages.

For instance, Internet caf és are the second most popular location for Chinese online game users to play online games. They also act as the main online game distribution channel by Chinese online game companies (Ren and Hardwick, 2010). Therefore, online game companies are active in using their unique communication techniques to establish a close relationship with the customers in Internet caf és.

### **2.4.2 Differences between Virtual World Economy and Physical Economy**

Massively multiplayer online games (MMOGs) are the pioneers of virtual worlds, which millions of users have signed up for, so as to enjoy interacting with each other in communication, collaboration and cooperation.

Research on virtual worlds began in the late 1980s with first contributions in the field of computer science and engineering (Zaugg and Fetscherin 2004). More recently, there have been an increasing number of scientific contributions to the research of virtual worlds from different disciplines such as psychology, information system and marketing. Because of its multi-disciplinary nature, research on virtual worlds is fragmented and lacks an overall terminology and research framework. Research on virtual worlds can be broadly categorized into four different research fields. Research can either concentrate on the behaviour of users by looking at individual game players or it can concern companies' activities. At the same time, virtual worlds can be broadly game-oriented or social interaction-oriented.

The research in this thesis addresses business-oriented issues in the socially oriented virtual world. Hence, the research is categorized in field 2 shown in Figure 2.1. Before doing the online game pricing review, there will be a general review of the progress of virtual economies.

		Orientation	
		Game	Social
Focus	Organization	1	2
	Individual	3	4

Figure 2.1 Framework for Virtual Worlds Research (Zaugg and Fetscher, 2004)

Academic study of video games has attracted the interest of a number of different disciplines, such as psychology, media studies, anthropology and computer science. Early research concentrated largely on the negative effects of video games on players (McClure & Mears, 1986). Presently, the research areas have expanded to the social dynamics of massively multiplayer games (Kolo and Baur 2004), economic analysis of the virtual world activities (Castronova 2002; Shankar and Bayus 2003). Simpson (1999) describes virtual economy of the game titled Ultima Online from a developer's perspective. The emergence of the so-called realmoney trade of game items and other virtual assets remind economists that revenues can actually be made by selling assets that exist in a virtual economy. That is why some researchers focus on the studies of virtual currencies (Yamaguchi 2004; Sulake 2004). The virtual economy and physical economy.

#### The Status of Scarcity

Scarcity is a central concept in economics which implies that there are never enough resources to satisfy everyone's demand. Consequently, a market is required to allocate the resources. In a virtual world, due to the marginal cost of production for most assets being zero, everyone should have the possibility to have almost everything (Nash and Schneyer 2004), since the game designer has the absolute right to design and reproduce the virtual items. However, Castronova (2002) stated that an excellent designer has to understand very well the interactions between the units or players. A game without scarcity is not a good game because game players cannot enjoy the feeling of achievement or advancement from it.

### **Currency** Situation

Yamaguchi (2004) points out the differences between real currencies and virtual currencies. In a real economy, a central bank monitors and controls the money supply. The effective control in tightening and loosening the money supply ensures the stability of prices in the real economy. However, it is totally different in virtual economies. In principle, the game designers and developers should keep under everything they create under control; however, the complexity due to the players' interactions make the control more complicated than the game professionals

expect. As a result, the virtual currency market is not as safe, stable and well-controlled as the physical currency market is.

#### **Resource Allocation Mechanism**

Companies arise as an alternative to the market so that they can arrange internal transactions conveniently, beat the market and offset the small loss of efficiency (Lehdonvirta 2006). By comparison, activities engaged by guilds in virtual economies should get the concerns. A guild is usually organized by a group of game players who have strict member hierarchies. They have their own decision making processes and each member should abide their guild rules. Guilds sometimes fulfil the roles of a resource allocation mechanism. The guild rules regulate how to distribute resources, including, armour, healing, loots (i.e. items and money obtained through killing monsters in the games) to the guild members.

After reviewing the differences between virtual economies and physical economies, the progress of online game pricing theory is examined.

# 2.4.3 Online Game Pricing

#### APRP's Market Entry Strategies for Canadian Video Game Developers

It took Canada's Asia-Pacific Research and Positioning (APRP) (2007) three years to finish their report to illustrate certain market entry strategies for Canadian video game developers wishing to enter the Chinese game market. This report intends to understand the dynamics of the Chinese game industry, and offer practical, business-focused knowledge that helps them in their decision to enter the Chinese market.

This APRP report compares the advantages and disadvantages of item-based and time-based models and illustrated a game lifecycle and peak concurrent users (PCU) during the game life cycle for 'item-based' and 'time-based' models with the conclusion that:

For high quality games, operators will naturally adopt time-based models. On the other hand, some games that were originally designed for time -based pricing are turned to item-based models because of their low quality (ibid, p.25).

Though the APRP's conclusion put forward in 2007 seems to provide a plausible explanation for the evolutionary pattern of the online game pricing dynamics, it does not incorporate the fact that in the online game market, especially in 2008 and 2009, the majority of top ten most popular Chinese online games are adopting the item-based model.

APRP (2007) concludes that time-based models offer more benefits to players. Over the longrun, with a similar fee for both models, paying users are likely to prefer the subscription-based model.

However, the conclusion seems controversial with the current pricing innovation development trend in the Chinese online game market because time-based *World of Warcraft (WoW)* and NetEase's *Fantasy Westward Journey (FWWJ)* are listed in the top ten games in 2008. The other eight popular games all apply the item-based model. Even NetEase who insists on using the time-based model began to apply the free-to-play model in early 2008 and admitted their ignorance of the needs of different game players before 2008.

#### Empirical Academic Achievement Presented in DiGRA 2007

Little empirical research on the pricing model innovations in the game industry was available until the arrival of *DiGRA 2007: Situated Play Conference* in Tokyo in 2007. DiGRA (Digital Game Research Association) is the main global organization for scholars to study digital games. Four papers in this conference discussed the online game payment from different viewpoints.

Nojima's pricing models in massively multiplayer online games (MMOGs)
 Focusing on virtual item sales, Nojima uses surveys to examine relationship between pricing models and players' motivations for MMORPG play. He finds that players who buy virtual items have higher levels of immersion in a game. Immersion levels differ between the pricing models but customer satisfaction has nothing with the pricing (Nojima 2007, p.675).

How to apply different pricing strategies to retain the current game players and attract potential players was a heated topic discussed by CEOs of the Chinese online game companies in the annual online game industry conference in 2008. Nojima's conclusion that "customer satisfaction has nothing with the pricing" (Nojima 2007, p.675) seems conflict with the companies' operation results. In addition, Nojima points out that the important limitation of his research is the small size of sample.

# • Oh & Ryh's study of item-selling based pricing model in Korea

Oh and Ryu (2007) summarizes the two pricing models in Korea and then characterized item-selling based payment model using a case study of two Korean

online games, *Kart Rider* and *Special Force*. The paper aims at covering the issues that are considered important in game design so as to ensure that item-sales billing is more efficient. Its discussion is of great importance for game designers when considering the balance between pre-paid items and game money items and the methods of item selling. However, its research interest did not cover the relationship between pricing strategy and companies' profitability.

 Lin and Sun's analysis of Taiwanese players' attitudes on item-based MMOGs

Lin and Sun (2007) look at individual game players instead of concerning companies' activities. In their articles, they showed positive and negative player attitudes regarding various aspects of item-based MMOGs. They point out that "the sense of community among item-based game players is weaker, since their participation is closer to that of consumers." It reminds that the idea of "take it or leave it" is gaining strength under the influence of free market logic or player-to-consumer identity transfer. They conclude that instead of complaining and expecting the game improvements, dissatisfied players would like to leave one game and find one that is more suitable.

• Ström and Ernkvist's unbound network model in the Chinese MMOG Industry

Although Ström and Ernkvist (2007) did not discuss virtual item sales directly, they presented the interactions in its online game network model between the MMOG industry, players and government within the context of the Chinese online game market. Ström and Ernkvist emphasize the important role of the unbound online game network model as the value chain of online games would become increasingly complex. They also argue that the framework would be greatly needed due to the recent dominance of item-based pricing model in China.

In summary, the DiGRA papers are not based on organizational decision processes or companies' marketing strategies. Rather, they emphasize the customer value and discussed the relationship between revenue models and game player motions. Even so, measuring and creating an understanding of customer value is still very important to firms because these perceptions can lead to companies' higher profit margins. As for the researcher, an understanding of the perception of customer value facilitates further study towards the organizational price setting decisions.

# **2.5 Theory of Integration – Theoretical Foundation for this Study**

It is clear that the strategic goals of firms have been influenced by the advent of Internet. Correspondingly, the competition process has been influenced by the shift towards the information economy." In this context, more and more scholars identify and stress the importance of "integration" when discussing competitive strategy (Shapiro and Varian 1999; Turner, 2000; Brandenberger and Nalebuff 1996; Besanko *et al.* 2007).

Shapiro and Varian (1999, p.10) elucidate that "the dependence of information technology on system implied that firms should attach the same importance to their competitors and their collaborators." Since "the need for collaboration and the multitude of cooperative arrangements" has never been more prominent than in the IT area, so "forming alliances, cultivating partners and ensuring compatibilities are crucial in firms' strategic decisions."

Turner (2000, p.40) points out that rather than having companies in the value chain that compete against each other, successful businesses will be the ones that can find ways to combine and establish common strengths. He also indicates that such a trend will integrate the external forces much more closely into generic strategy information.

Cyberguru (2004) emphasizes the importance of convergence in a successful e-business. He states that "the business process domains will be tightly integrated with the business and IT strategy when there appears to a customer or a supplier no barrier between departments".

As an enduring framework, Porter's five-force framework has been widely used for industry analysis since 1980s. The five forces include internal rivalry, barriers to entry, substitutes and complements, supplier power and buyer power. This framework is used as a convenient tool to explore the economic factors that affect the profits in an industry. Among the five forces, internal rivalry is the central one, because it may be affected by each of the other forces.

Brandenberger and Nalebuff (1996) identify several limitations of Porter's framework. They remark that the most important weakness of Porter's framework is Porter's rivalry theory because Porter tended to describe suppliers, competitors and distributors as the rivals of a firm and agreed that they might destroy a company's profit. Brandenberger and Nalebuff point out that many positive interactions among firms which Porter ignored could sometimes enhance profits. For instance, efforts by competitors can set technology standards and promote favourable regulations which can facilitate industry growth; cooperation among firms and

suppliers can enhance product quality and productive efficiency. Hence, targeting at Porter's five forces, Brandenberger and Nalebuff put forward the concept of the Value Net as a counterpart. The Value Net consists of suppliers, customers, competitors and complementors (firms who offer complementary goods and services) and looks similar to the five forces. In contrast to the traditional five-force framework which was mainly used to assess the threats to profits, Value Net stresses both the threats and opportunities. Here, Porter's theory is supported, because Porter (2004, p.231) has observed clearly the trend of the value chain shifting towards integration. When discussing the changing role of suppliers and channels, Porter (ibid) states that "strategically, the firm in an emerging industry must be prepared for a possible shift in the orientation of its suppliers and distribution channels". He further adds that, "suppliers may become increasingly willing (or can be forced) to respond to the industry's special needs in terms of varieties, services, and delivery. Similarly, distribution channels may become more receptive to investing in facilities, advertising and so forth in partnership with the firms."

Secondly, Besanko et al. (2007) argue against Porter's five-force framework by stressing that Porter only focused on a whole industry rather than on that industry's individual firms. In fact, Porter distinguishes between individual firms in his book Competitive strategy (2004, p.19). Porter outlines the diversity among competitors in "strategies, origins, personalities, and relationships to their parents because they have differing goals and differing strategies for how to compete and may continually run head on into each other in the process." This can explain why a strategic right for one competitor will be wrong for others". Porter's analysis is not limited to the strategic difference between fragmented industries, emerging industries and the industries undertaking the transition; he is also concerned with the presence of different levels of firms in different phases of the industry. For instance, he not only discusses the established IT companies such as Intel, Ninetendo and IBM, he also noticed that (Porter 2004, p.217) "related to the presence of newly formed companies is that of many spin-off firms, or firms created by personnel leaving firms in the industry to create their own new firms." In addition, Porter points out that the phenomenon of spin-off was due to an environment of rapid growth and perceived opportunities for an exodus of technology. In short, Porter's strategic theory in an emerging industry will be relevant for case studies in this thesis. Wheeler and Sillanpaa (1997, p.241) argue that "it is absolutely vital to the competitive success of the enterprise that employees' values 'fit' with those of the company." This rule applies to the Chinese online game industry. That is to say, who can have the top online game professionals will have the capability to win the severe business competition.

Thirdly, Besanko *et al.* (2007) argue against Porter's five-force framework because it ignores the changes in customer income, tastes and firm strategies for boosting demand, such as advertising. Rather than ignoring customers' incomes, Porter (2008, p.84) takes the customers' income into account and has classified the customers into price-sensitive ones who earn low incomes and are strapped for cash and less price sensitive ones who earn high incomes or are cash-rich customers. As to the tastes of customers, Porter (2008, p.238) notices that firms in the industry increasingly sell products which are "no longer new but established, legitimate items" to experienced, repeat buyers "who are increasingly knowledgeable and experienced, having already purchased the product, sometimes repeatedly." In terms of this, Porter concludes that "approaching these differently oriented buyers requires a fundamental reassessment of strategy."

Environmental analysis is important because it helps in developing sustainable competitive advantage, identifies opportunities and threats and may provide opportunities for productive cooperation with other companies (Lynch 2006, p.80). Lots of scholars turn to the environment analysis for a deeper understanding of establishing and maintaining substantial competitive advantage. Some scholars concentrate on discussing one particular factor, whilst some scholars observe the impact of internal factors and external factors together with the consideration of timing and dynamics.

#### **2.5.1** Theory Put forward by UK' Department of Trade and Industry

The UK Department of Trade and Industry (1999) identifies the demand of the market as the ultimate core drivers behind the information economy. Turner indicates (2000, p.8) that the development of the information economy is driven by three factors: demand side drivers, supply side drivers and government actions. Demand side drivers can explain the extent to which the users can use an increasing array of information products and services; supply side drivers can indicate the extent to which customer can achieve a critical mass, develop commercially and eventually reach a self-induced maturity. Porter (2004) and Turner (2000) both underline the supportive role of the government in the embryonic stage of the development of the IT industry. The government plays a key complementary role in stimulating and regulating the development of the information economy. Figure 2.2 illustrates the detailed drivers in each side.

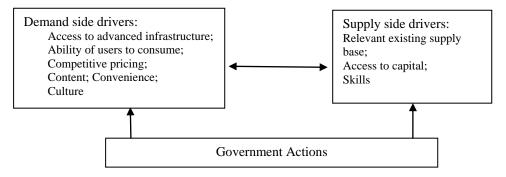


Figure 2.2 The Commercial Development of the Information Economy (Adapted from Turner, 2000; the UK Department of Trade and Industry, 1999)

According to Turner's brief explanation, the focus of the UK Department of Trade and Industry's approach will be listed briefly here.

# Demand- side Drivers:

- Access to advanced infrastructure: New technology that the network needs to deal not only with increased traffic but also with the advent of bandwidth hungry services.
- Ability to consume: Customers' ability to purchase the services offered. Generally, the higher the levels of GDP (Gross Domestic Product), the greater the propensity to absorb and accept the services and technologies associated with the emerging information economy.
- Competitive pricing: This will influence not only the speed of adoption of necessary technologies but also the roll-out of new services. Price is determined by factors such as market size and intensity of competition.
- Content: At the heart of the information economy and driven by the customer requirement, content has to show the capability to attract the customers to add value within an economy.
- Culture: Factors such as language, willingness to innovate, education and attitude to information will all perform important roles in influencing the absorption of these technologies. "Generally the more positive the attitude from the customers and the society, the easier it will be for the information market to achieve the necessary critical mass of the customers." (Turner 2000, p.11)

# Supply-side Drivers:

- Relevant existing supply base: According to Turner (2000, p.12), "Having relevant telecommunications, IT and content industries is an advantage in the move to the information economy."
- Access to capital: The ability to get a sufficient pool of risk capital for coping with quick change and rapid evolution.
- Skills: The critical supply of skilled IT professionals is pivotal and the existence of such skills stimulates further investment.

# 2.5.2 Bouwman and MacInnes' Value Web Framework

Bouwman and MacInnes (2006) discuss the business model dynamics for value webs with respect to the integration of internal organizational factors and external environmental factors. According to Bouwman and MacInnes (2006), external factors, including socio-economic trends, technological developments and political and legal changes, are important in understanding how business models are used in practice. They also refer to the following four components as the internal factors which have impact on how organizations create value: the service and/or product being offered, the technical configuration, and the organizational and financial arrangements.

With the aim of providing insight into the mechanisms behind changes in business models caused by radical or incremental technological, regulatory and market changes, Bouwman and MacInnes (2006) develop a new framework (see Figure 2.3) for explaining the dynamic aspects of business models in value webs.

They conclude that, "as companies move from research to roll-out and maturity three forces cause changes in business models. The technological forces are most important in the first phase, regulation in the second phase, and markets in the third."

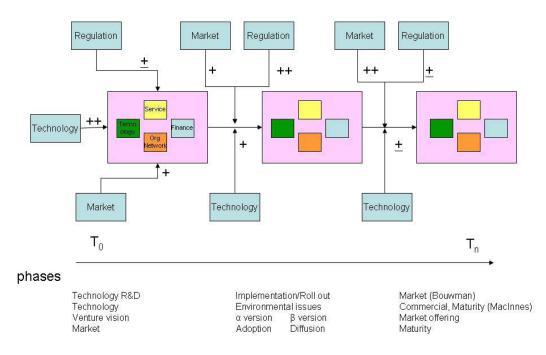


Figure 2.3 Dynamic Business Model Framework (Bouwman and MacInnes, 2006)

# Development of Bouwman and MacInnes' framework

Reuver, Bouwman and MacInnes (2009) admitted that the framework developed by Bouwman and MacInnes (2006) was designed through only one case and they realized the necessity to examine some comparative cases to further test their framework.

In 2009, with the study of longitudinal case descriptions involving business models from 45 companies of various industries, Reuver, Bouwman and MacInnes (2009) focused on examining the impact of external drivers on the business model so as to test the hypotheses which they put forward in 2006 (see Figure 2.4). The hypotheses for testing are:

- "H1: Technological drivers are most relevant (++) in the development/R&D phase, decreasing to medium (+) in the implementation/roll-out phase and low (±) in the commercial phase."
- "H2: Market-related drivers are most relevant (++) in the commercial phase and less (+) in the other two phases."
- "H3: Regulatory drivers are most important (++) in the implementation/roll-out phase, and almost irrelevant (±) in the other phases."

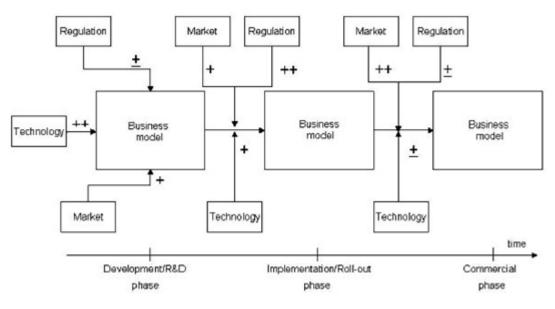


Figure 2.4 Dynamic Business Model Framework (Reuver and Bouwman and MacInnes, 2009)

Their study indicates that their case study supported the first hypothesis but rejected the second and the third. Also, they point out that their model is "much more applicable for the business models of small, start-up companies than for large, established business."

# 2.5.3 Summary of the External and Internal factors

# External Factors

- Technology important element in information economy Shapiro and Varian (1999, p.8) stress that the "information economy is an economy about both information and associated technology." In their opinion, "infrastructure is to information as a bottle is to wine: the technology is the packaging that allows the information to be delivered to end users." In order to make this explanation easy to understand, they illustrate that "A single copy of a film would be of little value without a distribution technology. Likewise, computer software is valuable only because computer hardware and network technology are now so powerful and inexpensive." Fletcher and Russell-Jones (1997, p.36) claim that technology can motivate efficient production and can also distort significantly a company's market rank by introducing new working or operating practices.
- Market changes

According to Bouwman and MacInnes (2006), the market changes include market developments or changes in the market environment and corresponding responses

from a socio-economic perspective (Bouwman and MacInnes 2006). A market is usually characterised by the competition between suppliers of the products/services in the market. If the market is competitive, the customers would affect the prices and "cause changes by demanding more value from the products/services particularly where there are lots of substitute offerings or their perception of a fair value changes" (Fletcher and Russell-Jones 1997, p.36).

Capon (2008) thinks that companies that have developed competitive strategies always develop a marketing strategy to change the market to underpin and support their chosen competitive strategies. Therefore, to a company, market changes are mainly caused by the impact of other companies which adopt market enlargement and market development. Market enlargement is the easiest in a growing market and is "simply an expansion of a company's existing markets, which requires manipulation of the price, promotion and place for a product" (ibid, p.224). Market development is the creation or exploitation of new markets or market segments. Market development requires "either the market to be re-segmented and new profitable segments identified or new geographic markets to be identified and entered into for its first time. Capon (2008, p.224) points out that socio-economic variables include income, occupation, terminal education age and social class. In addition, product development undertaken by other companies who are successful at innovation, research, design and development will bring big market changes as well.

Tung (1995, p.492) clarifies that 'culture is an evolving set of shared beliefs, values, attitudes and logical processes which provide cognitive maps for people within a given societal group to perceive, think, reason, act, react and interact.' Culture's nature of constant evolution can be illustrated by the conclusions of knowledgeable Chinese people (see Table 2.2).

The constant evolution of the nature of culture also affects game players. Users who were born before the 1980's are getting old. Lots of hardcore game players at this age will transfer their concentration from game playing to job hunting, family establishment and financial considerations. When students leave their universities and establish families, they soon need to make financial plans which will reduce the time available for playing games. How can online game companies ensure that their games will appeal to new game players who were born after 1990s? Is it still

possible to encourage the older game players to come back? Many interviewees expressed their concern about this tough question and thought that it was even tougher for the foreign online game players to get the answer.

Table 2.2 Changes of the Chinese People (Tung, 1995)

Period	Driver	Changes of the Chinese people
(1949 Liberation- 1979)	Under the Communist rule	Converting from Confucius into a socialist
1980s- Present	Reform and opening up to the outside world	The socialist is changing back to Confucius again but wearing a 'Christian Dior Suit'.

Synthesizing the above various opinions, the impact of direct competition between the same industrial players and customers' changing demands will be emphasized when discussing the external factor of "market changes".

# Regulations issued by a governmental body

New regulations refer to issues, such as fair competition, privacy, intellectual property right and content restrictions, which companies must comply with (Reuver and Bouwman and MacIness 2009). Government can affect companies by passing legislation and laws that put restrictions on their actions (Kotler and Armstrong 2006). Legislation may protect the customers from being taken advantage of and ensure that goods and services for sale are healthy and safe.

Porter (2004, p.223) points that "emerging industries often face delays and red tape in gaining recognition and approval by regulatory agencies if they offer new approaches to needs currently served by other means and subject to regulation." He (2004, p.224) stresses further that "if the emerging industry is outside a traditionally regulated sphere, regulation sometimes comes abruptly and can slow the industry's progress." Once a growth boom increases the size of an industry, regulators take notice. Porter's theory matches very well to the role of the Chinese government in its supervision of the Chinese online game industry. For example, the online game industry was ignored by Chinese government regulators until the industry was greatly expanded in 2003.

# Internal Factors

• Organizational structure

Carpenter and Sanders (2007, p.367) define organizational structure as the "relatively stable arrangement and division of responsibilities, tasks, and people within an organization." It acts as the framework for the management team to divide tasks, deploy resources and coordinate departments (Daft 2003). It provides a way for information to leave the people and departments who generate it to those who need it.

Carpenter and Sanders (2007, p.367) conclude that organizational structure has two essential functions: "1) It ensures control; 2) it coordinates information, decisions, and the activities of employees at all level." Considering the increasingly complex nature of the both functions, firms would generally modify their structure accordingly. Carpenter and Sanders conclude that "if a firm is participating in related business, it would try to exploit synergies; conversely, the more focused the firm is on a single business, the more its structure should be designed to emphasize control." Through case studies, this research observes each targeted company's structure at different periods of time and tries to check whether the firm's structure could facilitate the implementation of its strategy and how the structure influences strategy.

• 4Ps

Fletcher and Russell-Jones (1997) categorize the key elements in marketing as the four Ps (known as the marketing mix). They think it meaningless to discuss pricing without considering the other three elements - product, promotion, and place.

- 1) Product: what you are selling (or what your offer consists of)
- Promotion: how the offer is communicated (or how to communicate with your buyers)
- 3) Place: how the product is distributed and sold (or where to distribute the product)
- 4) Price: what to charge for the product

Given the significance of having a coherent and integrated marketing strategy, the 4Ps is regarded as an important factor in discussing market share competitiveness.

Services are always intertwined with promotion and distribution by the product suppliers. Porter (2004, p.223) points out that the "lack of standards, and technological uncertainty, together with erratic product quality can negatively affect the images and credibility of the entire industry". In an industry which lacks product differentiation, the offering of unique high-quality customer services is an important approach to differentiate a company from intense rivalry (ibid, p.37).

Fletcher and Russell-Jones (1997, p.76) state that customers' perceptions of value for money are related to the product or services before offered. All the services are based on an understanding of customer wants, rather than what you would like them to do. MacInnes and Hu (2005) point out that the detailed services to the Chinese online game operators and developers are "to overcome technical and non-technical, direct and indirect challenges (such as Waigua and private servers) so that game players' virtual property and other items that hold value within the community are protected."

#### • Technology in the companies

In the development/R&D phase, Reuver, Bouwman and MacIness (2009) expect technology to be the main driver behind a company's new business model development. Specifically, the emergence o new mobile, wireless and data networks, like the Internet, allow for an increased reach of businesses, while middleware, web services and multimedia applications at the same time offer new opportunities for enriched, customized and secure communication (Reuver, Bouwman and MacIness, 2009).

Porter mentions that there is usually a great deal of uncertainty about the technology in an emerging industry. What product configuration will ultimately prove to be the best? Which production technology will prove to be the most efficient? (Porter 2004, p.217) Even so, many uncertainties exist. The company whose products or services can generate the most value for customers is the exact company that possesses the advanced technology in game design and game operation. Shapiro and Varian (1999, p.14) emphasize that "having a superior technology is not enough to win. You may need to employ marketing tools such as penetration pricing to ignite the positive feedback."

### • Finance

Large financial resources are greatly needed today when entering almost any industry, particularly if the capital is required for risky or unrecoverable up-front advertisement or research and development (Porter 2004, p.9). The huge capital requirements in fields like computers and mineral extraction limit the pool of likely entrants. Although difficulty in financing is probably the most common situation, some industries seem to be an exception. In industries like online games, even newly started firms have found it relatively easy to raise finance. In case studies, the author will trace the financial development of each targeted company, analyze the relationship between the finance and pricing strategy and analyze the role of finance in the companies' competitiveness enhancement.

The company's strengths and weaknesses are its profile of assets and skills relative to competitors, including financial resources, technological posture, brand identification, and so on. The personal values of an organization are the motivations and needs of the key executives and other personnel who must implement the chosen strategy (Porter 2004, p.xxiv). Hence, this research will examine the personal value of each case company's CEO and their impacts upon the company's competitiveness.

# 2.5.4 Development of the Original Conceptual Framework

Although the Bouwman and MacInnes' framework focuses on the impacts of external factors to a business' life cycles, given the following strength of Bouwman and MacInnes' framework, an original conceptual framework (see Figure 2.5)is developed based on an amendment of the Bouwman and MacInnes' framework and integration of a variety of other theories in terms of internal drivers for business development discussed in 2.5.3. In the following, strengths of Bouwman-MacInnes framework will be listed. Also, the phasing model limitation which exists in the Bouwman and MacInnes' framework is pointed out, which explains why phasing concept will not be taken into consideration in the newly-developed original conceptual framework.

#### Strength of Bouwman and MacInnes' Framework

According to the discussion in Section 2.5.2, the strengths of Bouwman and MacInnes' framework (2006) are concluded as follows:

- 1) This model combines both of internal and external factors in the IT-based service sector Nippon Telephone and Telecommunications (NTT).
- 2) The model takes the important role of time in the business model innovation into account.
- 3) The model identifies the distinction between static and dynamic business models and examines how technological, regulatory and market changes affect transition models.

#### Phasing Model Limitation in Bouwman and MacInes' Framework

More and more scholars, especially those in the area of innovation management, try to use phasing models to understand environmental dynamics, aiming to explore how innovations and changes in products and services follow a life cycle and to show their impacts on the firm strategies and business models (Burgelman 1983; Afuah and Tucci 2001; Tidd *et al.* 2001; Mason and Rohner 2002).

Bouwman and MacInes (2006) divide the life cycle of business models into three phases: 1) R&D; 2) Implementation/Roll-out; and 3) Commercialization. They call these three phases "stages of market offering, maturity and decline." Besides, they point out that "there may be iterations in the life cycle of business models, in particular when things do not go as planned." In principle, the strength of the phasing model theory lies in the emphasis on the business model dynamics. However, the overriding aspect of emerging industries is great uncertainty, coupled with the certainty that change will occur (Porter 2004, p.234). From the viewpoint of the author, it is the great uncertainty and unexpected changes that would restrain the application of the phasing model into this research.

In addition, Reuver, Bouwman and MacInnes (2009) stress that their model developed in 2006 only applies better for small, start-up companies instead of large and established business. Further, they remark that "not all cases dealt with all three phases of our research model" with the reason that "the services involved had not yet reached mass market or ... established companies were already in the last phase of their life cycle."

### Original Conceptual Framework for this Research

Considering the phasing model is always tied to the study of a certain period environment dynamics and given the ambiguity in their phase classification and application limitation in their paper, the concept of phasing in the original conceptual framework is not to be considered (see Figure 2.5)

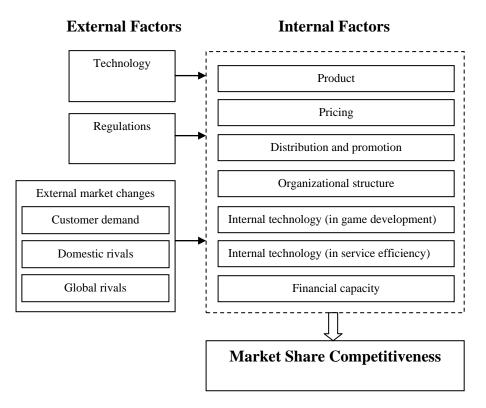


Figure 2.5 Original Conceptual Framework- Impact of Internal and External Factors on a Dominant Chinese Online Game Company's Market Share Competition

(Adapted from Bouwman and MacInnes, 2006; Reuver and Bouwman and MacIness, 2009; Carpenter and Sanders, 2007; Porter, 2004; Fletcher and Russell-Jones, 1997)

# 2.6 Other Important Concepts in Business Competitiveness

During the Literature Review, a number of concepts or theories are identified to link the pricing study and enhance the better understanding of the business competitiveness. Hence, the key concepts or theories are depicted below.

# 2.6.1 Market Share and Business Competitiveness

Although a few strategists disagree (Buzzell and Gale 1987; Baker 1993), a majority of strategists regard a large market share as strategically beneficial because a large share may make it possible to influence prices and the concept of economies of scales (especially in the traditional economy) can increase a firm's profitability (Porter 1990; Lynch 2006). From the strategic perspective, market share in terms of annual sales (Lynch 2006, p.81 and p.509), are usually used to measure a company' market share (which is also called a company's power in the market place or a company's market size).

Lynch (2006, p.509) suggests that "there is a correlation between high levels of marketing activity and market share." According to his opinion, high-share companies who have higher

profits already can use their funds to invest in cost-saving devices, higher quality and more marketing activity; in turn, they can raise their market share and profitability even further. For those companies with low market share, it may not be the best strategy to spend funds on marketing activities to increase market share. He further confirmed that for the majority of companies that do not have a high market share, it may be prohibitively expensive to invest in additional marketing activity and may result in low return on investment.

#### Velu's Theory of Business Model Innovation and Market Dominance

Velu (2005) defines "business model" as the process by which a firm generates and captures revenues. An 'evolutionary business model' is a business model that is only marginally different in terms of the process by which the revenues are generated and captured compared with the initial business model. In addition, an evolutionary business model maintains the viability of the initial business model (Velu, 2005). A 'revolutionary business model' is a business model that uses a substantially different process to generate and capture the revenues compared to the initial business model. In addition, a revolutionary business model makes the existing business model obsolete.

He regards the firms with market share dominance as the dominant firms. Those firms with small market share are called less dominant ones. His research suggests that the dominant firm is more innovative, and the power to influence the success of a new business model from the relevant network effects of the installed customer base makes the dominant firms commit to a particular narrow investment. He further proposes that less dominant firms tend to diversify their investments due to the threat of lock-out as a result of their weaker ability to influence the success of the investment. All his propositions are supported by the investment strategies of the incumbent dealer banks in the US fixed income market, another industry with relevant network effects.

# Contribution of Velu's Theory to the Study of Market Dominance and Business Innovation

In the fields of business strategy, marketing and economics, much research has been done to analyse the relationship between market dominance and business innovation. The academic contribution of Velu's theory lies in two points: one is its challenge to the majority of previous studies on market dominance and innovation; the other is its contribution to previous research on network markets. Firstly, past research on market dominance and innovation always stressed the impact of new technology and product innovation on market dominance, and ignored the effect of business model innovation. By comparison, Velu's innovation study not only focuses on technology-enabled product innovation but also combines the elements of business model innovation, the implication of which is more effective because it can change a whole industry by making the established source of revenue generation obsolete and making competitors irrelevant (Kim and Mauborgne, 2005).

Secondly, as to the research on network markets, past researchers rarely emphasize that firms with different levels of market dominance will have different expected returns via the application of different business models (or pricing models).

Presently, in view of the fragmented literature on market dominance and innovation in markets with strong network effects, Velu's theory is in comparison one of the most comprehensive and unique contributions because it investigates and summarizes the competitive interactions of dominant and non-dominant incumbents over time so as to explain the relationships between their motivations, decisions and innovation application.

# Application and Limitations of Velu's Theory to this Research

Velu claims that his propositions applied well in his research target, the US fixed income market during the period 1995-2000 (2005, p.51). Also, he states that the ideal context of an industry should display the following characteristics if other researchers would like to test his proposition:

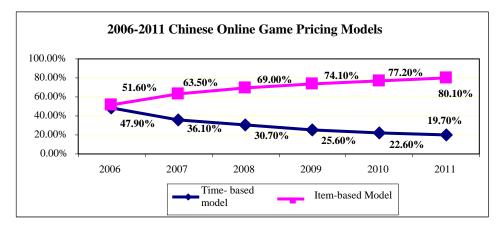
- 1) An industry in which a traditional business model exists with the potential to be transformed into a new business model
- 2) Relevant network effects
- 3) Incumbent firms with different levels of dominance (relative market shares).

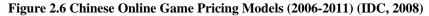
Scanning the characteristics of the Chinese online game market, it can be seen here:

 The dominance of item-based pricing model and the declining subscriptionbased pricing model satisfies. Figure 2.6 depicts IDC's projection of the revenues generated from the item-based model over the time-based model in China for 2006 to 2011.

- 2) The attribution of relevant network effects is evident in the Internet-based virtual world, and is especially manifest in online games; the imbalance of company market share dominance is a fact without any doubt.
- 3) Among the 60 online game operators in China in 2007, the top 4 online game operators account for 61 percent of the market share while the top 11 account for 93 percent of the market share. Besides, the market is very dynamic.

From these points, the Chinese online game market meets all the prerequisites for testing Velu's propositions. Velu's theory is, therefore, a good reference for the author to continue the following research. However, looking back at "when" and "how" Chinese online game firms innovated, the data collected by the author seems to conflict with Velu's propositions. The author will argue against Velu's concepts in Chapter 3. In terms of this, this research will explain why Velu's theory does not apply to the pricing dynamics in the Chinese online game market and will aim to enrich Velu's theory to gain a better understanding of the market with relevant network effects.





#### 2.6.2 Porter's Theory of Uncertainty

In Section 2.5.3, unexpected uncertainty (Porter 2004, p.234) in an emerging industry was suggested as a factor that would make the phasing model theory more difficult to apply. Here is a brief review of Porter's uncertainty concept with regard to uncertainty in an emerging industry.

# Technological Uncertainty

There is usually a great deal of uncertainty about the technology in an emerging industry. What product configuration will ultimately prove to be the best? Which production technology will prove to be the most efficient? (Porter 2004, p.217)

#### Strategic Uncertainty

No "right" strategy has been clearly identified, and different firms are groping with different approaches to product/market positioning, marketing, servicing and so on, as well as betting on different product configurations or production technologies.

# Erratic Product Quality

With many newly established firms, lack of standards and technological uncertainty mean that product quality is often erratic in emerging industries. This erratic quality, even if caused by only a few firms, can negatively affect the images and credibility of the entire industry (Porter 2004, p.223).

Considering erratic product quality and too many uncertainties existing in an emerging industry and the emergence of spin-offs as a common phenomenon, especially in the online game industry, it is hard to forecast a company's punctual life cycle. The aim of this study is not to contest the validity of the phase division adopted by Bouwman and MacInness. Rather, the author distinguishes the phases of each targeted established company in terms of the exact time (or milestone) when each targeted company initiates pricing innovation.

# 2.6.3 Social Value

# Public Value

Kolter and Armstrong (2006) underline that an organization's public include any group that has an interest in or impact on the organization's ability to meet its goals. For instance, the 'financial public' can restrain a company's ability to obtain funds and affect its credit condition. Media 'public' includes newspapers and magazines that can publish articles to influence customers' opinions. Government publics can affect the company by using legislation and censorship. As the main customer base, the general public's attitude, whether positive or negative, can greatly affect sales upward or downward because the general public is often the company's customer base. Wheeler and Sillanpaa (1997, p.x) define stakeholders as "individuals and entities who may be affected by business, and who may, in turn, bring influence to bear upon it." They classified "investors, employees, customers, suppliers and the local community" as the important direct stakeholders because the interest of these primary stakeholders link directly to the "company fortunes through social relationships". They point out that the two kinds of value that a successful business can create should be commercial value and social value. These two kinds of value could reinforce each other and lead to greater stakeholder loyalty and corporate resilience. In the view of Wheeler and Sillanpaa, genuine customer involvement is the only sure way to retain long term market share enduring competitive advantage (ibid, p.241). Wheeler and Sillanpaa expect that instead of focusing on products, consumers will concern themselves more on services (such as financial services and leisure services) and will even monitor actions of related services. Major principles that deal with honesty include: information transparency, disclosure of all relevant characteristics of the products and services (such as price, performance and quality); effective dialogue between customers and the company; fairness, protection and autonomy, and respect (ibid, p.249). Lynch (2006, p.440) points out that interests of different groups of stakeholder may conflict, which needs the organization to analyze and balance.

### Content Control and Issues of Cultural Diversity

Global information enables cultures to have more opportunities to interact with one another. Some hope that the new technologies associated with the information economy will promote cultural exchange and linguistic diversity. Others see the importing of other states' cultural products as a treat (Turner 2000, p.178). Turner (p.176) points out that "content in all its forms is the vital raw material of the information economy." When mentioning the relationship between content control and the national interest, he remarked that state restriction over content can be regarded as a measure to protect the 'national' interest.', and content control works as a balancing act between "allowing markets in information services and applications to flourish, and protecting the national interest."

Ernkvist and Ström (2008, p.121) conclude that Chinese online games are subject to three major national policies: 1) techno-nationalism, 2) information control, 3) social fears and pragmatic nationalism. Series of the Chinese government policies aim to support the flourishing of inhouse online games which can represent national cultures. The majority of representatives from schools, parents and society see online games as having created an unhealthy environment and as a threat that distract the children from studies.

How to deliver the game content which cannot only satisfy customer demand and dispel the social worries, but also preserve the cultural diversity will be discussed in the last chapter of this thesis.

# 2.7 A Review of Human Resource Management Theory

In the 1960s and 1970s the main reason for the introduction of monetary rewards was to create a way of helping workers' pay increase at a time of government restraints (Bowey *et al*, 1986). In the 1980s and 1990s, reward schemes are recognized as a factor that can motivate people at work and rewarding management is usually an important part of the employer's financial strategy (Hendry 1994, p.343). Lawler (2000) states that reward systems impact on organizational performance, such as influencing recruitment and retention, eliciting better performers from the poor performers. However, Purcell and Brown (2000) argue in a 'Rewards Debate' that "reward management interventions are more harmful than building mutual trust, commitment and motivation." They further point out that "not only does it perpetrate the illusion that companies are rational, top-down, directed organizations, it also assumes that people need incentives to work in an acceptable way"; in other words, "they cannot be trusted to work effectively without such a control mechanism." This is a contradiction because, as we have seen, mutual trust is at the heart of high commitment management (Purcell and Brown 2000, p.218).

Other scholars emphasized in the recent literature that using rewards as a strategic tool to influence corporate values and beliefs (Armstrong 2002, Kessler and Purcell 2003) instead of just as a tool for recruiting, retaining and motivating staff. Further, many scholars emphasize the importance of training in corporate human resource development. Marchington and Wilkinson (2005) stated that training, as a vehicle for human resource development, aims at improving the skills of employees and enhancing their capability to deal with the ever-changing demands of the work situation (2005). It could also make a positive contribution to the empowerment of employees. Specific benefits have been identified by Armstrong (1992) and Kenney *et al.* (1990) as follows:

- 1) Training facilitates the requirements of meeting a job quickly, and by making progress in the knowledge and skill of the worker it allows him or her to offer better quantity and quality of output with fewer mistakes and a reduction in waste.
- 2) Training is an invaluable process when the organization wishes employees to keep right attitudes when facing changes. Training equips employees to understand why changes are necessary, how they might benefit from it, and when they are given skills to participate in the implementation of change.

In organizations where there is a core of knowledge-based workers, training development is a vital factor for adding value to the enterprise. Different countries have adopted alternative approaches to encourage companies to invest in training. Traditionally, when companies encountered our financial difficulties, the training budget would be cut first. Nowadays some forward-looking companies, when faced with difficulties, actually increase training (Marchington and Wilkinson 2005).

Whatever the soundness and reasoning behind the design of employee relations strategies and the framework, they may only be successfully implemented if the employees' motivation can be understood (Pettinger 1999). The most famous model of the variation in motivation across time, for the same person and between people, is that developed by Maslow (1954), who grouped needs into a hierarchy of five stages. Maslow emphasized that people tended to satisfy their needs systematically and usually started with the primary needs (i.e. the first two needs). The basic needs concern people's physical requirement to sustain life and then move up hierarchy. The last three stages were called secondary needs by Maslow (see Figure 2.7). They are social needs, esteem needs and self-actualisation needs. The concept of self-actualization (or self-fulfilment) indicates that you are always trying to become everything that you have the potential to become. This concept has also been very influential in organizations because its main strength is that it has listed what factors might motivate people.

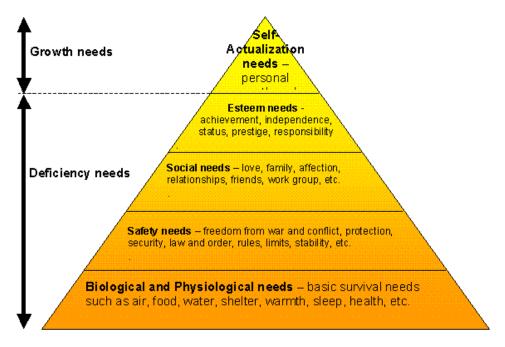


Figure 2.7 Maslow's Hierarchy of Human Needs (Maslow, 1954)

Targeting the abovementioned theories, this research aims to check whether monetary reward is the most effective way to retain talents and to find other factors which can benefit the industry's development in the long run.

Academic research in human resource management in the Chinese online game industry is quite limited and most HR research has targeted the IT industries in India and western countries (Whitener 1998; Mathiassen and Pourkomeylian 2003; Marks and Vansteenkiste 2008; Mulla and Premaraja 2008). Given the increased emphasis in recent years on talented people as a key source of an organization's competitive advantage, especially in the knowledge-based online game industry, it is not surprising to see corporate initiatives introduced to buy in talented professionals. However, how successful are the talent wars and on what assumptions are they based? With the aim of combining the reward theory and training theory mentioned above with the current talent mobility in the Chinese online game labour market, this research tries to understand the complexity of motivating employees at work in this fast-growing market. This part of the study is important because it facilitates the HR professionals in understanding what motivates people and makes them happy in their workplace and the study can be used as a good reference for organizations' management teams to design and implement their future reward and training schemes.

# 2.8 Strategic Alliance Management Theory and Related Weakness

A substantial body of literature concerns the cultural implications of international business and "has long acknowledged the importance of national cultural characteristics as determinants of management behavior and strategy formulation and market entry mode (Cheng 1989; Rosenweig and Singh 1991)." Kogut and Singh (1988) note that cultural distance, which indicates the cultural norm difference between one country and another, may affect the success of business.

Morgan Stanley (2004) indicate that none of the top 10 most popular online games in China had Western culture content which confirms that this cultural difference may hinder Western games' success in China. However, this theory cannot offer an explanation to the success of *WoW*, a game with Western culture content.

In addition, along with Japan, China, Hong Kong, Taiwan, South Korea are commonly referred to as Confucian or neo-Confucian societies because they have all been influenced by the Confucian philosophy (Tung, 2002). Hofstede's (1980) dimensions are usually utilized as the most widely accepted basis for understanding national culture. According to Hofstede's survey, some similar cultural attributes are commonly shared by the Confucian societies. They include a concern for the future, persistence, perseverance in pursuing goals, having a sense of shame, willingness to subordinate individual goals for a purpose, and thrift (Hosftede and Bond 1988). Guanxi (Kankei in Japanese and Kwankye in Korean), or connection, has long been identified and emphasized as a critical factor for successful market entry in Confucian societies (King 1991). However, the importance of guanxi will decrease in ensuring continued success once the operation is established (Yeung and Tung 1996; Jiang 2006; Westrup and Liu 2008; Willis 2008). The failure of foreign-licensed games in the Chinese online game market implies that cultural similarities in Confucian societies will not always guarantee business success.

Tung (2002) points out that in order to sustain a product's competitiveness, other conditions, especially technical competence, have to be met. He defined technical competence as the supply of appropriate products of high quality, the adoption of suitable business strategies and the possession of in-depth knowledge of the market.

Based on knowledge-intensive innovation analysis, Van de Ven (2004) proposed that the rise of a knowledge-intensive global economy indicates that innovation is more of a collective than an individual achievement.

Given that academic research is quite limited on the topic of strategic alliances in the Chinese online game industry at present, I decide to use theories put forward by Tung to explore factors that contribute to the operation failure of mot foreign-licensed games in China. It is expected that the study of this Chapter can make certain contributions in the strategic management research in the IT knowledge-intensive service industry.

# 2.9 Governmental Policy Support on the Online Game Industry

In this section, limited previous literatures of the government policies and their impacts upon the Korean and Chinese online game industry growth will be discussed.

#### 2. 9.1 Wi's Theory on the Korean Government Policy

Wi (2009) is the first person to reveal how the Korean government issued a series of policies to encourage the growth of the Korean online game industry.

He concludes that, among the above-mentioned policies, two important policies have played important roles in the development of the Korean online game industry. One is the high-speed communication network policy, and the other is the adoption of adapted military service system. The high-speed communication network policy was designed with reference to the information highway plans of the US and Japan. With the aim of promoting the competition in the communication industry so as to speed up the infrastructure expansion, the high-speed communication network policy tightened its regulation on telecom monopolies to prevent dominant ones from abusing their position by unfair competition, and encouraged new competitors to enter into the market.

The other important policy, called the "Adapted Military Service System", promoted a pool of skilled engineers and programmers for the game industry. Korea has a policy of mandatory military service for all Korean men between the age of 18 and 35. The length of the duty is generally between 2.5 and 3 years. However, draftees can fulfil their military duties by going to work for certain firms which are designated by the government as "infrastructure industries". The Government hoped to use this plan to foster economic growth by providing these industry-skilled workers. In 2000, the online game industry was designated as this kind of industry and certain development companies (especially mid-sized ones) were elected to offer draftees work positions by which they could receive full credit for their military service. A large number of online game development professionals and a long list of CEOs in the prestigious online game companies all began their careers via the adapted military service.

The contribution of the adapted military service to the mid-sized online game companies is that it offers them a stable supply of personnel. Gaining the designation by the military service system demonstrates the government's trust in this company, which will establish and consolidate a company's good image in public.

#### 2.9.2 The Role of Chinese Government Policy

Ernkvist and Ström (2008) systematically evaluate the role of the Chinese government during the development of the Chinese online game industry. According to Ernkvist and Ström (2008, p.121), "online games in China are deeply enmeshed and shaped by the three national policies: techno-nationalism, information control; and social fears and pragmatic nationalism." A number of governmental ministries claim to have jurisdiction over the industry. Therefore, lots of policies which should be complementary are often conflicting and give rise to friction. With the integration of their analyses, the Chinese government's strict regulations, tight information control and ambiguous policies tend to curb the innovation and diversity of online games in China although the Chinese online game companies are supported by the Chinese government.

## 2.10 Summary

This chapter reviewed previous studies on pricing within the context of traditional economy and information economy. Moreover, other possible factors that may influence business competitiveness have been discussed. Although Bouwman and MacIness' business model framework (2006) would provide insight on examining impact of pricing strategy and other factors on the online business competitiveness in the information economy, in 2009, Reuver, Bouwman and MacInnes (2009) raised the challenge to the framework that they developed in 2006 and concluded that the framework they developed could only be applied very well for small companies. The identified weakness of this framework raised challenging issues to this study. Considering the limitation of Bouwman and MacIness' business model framework and integrating other related theories, a conceptual framework is designed for the following case studies.

Given no case studies of the dynamic pricing of established companies towards business competition have been conducted, in order to fill this gap of pricing study in the information economy, five dominant online game companies (four NASDAQ listed and one NYSE listed) are chosen from the prosperous Chinese online game industry for this research. The following chapter investigates when and how Chinese online game companies adopt their pricing innovation for the market share competition.

# **Chapter 3 Market Share Competition and Chinese Online Game Operators' Pricing Innovation**

#### 3.1 Introduction

The gaining and retention of market share (or customer base) is the main goal of any service operator (Fitkov-Norris 2002, p.62). Buzzell et al. (1975) and Porter (2004, p.145; Jaisingh 2008; Voss and Voss 2008; Tellis et al. 2009) agree that the firm with the largest market share is usually the most profitable one. According to Lynch (2006), Velu (2005) and other economists, market share refers to a company's sales revenue (from that market) divided by the total sales revenue available in that market. This study aims to discuss the market share dominance of the established top 5 online game companies and try to find out the relationship between the market dominance and pricing innovation. Also, as explained in Section 2.6.1, the Chinese online game market meets all the prerequisites for testing Velu's propositions (Velu 2005). Therefore, this chapter firstly presents Velu's propositions, and then investigates game operators' market share trend. This chapter also investigates how and when pricing innovations were adopted by dominant and less dominant Chinese online game companies so as to test the relationship between market dominance and online game operators' pricing innovation. The above-mentioned investigation results indicate that Velu's propositions cannot all work in the context of the Chinese online game market. Based on the investigation results, the last section of this chapter addresses the effectiveness of pricing innovation on a company's market share competition is limited and cannot be overemphasized.

#### 3.1.1 Velu's Propositions

Targeting the investment strategies of the incumbent dealer banks in the US fixed income market in the years1995-2000, Velu (2005) examined the impact of network externalities on when and how firms innovate their business model in network markets. Velu concluded that: "For an industry with relevant network effects, the dominant firm is more innovative and the power to influence the success of a new business model from the relevant network effects of the installed customer base makes the dominant firms commit to a particular narrow investment." He further proposed that less dominant firms tended to diversify their investments due to the threat of lock-out as a result of their weaker ability to influence the success of the investment. His conclusions are listed as follows (see Table 3.1).

Key questions	No.	Propositions/Corollaries
1. When do	Proposition 1	Less dominant firms will invest in the new technology
incumbent firms		ahead of dominant ones
innovate?	Proposition 2	Less dominant firms are more likely to invest in the
		evolutionary business model
	Corollary 1	Dominant firms will not invest in the evolutionary business
		model once the less dominant firms have invested in it
	Proposition 3	Dominant firms are more likely to invest in the
		revolutionary business model earlier than non-dominant
How do incumbent	Proposition 4	Less dominant firms are more likely than dominant firms to
firms innovate?		diversify their investment
	Corollary 2	Dominant firms are more likely than less dominant firms to
		make narrower investments.

Table3.1	Velu's	Theory	in	the	Relationship	between	Revenue	Model	and	Market
Dominance	e (Velu, 2	2005)								

# **3.1.2** Chinese Online Game Market - Ideal Context for Testing Velu's Propositions

In 2.6.1, it was argued that the Chinese online game industry matches all the requirements for testing Velu's propositions because it is an industry which is undertaking business model transformation, an industry with strong network effects and an industry with different levels of market dominance. In terms of this, the market dominance in the Chinese online game market will be examined in Section 3.2.

# 3.2 Market Share Dynamics in the Chinese Online Game Market

As mentioned before, the development of pricing strategies (2003-2009) was classified into two stages in the Chinese online game market. The first stage took place from 2003 to early 2008, during which the traditional time-based pricing model became obsolete and was replaced increasingly by the new item-based pricing model. Velu defines a business model as a "revolutionary business model if it can generate and capture the revenues with the adoption of a model which is totally different from the initial business model. With respect to this, the transforming of time-based pricing to item-based pricing (2004-2008) is regarded as a model revolution. By comparison, some game operators (2008-present) have made more pricing changes, such as offering a game with both item-based pricing and time-based pricing. This pricing innovation is only marginally different and only a complement to the current prevailing

item-based business model. So, this pricing innovation is regarded as the evolutionary pricing innovation.

#### 3.2.1 Market Share Competition in 2003 - 2005

Market dominance in the Chinese online game market was quite stable in the period 2003-2005. The online game market (2003-2005) was highly concentrated with the top 3 companies having a significant market share. The market concentration rate of the top 3 companies (Shanda, NetEase and The9) was 61%, 63% and 75% in 2003, 2004 and 2005 (see Table 3.2). During these three years, Shanda always kept its top 1 position while NetEase and The9 ranked as the No.2 and No.3 respectively.

Table 3.2 Top 5 Chinese Online Game Operators' Market Size 2003-2006 (iResearch,2007)

Market share	2003	2004	2005	2006
percentage	2005	2004	2005	2000
Top 1-3	61%	63%	71.9%	58%
Top 4-5	4%	10%	11.8%	16%
Others	35%	28%	16.3%	27%

## 3.2.2 Market Share Competition in 2006 - 2009Q2

Prior to 2006, market share gaps of incumbent firms in the Chinese online game market were huge. Since 2006, the market share concentration of top 3 companies (Shanda, NetEase and The9) declined firstly down to 58% in 2006 and 46% in 2007, and 39% in 2008 (Shanda, Tecsent and NetEase). Market share was highly concentrated with the top 11 game operators who account for 93% of the whole market revenues in 2007. However, it is evident that the strength gaps between incumbents have narrowed. In 2008, the top ten companies still comprised over 80 percent of the whole market. Therefore, this study regarded the top 10 companies as the big companies (or dominant companies), and the other as the middle and small companies (or less dominant companies).

The rankings have been changeable since 2006. Shanda gave its No.1 place to NetEase in 2006 and The9's No.3 position was replaced by Giant in 2007. Among the market share rankings of the top ten online game operators in 2006, Giant (5.2%), CDC (2.7%) and T2CN (2.0%) are the companies who entered into the Top 10 with around one year's successful launching of only one successful game product. Perfect World is another extreme case. It was ranked No.8 in 2007

with one year's operation of its four self-developed MMORPGs and improved its ranking to No.6 in 2008 and No.4 in 2009 Q1 and Q2 (see Table 3.3).

Before making related market share comparison, Tencent will be introduced and explained about its position in the Chinese online game market. Tencent (SEHK: 700) runs one of the largest web portals in China, QQ.com. Tencent's products and services "span seven main business lines: online media, mobile and telecommunications value-added services, interactive entertainment service, internet value-added services and e-commerce and online advertising service."<sup>17</sup>. It entered the Chinese online game market in spring 2007 with its QQ Games. With its QQ Games, Tencent Games was quickly successful in the online game market and was ranked No.2 according to its annual sales in 2008. It should be noted that QQ Games are different from MMORPGs because they combine community elements (such as profiles, chat, and friends' lists) with different kinds of casual games (for instance, board games, casino games, driving games, puzzle games, fighting games, customize games and dress-up games). Given that the relative comparisons and analysis in this study only target the MMORPG operators, Tencent is not involved in the rest of this research and its market share positions are not considered in the rest of this thesis.

Table 3.3 Top 1-5 Chinese MMORPG Operators' Market Share Rankings 2005-2009Q2
(Adapted from Companies Annual Financial Reports)

MMORPG operators (Market share ranking)	2003-2005	2006	2007	2008	2009 Q1	2009 Q2
Shanda	1	2	1	1	1	1
NetEase	2	1	2	2	2	2
The9	3	3	4	4	6	7
Giant		6	3	4	7	6
Perfect World			8	5	3	3

The market share has been less concentrated since 2007 and the whole market has turned from the monopolistic competition to oligopoly rivalry. Although the dominant companies (especially the top 10) still maintained their rankings, their market sizes have been shrinking in the whole market due to the increasingly fierce competition. The direct result is that the strength gap has been gradually narrowing. Therefore, any operator, whose game products become out of date or whose rivals' product succeed is likely to find its market share shrinking.

**2 2 m** 

<sup>&</sup>lt;sup>17</sup> The data is available from Tencent's website: http://www.tencent.com/en-us/ps/

#### 3.3 Pricing Strategy Innovation in the Chinese Online Game Market

Following the brief introduction of the pricing strategy innovation in the Chinese online game market in Chapter 1, this section will discuss the pricing model in the current Chinese online game market in more detail and then examine when and how Chinese online game companies with different levels of dominance made their pricing innovations (see Table 3.4).

#### 3.3.1 Less Dominant Companies' Pricing Innovation in 2004-2009 Q2

Instead of adopting evolutionary pricing strategies, less dominant incumbents adopted the revolutionary pricing strategies before the dominant ones took action.

- The absolute dominance of the time-based pricing strategy in the Chinese online game market came to an end with the adoption of item-based pricing by Beijing Gamania, a less dominant game operator, in September 2004. Gamania Beijing was established in July 2002 and is one of the branches of Gamania (whose headquarters are in Taiwan). Gamania Korea was the first operator to adopt the item-based pricing model for its own game *Gersang* in Korea in 2002 and this generated a substantial turnover for Gamania Korea and revolutionized the pricing model in the Korean online game market. Inspired by the success of Gamania Korea, Gamania Beijing decided to apply item-based pricing for *Gersang*'s operation in China. However, as an insider who has experience in running Korea-made games in China remarked, "*Gersang* was stopped running in China in September in 2007 due to the powerful rival strength and some technical problems during the game operation." (*ChH in the interview*)
- Another Chinese online gaming company Happy Digital was a joint venture established by China Telecom and Korean Hanbitsoft in August 2002 in Sichuan province. In July 2004, Korean Hanbitsoft adopted item-based pricing for its self-developed game *Tantra* in Korea. It was reported that the number of *Tantra*'s registered players doubled within ten days of the item-based pricing adoption in Korea. Five months later, China's Happy Digital decided to apply the item-based pricing strategy to operate three Korea-made games in China: *Tantra* firstly and another two Korean-developed games (*W.Y.D* and *Survival project*) in September 2004. Unfortunately, in April 2008, all of these three games stopped operating due to the announcement of Happy Digital's bankruptcy in April 2008.

• 17Game, a business unit of Corporation CDC Corp (NASDAQ: CHINA) commercially launched *Yulgang* in May, 2005. *Yulgang* grew healthily and steadily for months after its commercial launch. CDC upgraded *Yulgang* in 2007, which improved the game's overall operation significantly and brought continued growth of *Yulgang*'s registered users. The *Yulgang*'s registered accounts climbed to 42 million in January 2007 from 37 million users at the end of the third quarter of 2006. In October 2008, CDC Games (one of the top 10 dominant online game companies in China) incorporated all of its units, including 17Game and Optic Communications, under the CDC Games brand. Since then, CDC has increased its shareholding of 17game from 48% to 100%.

 Table 3.4 When and How Less Dominant Chinese Online Game Companies Innovate their

 Pricing and Related Market Share Changes

Service	Pricing model	When to innovate	How to innovate	Market share change(s) after
provider	before pricing	(Games' name)	(revolutionary or	pricing innovation
	innovation		evolutionary)	(Up↑, Down ↓or Nearly no
				change)
Bejing	Time-based	Sept 01, 2004	Revolutionary	Down $\downarrow$ to Zero (when stop
Gamania			(Time-based	operating in 2007)
			$\rightarrow$ Item-based)	
Нарру	Time-based	Dec 2004	Revolutionary	Down ↓to Zero (when stop
Digital			(Time-based	operating in 2008)
			$\rightarrow$ Item-based)	
17game	Time-based	May 13, 2005	Revolutionary	Up↑
			(Time-based	
			$\rightarrow$ Item-based)	

Note: 17game was taken over by CDC in 2007.

In summary, according to the illustration of above analysis, less dominant online game operators will adopt new technology or service earlier than the dominant firms do, which supports' Velu's proposition 1. However, instead of evolutionary pricing innovations, all three of these less dominant companies adopted revolutionary pricing innovation with the use of the item-based model, which argues against Velu's proposition 2 that "Less dominant firms are more likely to invest in the evolutionary business model."

The above analysis shows that Bejing Gamania and China's Happy Digital kept their cooperation with the Korean online game companies and their Korean partners were running the same games as they were in China. The success of the game operation in Korea due to the revolutionary pricing innovation prompted these three Chinese game companies to act decisively. In this sense, the decisive launch of the item-based pricing model by three less dominant companies in China should contribute to the improved cooperation between the Korean game industry and the Chinese online game industry (such as establishing joint ventures, and various kinds of information technology exchange).

On the other hand, the fates of the three companies are not the same although they adopted the same pricing innovation. *Gersang* disappeared in September 2007 due to so-called technical problems; Happy Digital stopped running all of its games with the announcement of its bankruptcy in 2008. Only *Yulgang* was still in the list of the most popular top 15 games, ranked of 14th in the CNNIC 2008 survey. In terms of this, the operator of *Yulgang*, CDC Games (a business unit of CDC Corporation (NASDAQ: CHINA) can be regarded as the truly successful pioneer of the item-based model for online games in China. As Monish Bahl, CFO of CDC Games stressed, "We are quite proud that *Yulgang* is still so popular in China with over 78 million registered users. The key of it success is due to our sustained content improvement for *Yulgang*. With the release of the new update in March 2009, lots of gamers have steadily returned to *Yulgang*. Average daily revenues in the second quarter of 2009 were increased by approximately 45 percent compared to the first quarter of 2009."<sup>18</sup>

According to this brief summary, it seemed that the effectiveness of pricing innovation to the company's market share competition is limited but business implementation and timely technical support are more important for satisfying the customers' requirements and creating profitability for the online game companies. Section 3.3.2 continues the testing of Velu's proposition regarding the dominant companies' pricing innovation and the related impacts upon dominant companies' market share competitiveness.

#### 3.3.2 Dominant Companies' Pricing Model Innovation 2004 - 2009Q2

Comparing Velu's Proposition 3 that "dominant firms are more likely to invest in the revolutionary business model earlier than non-dominant firms" with the pricing innovations occurred in the Chinese online game market, the invalidity of Velu's proposition 3 can be easily seen. In fact, although their influences were limited, the three less dominant companies (Bejing

<sup>&</sup>lt;sup>18</sup> The data is available from: http://www.encyclopedia.com/doc/1G1-201586931.html. It is available in Busines Wire, June 11, 2009.

Gamania, Happy Digital and 17game) were really the pioneers of the revolutionary pricing model innovation in the Chinese online game market, whereas the dominant companies were their followers.

Responding to the less dominant companies' pricing innovation, Shanda announced that it would adopt pricing innovation for its three popular MMORPGs in November 2005. The influence of Shanda's pricing innovation radically accelerated the pricing revolution by other less dominant online game companies. By the end of 2007, there were 207 games (including Casual games and MMORPGs) under the commercial operation, 74.9 percent of which adopted the item-based pricing model, 10.1 percent of which adopted time-based pricing model, and 10.6 percent of which chose the mixed pricing models (iResearch, 2009). By comparison, another two dominant online game companies, NetEase (ranked 2<sup>nd</sup> till 2009) and The9 (ranked 3<sup>rd</sup> or 4<sup>th</sup> prior to 2009), lagged behind of the industrial pricing revolution in China. Instead of reacting quickly, they took a considerable time before embracing the pricing revolution. The9 announced its pricing innovation in May 2007. NetEase was the last dominant company to adopt the item-based pricing model in early 2008. Prior to that, NetEase had refused to accept the item-based pricing model until their new time-based online game *Tianxia II* (for which they had high expectations) did not satisfy the game players' requirements. Even so, the revenues of The9 and NetEase still heavily relied on their time-based flagship games in 2008(see Figure 3.1 and Figure 3.2). The evolutionary pricing strategy (or mixed pricing strategy) taken by NetEase and The9 and other dominant companies is evidence against Velu's Corollary 1, which emphasizes that "dominant firms will not invest in the evolutionary business model once the less dominant firms have invested in it."

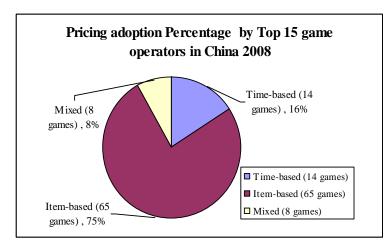


Figure 3.1 Pricing Strategies adopted by Top 15 Chinese Game Operators in 2008 (Winresearch, 2009)

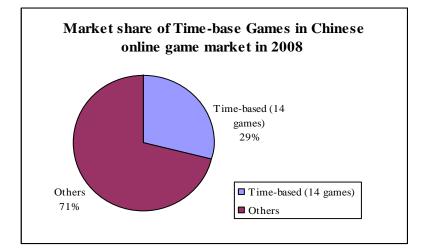


Figure 3.2 Market Share of Time-based Games in China in 2008 (Winresearch, 2009)

The revolutionary pricing model innovation in China began in September 2004 with the transition from time-based to item-based pricing model. By the end of December 2008, itembased pricing model was completely prevalent. Eighty seven MMORPGs and were under the operation of the top 15 online game operators, 75 percent of which (i.e. 65 games) were using the time-based pricing model, and 9 percent of which (i.e. 8 games) were using the mixed pricing model. It should be noted that although 16 percent of 87 MMORPGs (i.e. 14 games) were still using the time-based pricing model and their revenues contribution account for 29% of the whole market share in 2008 (see Figure 3.1 and Figure 3.2). Main contributors under the time-based pricing model adoption are The9's *WoW* (commercially launched in June 2005), NetEase's *Westward Journey Online II* (*WWJO*, commercially launched in August 2002) and *Fantasy Westward Journey (FWWJ*, commercially launched in January 2004).

In addition, Velu's proposition 4 and Corollary 2 stated that "less dominant firms are more likely than dominant companies to diversify their investments". According to the author's investigation (see Figure 3.1 and Table 3.5), most of the less dominant game companies have focused on using the item-based pricing model instead of diversifying their pricing strategies while nearly all dominant companies have combined the time-based and item-based pricing models together to run their games. Lots of the top 10 game companies (such as Perfect World, Giant) have used the mixed model to operate one game.

Service	Original	When to innovate	How to innovate			
provider	pricing model	(Games' name)	Revolutionary	Evolutionary	Mixed	
Shanda	Time-based	Nov 2005 (MirII, Woool, Magic Island)	(2006-2007) Time- based $\rightarrow$ Item-based (for all games);	(July 2008) (Time-based for Chang Chun)	V	
Giant	Item-based	July 2008 (ZT Online)		Item-based $\rightarrow$ Item-based + Time-based ( only for 1 game)	√	
The9	Time-based	May 2007 Item based pricing adoption (for MU),	Time-based → Item- based (for another 2 games in Nov 2007)		N	
NetEase	Time-based	Early 2008 Item based pricing ( for Tianxia II)	Time-based → Item- based (for 3 games in 2008)		N	
Perfect World	Time-based pricing (for Perfect World, January 2006)	Item based pricing for September 2006	Time-based → Item- based (Legend of Martial Arts in September 2006; Perfect World II in Nov 2006)	Totally free game Hot Dance Party (April 2008)	V	

# Table 3.5 When and How Dominant Chinese online Game Companies Innovate (2005-2008)

# **3.4 Pricing Innovation Impact on Game Operators' Market Share Competition**

According to the above observations, it seemed clear that, the effectiveness of pricing innovation on market share differs from one company to another. The following section will analyze why nearly all less dominant companies merely adopt the item-based pricing model and it will discuss the fact why even for the dominant companies, the effectiveness of pricing strategy innovation is totally different.

# 3.4.1 Majority of Less Dominant Online Game Companies – Passive Followers

As mentioned in Section 3.3, in 2006, a large number of online game operators, especially the less dominant ones followed Shanda immediately and announced that they would operate their games under the item-based model.

With the need to respond to Shanda's pricing innovation, online game incumbents needed to decide how to innovate and when to innovate. Since the online game market is a market with relevant network effects, successful pricing model innovation has the possibility to make the initial pricing model obsolete, thereby taking the revenues from the established time-based pricing model. In principle, due to the uncertainty of the pricing model changes, the less dominant firms should do as Velu concluded in Proposition 4. That is to say, they should be "more likely than dominant firms to diversify their investments (Velu, p.45)" or "more likely to invest in the evolutionary business model." However, the facts suggest the opposite in the Chinese online game market. During the interviews to staff from less dominant companies, their complaints stressed that three factors restrain less-dominant companies from adopting diversified models and force them to only use item-based pricing. They are: technological factors, financial factors and the unfair position when licensing imported games. With the risk of their market share being swallowed by the big companies, less dominant companies followed Shanda's lead quickly. LM from Shanghai based less dominant company explained why they only adopted the item-based pricing innovation,

Two reasons explain why we only adopt the item-based pricing. One is we have no confidence and capability to attract the game players from other time-based games, such as Netease's FWWJ and WoW. To be more important, we have not enough financial support. (LM in the interview)

A majority of the interviewees noted the fact that more than 70 percent of the Chinese online game companies are in debt which indicates the high risk of the online game industry. Most of them emphasized the importance of financial strength, as ChH remarked,

You have no way to choose but cast sums and sums of money if you want to try an idea. ...Yes, we did get the huge profits. Unfortunately, it was offset by costs on attracting and maintaining the few talents. Hardware updating for an ordinary online game is around RMB 10 million. Oh, market promotion and services will cost us another RMB 20 million. If a company wants to operate an imported game, such as a Korean-made MMORPG, the licensing fee is at least over US\$ 1 million and it is usually required to pay before the open beta testing. (ChH in the interview)

# 3.4.2 Pricing Innovation and Dominant Companies' Market Share Competition

Based on a scrutiny of changes in the dominant online game companies' market shares change before and after their pricing innovations between Year 2005 and the second quarter of 2009, the author makes a summary in the following framework (see Table 3.6) which indicates that the impacts of the same pricing revolution on different dominant companies' market shares are different and chaotic.

Online game	2003- 2005	2006 Ranking	2007 Ranking	2008 Ranking	2009 Q1 Ranking	2009 Q2 Ranking	Rank change after innovation
operators	Ranking					U	
Shanda	1	2	1	1	1	1	Down (Short
	* (Nov 2005)						period ) →Up
	,						$\downarrow \rightarrow \uparrow$
NetEase	2	1	2	2 * Early 2008	2	2	Even
The9	3	3	4 * May 2007	4	6	7	Down↓
Giant		6	3	4 * July 2008	7	6	Down↓
Perfect World		* Sept 2006, six months after its game running.	8	5	3	3	Up↑

 Table 3.6 Dominant MMORPG Operators' Market Share Change(s) before and after their Pricing Innovation (2005-2009 Q2)

*Note*: \* indicates the year when a company made its pricing innovation.

According to Table 3.6, Shanda benefited most from the pricing innovation due to its earlymover advantage. Although its market share ranking had short period of decline in 2006, Shanda returned to its No.1 position in 2007. NetEase's began the evolutionary pricing innovation in early 2008, which did not affect its ranking. In addition, according to Figure 3.3, we can see that NetEase's market share percentage has remained stable since 2008. The market share positions of The9 and Giant both decline after their adjusted their own pricing innovations. For six months after its commercial online game operation, Perfect World used time-based pricing for its first MMORPG *Perfect World*, and then adopted item-based pricing early and quickly for another three new games.

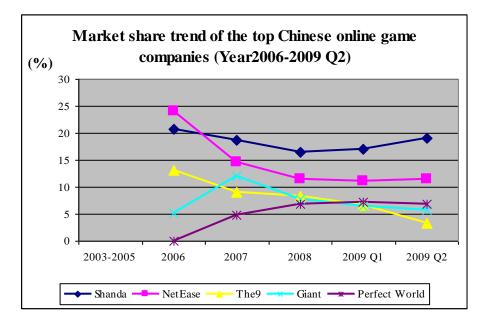


Figure 3.3 Market Share Trend of Top Chinese online Game Companies (2006-2009 Q2)

# **3.5 Summary**

The chapter examines the relationship between market dominance and pricing strategy adoption by the Chinese MMORPG operators. According to the analysis, except for the Proposition 1, Velu's other propositions and corollaries do not apply in the Chinese online game context. For the less dominant online game operators, besides pricing innovation, other factors such as technical factors, financial factors and royal right problems are probably the critical elements which influence or restrain their market share competition. For the dominant companies who adopt the same pricing innovations, the impacts of their pricing strategies on their market shares are different, with no clear trend. Therefore, instead of overemphasizing the significance of pricing innovation, Chapter 4 clarifies the role played by external factors in the development of Chinese online game companies. In Chapter 6 and 7, multiple case studies are used to identify the internal factors and external factors that affect of the market shares of selected dominant companies.

# **Chapter 4 External Factors Influencing Market Share** Competition

## 4.1 Introduction

Knowledge-intensive services have been the dominant forms of technological innovation in many western countries and East Asian countries, such as South Korea and Thailand, since the 1980s (Braddock 1999). The rise of knowledge-intensive global services is considered to be related positively to the growth in other economic sectors and social well-being, including growth in real GDP per capita (Gani and Clemes 2002, Van de Ven 2004). In China, annual GDP per head has risen from RMB 379 in 1978, at the beginning of the reform period, to RMB 10,502 in 2004. Although efforts were made to cool the overheating economy, the GDP growth rate that was officially recorded was 11.4 per cent in  $2007^{19}$ .

The online game industry falls into the category of a capital-intensive, technology-intensive and knowledge-intensive industry with large consumer groups, great market demand, long product lifecycle, and high value added (CCID 2002)<sup>20</sup>. With ten years' development, the online game industry has become a major industry in China and many other developed countries, such as Korea and Japan. The Chinese online games market grew more than 60 per cent in 2007 to reach the total sales of US\$ 1.66 billion<sup>21</sup>. Domestic online games accounted for 64.8 per cent of the whole online gaming market in China in 2006.

The analysis in Chapter 3 illustrates that the significance of the pricing revolution is limited with respect to the online game companies' market share competition. Instead, many scholars recognize the impacts of external factors and internal factors on companies' profitability. Based on the existing data on the online game industry in China, this chapter presents an overview of the external factors which are beyond the enterprise's ability to influence or control, which is followed by the explanation of market changes. In the last two sections, the role of external technology and government intervention in the Chinese online game industry are discussed.

<sup>&</sup>lt;sup>19</sup> The data is available from: http://www.chinability.com/GDP.htm

<sup>&</sup>lt;sup>20</sup> CCID Consulting is a company that dedicates to providing professional market research and management consultancy services. It was successfully listed in Hong Kong Growth Enterprises Market on December 12, 2002 (Stock code: HK8235) and became China's first listed consulting company. <sup>21</sup> The data is available from: http://www.gamesindustry.biz/articles/chinas-online-gaming-market-grew-60-in-2007

#### **4.2 Market Changes**

In this Chapter, market changes are considered from three perspectives: market competition between rivals, customer demands and social concerns (for example, from parents, teachers).

#### **4.2.1 Competition between Rivals**

As Fletcher and Russell-Jones (1997, p.35) proposed that "competition represents the other players in your market. This can be direct competition where the product/service is an exact substitute for yours or it can also be a totally different type of product which impacts on the demand for and, therefore on the price of your product." They further pointed out that "a competitive market is usually characterised by price wars in the mature phase of its cycle", and this obtained support from many scholars (Heil and Helsen 2001; Heerde *et al* .2008; Chiu *et al*. 2009). In the following, the author summarizes different types of competition in the Chinese online game market.

#### Competition between Foreign Games and Chinese Home-made Games

With 10 years' development, the online game industry has become a major industry in China and many other developed countries, such as Korea and Japan. The Chinese online games market grew more than 60% in 2007 to reach a value of US\$ 1.66 billion. Domestic online games accounted for 64.8% of the whole online gaming market in China in 2006 (iResearch 2007). At the same time, foreign licensed games have faced a sharp decline in market share. "Foreign online games accounted for 70% of the entire industrial revenues of US\$ 290 million in China in 2004. Korean online games dominated the Chinese online game market and made up 68% of the total Chinese market in online games in 2003" (ibid).

"However, the market share of Korea-developed games kept shrinking and dropped sharply to 38% in 2004, 20% in 2005 and even 10% in 2007" (Ren and Hardwick, 2009b). In addition, game giants from Japan have suffered in the Chinese online game market in recent years. SEGA and Square Enix exited China in 2007. Set up in 1960, Sega is one of the largest entertainment software and electronic entertainment products. With the aim of being a global market leader in the online game industry and considering the importance of the Chinese market for its growth in the multiplayer online game business, it set up Sega Networks China in October 2005 in Beijing and a branch in Shanghai. However, after less than two years of operation in China, Sega Network China had to dissolve the online game business department due to poor operations. Another MMORPG *Uncharted Waters Online (DOL)* which was developed by the Japanese game development company KOEI, survived only seven months before its Chinese operator

went bankrupt. KOEI had to sign another Chinese operator for the game, but by that time, players had already been hurt and lost confidence in KOEI's product.

In addition, even with the cultural similarity, two major Taiwanese companies Softworld and Softstar, who entered mainland China in 2000, gradually moved their operation from mainland China back to Taiwan again. Developed by the USA-based Blizzard, *WoW* is the only foreign licensed game which keeps its top rank in the most popular online game list in China.

Here is a brief introduction regarding the alliance relationship between Chinese online game operators and foreign online game developers. Reforms were initiated in China in 1978, and growth in foreign investment has been dynamic since then. Strategic alliances have been the dominant mode for foreign games to enter China because foreign companies are not allowed to operate online games directly in China. That is why foreign game companies, such as Blizzard, NCsoft, and Webzen, need to collaborate with Chinese local partners for game operation.

Game development was undertaken by foreign game development teams prior to the entry of China. Their pro-production work consists of producing a design document by game designers. Programmers are responsible for writing new source codes; artists develop game assets such as 2D or 3D models of game elements. Sound engineers create sound effects and composers write music for the game. Level designers oversee the design game levels, and writers offer dialogues for cut scenes. Testing work is the last and most important stage for game production.

When completing the game development, the Chinese game operator will start their commercialization in China after gaining the license. Using their own operation capabilities, the Chinese online game operators contribute to the game products by analysing and identifying consumer groups, balancing and localising the game so as to appeal to the local game player's tastes and testing the games for bugs. Apart from implementing marketing strategies, such as packaging and advertising, they have to deliver customer support to satisfy the Chinese game players. One functional difference between the foreign game developers and Chinese online game operators is that foreign game developers keep the games' source codes which are not accessible by Chinese online game operators. *Source codes* enable the programmer to exchange ideas with the computer using a reserved number of instructions. Without access to source codes, the Chinese game operators are not allowed to do any correcting or updating to the game. What they can do is to provide feedback on content problems and expect the continual updates to the game by the foreign game development teams. Further, Chinese online game operators

73

need to pay an upfront fee plus revenues sharing (typically between 20% and 30%) to foreign licensed game developers while the Chinese game operators could keep all the revenues for their own self-developed domestic games.

One noticeable phenomenon is that the Chinese online game industry is still a hit-driven industry. Shanda's revenues rely on Korean-developed game *the Legend of Mir II* (launched in 2001), and NetEase's main revenues depend on popular self-developed *Fantasy Westward Journey (FWWJ)*. Over 90 percent of The9's revenues were from the operation of the western-developed *World of Warcraft (WoW)* prior to 2009. Giant's most profitable game is *ZT Online*.

#### **Competition between Domestic Games**

After Shanda and The9 were listed on Nasdaq in 2004, till November 2007, another 4 online game companies in China were IPOed in HKSE, NASDAQ and NYSE. 2007 was a milestone for the Chinese online game industry. The four companies are listed in Table 4.1.

Name	Time for IPO (Initial Public Offering)	Stock market
Perfect	26/07/2007	NASDAQ
World		
Kingsoft	09/10/1007	HKSE
Giant	01/11/2007	NYSE
NetDragon	02/11/2007	HKSE

 Table 4.1 IPO Time of Online Game Companies in 2007

The primary competitors are Chinese operators of online-games. Although some threats were from foreign companies, they are weakened due to the Chinese government policy which requires that any mainland Chinese venture has to be more than 50% Chinese owned/operated. Therefore, Shanda's primary competitors are Netease.com (NTES), The9 (NCTY), Giant (GA) and Perfect World (PWRD). How Shanda and its rivals have adopted their own internal strategies for the market share capture is discussed in Chapters 6 and 7.

In the face of competition, companies with different levels of dominance (i.e. market size) design their own specific strategies to innovate their revenue model. Regardless of the differences in the companies' market size, they have one mutual aim. That is how to retain customers, decrease customer attrition, sustain and enhance the revenue streams. Due to the lack of product differentiation and talented professionals, talent wars are inevitable between the national game companies.

#### • Talent wars

Skill gaps are defined as "when employers believe that their employees are not fully proficient to carry out the requirements of the job roles" and "skill shortages indicate lack of applicants for vacant posts with the right skills and а qualifications" (Marchington and Wilkinson, 2005). The Chinese government and the Chinese online game industry both provide evidence of skill gaps and skill shortages in the Chinese online game labour market. "Half of game companies have skill gaps and only 3,000 top level game professionals (out of 10, 000) are qualified and an extra 600,000 job vacancies need to be filled in online game labour market in the next few years."22 High-skill programmers, animators to artists and game designers are badly needed in China, especially designers with more experience and a history of successful titles. The designer's primary job is writing, so the more experience designers have with that activity, the better.

At the same time, 2 million school leavers and graduates find it hard to obtain jobs. Even graduates from art colleges do not find it easy to obtain posts in the online game industry due to their lack of work experience. McKenna and Beech (2002) point out that in a labour market where skills are scarce with an abundance of employment opportunities, mobility will be accelerated and a substantial increase in rewards will occur. Currently, the characteristics of the Chinese online game market echo the above points put forward by McKenna and Beech. Here is a list of several influential talent exodus cases in the Chinese online game industry.

- In June 2006, Xu Bo, lead game designer of *the Fantasy Westward Journey*, an online game that has created RMB 200 million of revenues for NetEase, left NetEase and was recruited away by KingSoft to establish a new studio in Guangzhou, to develop a new Q-style game to go after Fantasy Westward Journey. Several core staff followed Xu Bo to KingSoft as well (Ren and Hardwick, 2009b).
- 2) In October, 2004, Shi Yuzhu, the CEO of Giant invested RMB 20 million and high salaries to buy in a development team (for a game titled The Age) from Shanda (the top game operator in China). It is this team who made the great contribution of developing Giant's first online game *ZT Online*. The

<sup>&</sup>lt;sup>22</sup> The data is available from: http://www.gamfe.com/jb/content/2009-02-16/20090216141149.shtml, accessed on Feb 19, 2009.

successful development and operation of *ZT Online* made Giant the most popular game company in China and enabled Shi Yuzhu to be "the 24th richest in China in 2007 with a fortune of \$2.2 billion (Li, 2009)<sup>23</sup>".

3) The former senior vice president of KingSoft, Wang Feng, left KingSoft in November 2006. He established his own game company LineKong and announced in May 2008 that Linekong had obtained investment of US\$ 25 million from venture capital firms Northern Light Venture Capital (NLVC) (Ren and Hardwick 2009b). Currently, main professionals in Wang Feng's management team are from other Chinese online game companies. Table 4.2 shows the posts of these talents before and after they joined in LineKong.

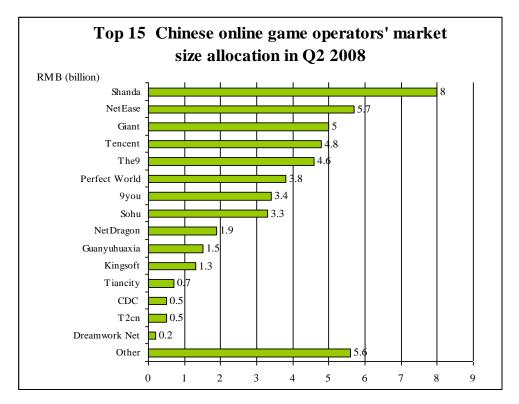
	Post prior to joining LineKong	Current post in
		LineKong
Wang Feng	Senior Vice President of KingSoft (1999 -2007)	Chairman & CEO
Liao	Vice President of game operation center in KingSoft	Sales & Marketing VP
Mingxiang		
Wang Lei	Chief Operation Officer in Beijing Guangyu Huaxia	Operation VP
-	Games Company	_
Zhang Yuyu	Chief game designer in KingSoft	СТО
Wang Wei	Technique director at Xi-Shan-Ju game studio of	R&D VP
-	KingSoft	

Table 4.2 Management Team of LineKong

#### • Strength gaps between game operators are increasingly narrowed

The reason is that it is more and more difficult for companies to differentiate themselves in the crowded and increasingly competitive online game market. Under the item-based pricing model, each game operator hopes to attract as many game players as possible and further to expand the number of active game players who would like to pay willingly. However, when looking back the Chinese online game market size in the second quarter of 2008 (see Figure 4.1), it can be noted that the strength gap between game operators has increasingly narrowed. The market share gap between NetEase (No.2 in the ranking) and Sohu (No. 8 in the ranking) was RMB 240 million, which is around the revenues earned by a successful product. In addition, most operators' revenues rely heavily on their only flagship game. Once the sales of its flagship game declines, a company's ranking will be negatively

<sup>&</sup>lt;sup>23</sup> The data is from: Weitao Li, titled with Breaking the rules, April 28, 2008. Available from: http://www.chinadaily.com.cn/bw/2008-04/28/content\_6647184.htm



affected. The external pressure from its rivals pushed Shanda to make pricing model changes.

Figure 4.1 Top 15 Chinese Online Game Companies' Market Size Allocation in 2008 Q2 (iResearch 2008)

# 4.2.2 Customer Demand

In order to explain customer demands objectively and have an overall understanding of the differences between Chinese online game players and those of other Asian countries, customer demands will be discussed from two perspectives. The first considers the main features of Chinese game players; the second discusses the popularity of internet caf és.

## Main Features of the Chinese Online Game Players

• Three-low feature

According to China's Internet Network Information Center (CNNIC, 2009a), the number of online game players in China reached 55.5 million in 2008. The main features of these online gamers are the "three lows," that is to say, *low in age, low in educational background, and low in income.* "52.5 percent of the total online game players are under the age of 22; 77.1 percent of game players have education backgrounds of junior college level and below; and 30 percent of online gamers have

no income. Another 9 percent and 25.5 percent of game players have income levels of \$ 1-150 and \$ 150-300 respectively" (CNNIC 2009b). Allison Luong of Pearl Research concluded that "One of the key differences between South Korea and China is income level." "China is still an emerging economy with annual urban income levels of \$1,300; whereas South Korea's annual income levels approximate \$16,000."

Lack of alternative forms of entertainment
 Most of the online game players have no siblings because of China's one-child policy. Lack of sports, lack of social activities, lack of parks/opening places make them keen to be involved in socialized and affordable entertainment.

#### Popularity of the Internet Caf é

The internet caféis chosen as the main affordable way to play online games. With the spread of the Internet, gamers can get high speed and large volume for all kinds of online peer-to-peer communications. These people are the major consumers of the virtual 'swords and armours' in online games in China. It is reported by CNNIC (2008b) that 67.3 percent of the 220 million Chinese internet users rank home as the most convenient place for Internet access. Internet caf & are chosen by over 33.9 percent of Chinese internet users for online access. In 2007, the number of people surfing the Internet at internet caf & increased by 60.9% over 2006. The popularity of Internet access in internet caf & is due to the following reasons.

- CNNIC (2008a) statistics shows that it will cost an average of RMB 900 for a family for annual internet access in China. Not all families can afford internet access and internet accessible computers and other equipments. Internet café is the popular location for low-income people or internet users without computers or internet access at home. By comparison, the average expense of an Internet user at an internet café is RMB 51.6 per month and 1/3 of them spend less than RMB 15 per month (CNNIC 2008a, p.34).
- Broadband penetration difference: In 2007, South Korea led the cohort with a 90.8 per cent penetration rate, followed by Hong Kong and Taiwan at "83.8 per cent and 76.8 percent, respectively. China's percentage penetration rate is only 14.5

percent."<sup>24</sup> This may explain why Internet caf & are regarded as the main distribution channels by the Chinese online game operators.

- Internet café may be the only source of internet access in China's rural areas and smaller cities. 48% of the rural internet users go to Internet cafés for surfing online (CNNIC 2008b). It is amazing to know that internet cafés are widely located in China. They are not limited to Eastern developed areas, but scattered in most small and medium-sized cities, rural areas and can even be found in Kashgar, close to China's border with Pakistan.
- Internet caf és are attractive places for young game players whose parents show their disapproval of online game playing. Thomas and Lang (2007) noted that internet cafés "have emerged as the place for urban Chinese youth to be one of the few places young urban Chinese can escape from the pressure of schooling, work and their parents." Besides, most game players in Internet caf és enjoy the presence of other game players and are bored of playing online games at home.
- Despite owning personal PCs at home, lots of young internet users still enjoy going to internet caf & for playing online games, meeting friends, watching network films, videos and other socialization activities. According to Lindtner and Nardi (2008), some game players in China are also friends in the physical world and some of them may live very close to each other. They enjoy playing in internet caf és together for a couple of hours and then going out for dinner or tea. Lindtner et al. conclude that playing in an Internet café with friends is regarded by the game players as "a very stimulating social experience comprised of physical and digital elements." Lots of game players prefer to sit beside experienced game players and learn how to enhance their skills in the Internet caf éthrough observation and advice from them, especially from those who lead the raids (i.e. one of the hardest activities in a game). If you go to an internet caféin China, you can see lots of people sitting in front of terminals to satisfy their needs. According to the iResearch investigation, over half of internet users play online games. 18% of them like to chat online with friends and others enjoy watching films or listening to music downloaded off the Internet (iResearch 2007).

<sup>&</sup>lt;sup>24</sup>The data is available from: http://www.zdnetasia.com/news/communications/0,39044192,62043606,00.htm

In a licensed internet caf é, it will take about RMB 2 to 3 (between 20p and 30p) to download a film legally. However, it is usually free to watch due to illegal downloads. This can explain why illegal internet caf és still exist and are hard to be eradicated. These unlicensed internet caf és offer their customers lower-priced internet services by evading taxes which were enforced to take effect in April 2001 by the Chinese government.

#### 4.2.3 Influences from the Social Concerns

For most Chinese parents with one child, the immense pressure on the child to focus and succeed within the Chinese educational system means that online games in general distract children from their studies and provide an environment which is harmful to the children's growth. Representatives of schools and universities, to a large degree, share these views.

A number of game players showed their disagreement with the Chinese government's policies through virtual communities, online protests, and surveys. One example was the player protest against the anti-fatigue system that forced GAPP (General Administration of Press and Publication) to rework and postpone the system and apply it to players younger than 18 years of age. The real-name system the GAPP proposed in 2006 created worries over privacy by players. When the players realized that the Burning Crusade expansion pack for *WoW* would not include bones and skeletons, as in other countries, protests soon followed (Ernkvist and Ström 2008).

# 4.3 Technology

Eager to speed modernization, China's leaders have expressed clearly their desire to see people use the Web widely to seek knowledge. In 2007, President Hu Jintao said at a Politburo study session that the solution of the state-controlled press is not to deter development of the Web but to "nurture a healthy online culture" (Cody 2007). Chinese online gaming can benefit from the stable growth of Internet users and the broadband penetration.

#### **4.3.1** Technical Infrastructure – Efforts by the Chinese Telecom Industry

According to the CNNIC report (2004), for most China online game players (69.4%), connection speed has a considerable influence on the running of an online game and their game choice. 39.3% of players list cost as the second most important factor, because broadband Internet users conduct more online sessions, play more complicated online games than

narrowband users. Since then, the Chinese telecom industry (China Telecom<sup>25</sup> and China Netcom<sup>26</sup>, the dominant carriers) has invested heavily in broadband penetration, to enhance the speed online and offer low-cost services. In the second half of 2008, 90.6% of the Chinese internet users (i.e. 270 million) accessed the Internet via broadband, rising by over 100 million from 2007 (CNNIC 2009a, p.3). In the third quarter of 2008, China passed the US in the number of broadband users (see Figure 4.2). The total number of Chinese broadband subscribers is growing at a rate of 6.8% per quarter, which was 2.8 times greater than the US at 2.4% over the last quarter of 2008.

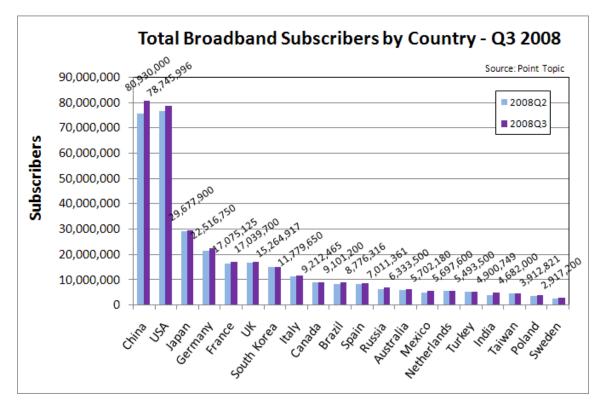


Figure 4.2 Total Broadband Subscribers by Country 2008 Q3 (Point Topic, 2008)

#### 4.3.2 Broadband Development in China

Although the size of Internet users and penetration rate in China keeps developing rapidly, in 2009, the penetration rate of the Internet only ranks 87th in various countries and regions in the world due to the big population base in China (see Figure 4.3).

<sup>&</sup>lt;sup>25</sup> China Telecom Corporation is an extra-large telecom enterprise formed according to the state telecom structural reform scheme. It was officially established in May 2002 after the split of the former CHINA TELECOM into two groups: CHINA TELECOM (south) and CHINA NETCOM (north)...
<sup>26</sup> China Netcom full name China National Comparison Line in a Compari

<sup>&</sup>lt;sup>26</sup> China Netcom, full name China Netcom Corporation Limited (CNC), was originally formed in August 1999 to build high speed Internet communications in China.

The CNNIC report (2009a) shows the rapid rise of broadband penetration in China. By the second half of 2008, 90.6% of Chinese Internet users accessed the Internet via broadband, which was an increase of over 100 million from 2007 to 270 million in 2008. However, one fact should not be ignored that that the broadband speed in China still lags behind other countries (see Figure 4.4).

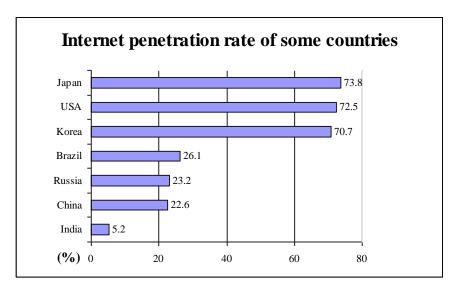


Figure 4.3 Countries' Internet Penetration Rates in 209 (CNNIC 2009a)

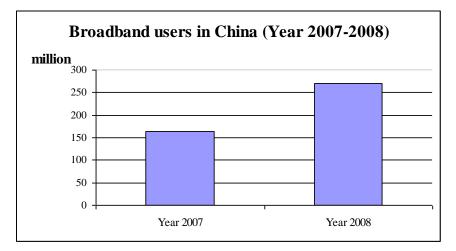


Figure 4.4 Broadband Users in China 2007-2008 (CNNIC, 2009a)

## **4.4 Chinese Government Policies**

With the emergence of the indigenous software industry, the Chinese government released specific policies towards taxation, export and capital targeting and facilitating the growth of business software firms. It further extended these policies to benefit online gaming firms in

2003. It should also be noted that these online game firms prospered within the context of recent Chinese government's policy framework.

More recently, the Chinese government has actively supported the growth of indigenous online game software developing firms by creating more favourable business environments. Further, the development of the internet café has not been smooth in China at all. Here is a brief overview of its progress in China. Further, some Chinese government ministries are involved in issuing the policies and regulations which affect the development of the Chinese online game industry. Their functions and roles will be discussed by the end of this Chapter.

# 4.4.1 The Development of Internet Caf & and Government Regulations

The Chinese government kept issuing policies to regulate China's Internet Cafés:

- Between 1995 and 1998 was the period of fast development for China's Internet Caf &. During that period of time, few families owned PCs. The main function of internet caf & in China was to offer unconnected games to caf é users at a price of around RMB 15-20 per hour.
- Between 1998 and 2002, Internet caf és were flourishing. Competition became more and more severe. Nine people were killed in an internet caf é fire in Beijing in June, 2002. Since then, internet caf és have been closely scrutinised by the Chinese government and new regulations have been constantly released by the Chinese government.
- At the end of 2004, more than 70,000 caf és were closed due to safety reasons and the game contents which were thought to be harmful to the growth of young adolescents.
- In March 2007, 14 Chinese ministries jointly announced that they would not approve the opening of any new Internet caf & till 2008. "The regulations govern the estimated 185,000 internet caf & nationwide in China, 71,000 of which are unlicensed by the appropriate regulatory authorities (Niko Partners<sup>27</sup>, 2008)." According to different media, this action was taken by the Chinese government to drive illegal caf & out of business and make it easier for the Internet caf & reconsolidation.

<sup>&</sup>lt;sup>27</sup>Niko Partners is the leading market intelligence firm for China's video game industry.

• In early 2008, Chinese governmental agencies announced the lifting of the one-year ban and new internet café applications started again. By comparison, the new license approval procedures were more convenient. More preferential policies were released for supporting the development of the Internet café industry. The new policies are especially favourable for the development of franchises or chains of internet caf és.

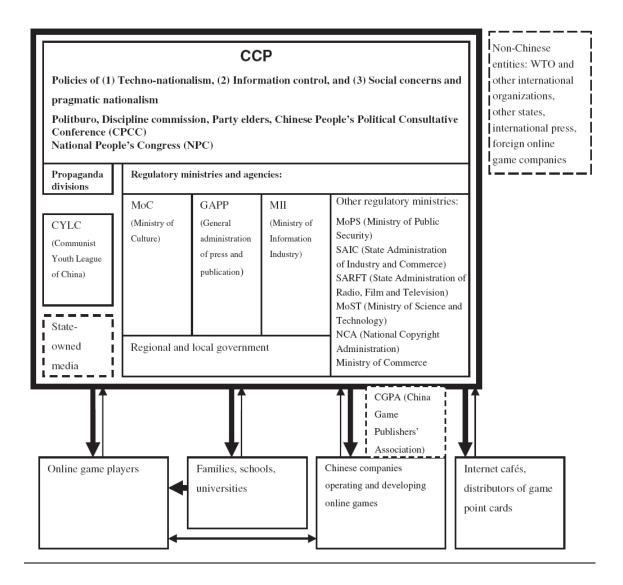
Also, since 2008, all visitors to internet cafés in Beijing have been required to have their photographs taken when using internet cafés. It is said that a city-wide database run by the Cultural Law Enforcement Taskforce is responsible for storing the personal information. By mid-December all internet cafés in the main 14 city districts installed cameras to record the identities of their internet users, who must by law be 18 or over; although a survey by the internet version of the People's Daily indicated that "72 per cent of respondents were opposed to the measure, calling it an infringement of their rights. Just over 26 per cent supported the photographing because it would benefit children (Macartney 2008)". This reminded people of the anti-fatigue system, which was issued two years ahead of this policy and regarded as a failure by many internet users.

# 4.4.2 Chinese Government Ministries Involved in Issuing the Online Game Policies

The Chinese Communist Party (CCP) has been as a vanguard in the control of the national economy. Since China joined the WTO in 2001, the CCP has showed a more open attitude towards the global economy. Acknowledging the online game's contribution to national economic growth, the Chinese government has also been concerned with the effects of online games on Chinese social and nationalistic values. For example, the Chinese government censor online games and discourage "unhealthy" content from reaching the market; "real-name registration", and "anti-addiction software" are built into the games to prevent addiction by young adolescents.

A number of Chinese government ministries claim to be involved in issuing the policies and regulations which affect the development of the Chinese online game industry. Three ministries play key roles. GAPP is responsible for releasing regulations, approving licenses, censoring or banning media. The Ministry of Culture (MoC) regulates cultural content and the Ministry of Information Industry (MII) makes regulations and license policies towards Internet content providers, telecommunications and software. With the goal of "educating people and helping to

build up "healthy" games in recent years", the CYLC (The Communist Youth League of China) which is a CCP-led national youth organization shows its increasing important role in regulating online game policies. Ernkvist (2009) listed game players, families, schools and universities as the other factors in the online game policy environment (see Figure 4.5).



#### Figure 4.5 Regular Structure and Interest Groups in China's Online Game Industry (Ernkvist and Ström, 2009)

Note: Breadth of arrow is an approximation of degree of influence.

# 4.5 Summary

This chapter has presented an overview of the external factors which influence market share competition in the Chinese online game market. The chapter introduces a number of factors in the attempt to explain dynamic market changes, such as the three-low features of the Chinese online game players, the failure of foreign game dominance in the Chinese online game market,

the popularity of the internet café as well as the talent wars between the existing online game incumbents. After a general introduction of the development of external technology, Chinese government regulations are outlined. All of these external factors will be examined to check whether they impact on the market share competition of targeted companies in the case studies in Chapters 6 and 7.

# **Chapter 5 Research Methodology**

## **5.1 Introduction**

The chosen research methodology is crucial because it underpins the credibility of the research, and enables the reader to assess the value of the research results. This chapter begins by discussing why interpretivism is chosen as the appropriate research philosophy for knowledge development. Then why a combination of deductive and inductive approaches is used in the research strategy will be explained. After the discussion of research strategy, this chapter illustrates how data are collected, including the selection of the sample and the use of interviews. At last, the data analysis process of template analysis is outlined in the following section, including the creation and revision of codes and the creation of the initial template.

## 5.2 Research paradigm and Strategy

Khun (1970) points out that a paradigm is a means of viewing the world, which influences the direction of the research. Guba (1990) defines a paradigm as a basic set of beliefs for guiding action. Major research paradigms will be examined and fundamental differences between different paradigms will be discussed below, which is followed by the discussion of application of research approaches.

#### **5.2.1 Philosophical Stance**

Positivism and interpretivism are the two main ways that social science researchers think about the development of knowledge (Saunders *et al.* 2003, p.83). Positivism derives from the philosophical stance of the natural scientists and utilises a highly structured methodology to analyze quantifiable data (Gill and Johnson 2002; Saunders *et al.* 2003). Positivist research is often underpinned by the ontological assumption of realism, according to which a reality exists which is independent of human thoughts and beliefs (Saunders *et al.* 2003, p.84).

In contrast, interpretivism aims to understand the social behaviour of the research participants. Interpretivist research is often underpinned by the ontological assumption of constructionism, according to which social phenomena are produced through social interaction and are constantly being revised. In terms of this, the quantitative methods that natural scientists adopt cannot be used effectively to explore market share competition in this study. Hence, the approach in this research is close to interpretivism which emphasizes that "individuals see and understand things differently and no one has the answer" (Denzin and Lincoln 1994). As the players in the emerging online game industry, with the utility of their internal strength and under the effects of various external factors, existing online game companies interpret the meaning of *sustainable competitiveness* through their own experiences. Therefore, this research will try not only to interact directly with the research participants who are from the targeted environment, but also seek to make sense of them and understand their motives and actions through their interpretation of events and their comments.

#### **5.2.2 Inductive Approach and Deductive Approach**

Prior to starting the research, a researcher must make clear the nature of the relationship between theory and research. Inductive research begins with empirical data collection; based on the data that the researcher has collected, he or she then draws conclusions with the aim of generalising them into a broader theory. If the researcher uses theory to guide the research, then a deductive approach is being followed. Figure 5.1 shows the process of deductive research (Bryman and Bell 2007, p.11).

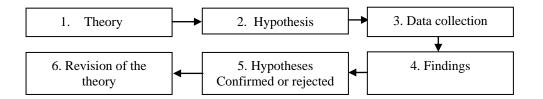


Figure 5.1 Process of Deduction (Bryman and Bell 2007, p.11)

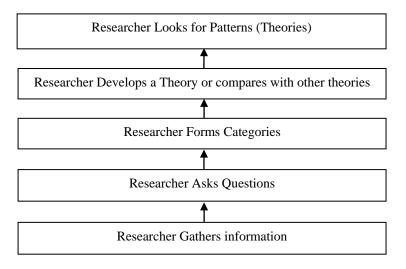


Figure 5.2 Inductive Model of Research in a Qualitative Study (Creswell 1994, p.96)

Creswell (1994, p.96) developed the inductive mode of research in a qualitative study (see Figure 5.2). According to Creswell, a researcher starts to gather information and form categories or themes. With the accumulation of data, a theory will be developed.

#### 5.2.3 Combination of Inductive and Deductive Approaches

Yin (1993) stresses that the inductive approach can be a difficult strategy and it may not lead an inexperienced researcher to success. He further explains that "this is just like a case where you go ahead aimlessly and collect data without examining them to assess which themes are emerging from the data being gathered." In this respect, Yin (1994) suggests a researcher to commence with and utilize the existing theory as a means to devise a framework and to organize and direct the data analysis.

This research commenced firstly with a preliminary deductive approach, with the aim to test the applicability of Velu's (2005) theoretical propositions with the available secondary data in the context of the Chinese online game market. However, it was found that Velu's theoretical framework as well as the virtual web framework (developed by MacIness *et al*, 2009) could not yield a convincing answer to my research questions. Even so, the advantage of commencing this research from a theoretically deductive perspective is evident. It helped to link the research into the existing body of knowledge and helped to get the research started by providing an initial analytical framework.

However, realizing the insufficiency of the deductive approach, the research turned to the inductive approach, namely, the collection and analysis of data from qualitative interviews. With more and more information collected, some new themes emerged. Just as many researchers conclude that "while you may commence with an inductive or a deductive approach, however, you will combine element of both in your research (Babbie 1998, p.60). The combination of the deductive and inductive research strategies enabled me to go back and forth and make comparisons between the empirical data and existing theories. It also facilitated a scrutiny of the new relations embedded in the empirical information and the existing theory.

### 5.3 Research Design

De Vaus (2001, p.9) states that many researchers confuse research design with the research methods by which data are collected. Therefore, the definition and function of research design is illustrated below, which is followed by the discussion of case study application in this study.

## 5.3.1 Relationship of Research Design and Research Methods

From the viewpoint of De Vaus, a research design is needed before starting the data collection and analysis. "The function of a research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible." He classified the types of research design into: experiment, case study, longitudinal design and cross-sectional design. Agreeing with De Vaus, Yin (1989, p.29) stress that research design "deals with a logical problem and not a logistical problem." Strauss and Corbin (1998) acknowledge that, "A research design provides a framework for the collection and analysis of data." Bryman and Bell (2007, p.40) agree that that "A research method is simply a technique for collecting data, which involve a specific instrument, such as questionnaire, interview, observations and the analysis of documents etc."

#### 5.3.2 Case Study Design in this Study

When commencing a study, it is crucial to be aware what research methods are available and which ones suit your research task best. It is also important to distinguish the strengths and weaknesses of each different method before making the final choice of the research methods.

Yin (1993, p.13) defines a case study as: "an empirical inquiry that investigates a contemporary phenomenon with its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." A case study approach was identified as best suiting the purpose of this study as it allows a better understanding of pricing practices in the real context of the Chinese online game market. The features of case study design in this study are listed as follows.

• Multiple cases instead of a single case

A case study design can be based on a single case or multiple cases. With strategic selection, multiple cases are useful for providing a more rigorous test of a theory and can help to distinguish the different conditions under which a theory may or may not hold (De Vaus, p.227). In order to gain access to sufficient resources, multiple cases are applied in this study with the aim of obtaining more powerful and convincing insights. However, following the suggestions put forward by Stake (1994) and Yin (1989, p.56-57), each case is treated as a single case so that a full account of each case can be obtained before undertaking cross-case comparisons. In this study, the use of multiple case studies (see Figure 5.3) aims to highlight the differences between the cases and identify the commonalities among cases and also stress the differences so as to point out where the theories work and where the theories do not work.

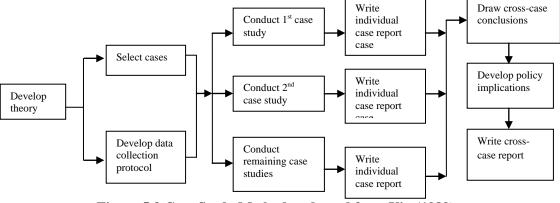


Figure 5.3 Case Study Methods, adapted from Yin (1989)

Intensive analysis in case study

The aim is to subject each case to an intensive examination so as to address the research questions effectively. Longitudinal element involved in this research. The fieldwork was conducted between early 2000s and 2009 Q2, which has enriched the interviewing and secondary data.

• Cross-sectional element involved in this research

Apart from involving longitudinal elements, the structure of the data is crosssectional. It consists of a sample of existing mangers and R&D professionals in the five dominant companies and people who had work experience in the five dominant companies before but are now working in other companies. It also involves interview information gained from talented professionals out of the targeted cases. The benefit of such a structure is the involvement of more relevant phenomena, which offers the possibility of interpreting the differences among the targeted cases more objectively and thoroughly.

Pilot Case Study

A pilot case study was applied in this study as final preparation for data collection. The case of Shanda was chosen for the pilot study for the following reasons. Firstly, some accessible interviewees were known to be congenial and would offer reliable data for the Shanda case discussion. Secondly, the Shanda case is the most complicated case and the study of Shanda would involve almost all relevant issues during the data collection. The pilot case study of Shanda enabled the researcher to make timely design amendments to the interview guides. The majority of the codes in the initial template were confirmed in the three interviews conducted during the pilot case study (See Section 5.5.1).

# **5.4 Data Collection**

Data collection methods are usually classified in two types: qualitative and quantitative methods. The main difference is that quantitative methods are based on numerical data and statistics, while a qualitative study is always used when it is impossible to collect quantitative data or quantitative data cannot achieve the desired objectives.

# 5.4.1 Qualitative Interviews Adopted in this Study

As Strauss and Corbin (1998, p.11) state: "Qualitative methods can be used to explore substantive areas about which little is known or about which much is known to gain novel understandings [...], to obtain the intricate details about phenomena as feelings, thought processes, and emotions that are difficult to extract through more conventional methods." And according to Maxwell (1996, p.17-18) that "qualitative studies are useful for understanding [...] the context within which participants act [...], unanticipated phenomena and influences [...], the processes by which events and actions take place."

Bryman and Bell (2007, p.28) point out that quantitative research emphasizes quantification in the data collection while qualitative research emphasizes words and also emphasizes an inductive approach to the relationship between theory and research."

Based on the above statement and the exploratory nature of this research topic, qualitative approaches have been mainly conducted in this study. The investigation needed in this research requires a series of holistic factors which can affect the pricing dynamics and Chinese online game companies' market share competition. These data always have the nature of intangibility and are hard to quantify, which indicates the indispensability of qualitative research strategies.

### Qualitative Interviews Conducted in the Multiple Case Studies

As previously mentioned, five separate case studies have been conducted to draw conclusions about how pricing strategies and other factors impact upon the Chinese dominant online game companies with respect to market share competition. All of the selected cases have been chosen based on their market dominance during the past 5 to 10 years. The aim of multiple case study is to "increase the generalizability, reassuring oneself that the events and processes in one well-

described setting are not wholly idiosyncratic, and thus, to develop more powerful explanations" (Miles and Huberman 1994, p.72).

Online semi-structured synchronous audio and video interviews were conducted towards 64 chosen interviewees individually in this study. All interviewees were encouraged to explain issues in Chinese, which led to a rich and vast amount of information. Interviews were tape-recorded after seeking the permission of the respondents. The length of each interview with the online game companies ranged from 25 minutes to over one hour. After each interview, data collected were re-written in a report. Detailed information about the interviewee details are presented in Appendix 1. The reports were then examined and refined due to the quick and constant changes in the Chinese online game market.

For the online face to face surveys, 26 interviewees I accessed are working as existing staff members in the targeted five Chinese online game companies. Another 25 interviewees are talented online game professionals who had previous experiences of working in the targeted five dominant companies. However, the majority of these 25 people left the abovementioned big companies already due to different reasons and are working in small or medium-sized companies. In order to gain more perspectives of the online game industry's professionals, with friends' introductions, interviews were conducted to another 13 people who had no work experience in the targeted 5 companies but still had rich R&D experience or management experience in joint ventures between China and Korea (or Japan). When interviewing the respondents who were still working in the five targeted companies, their uneasiness could be sensed with regard to commenting on the companies' HR management team, related financial allocation and promotion, etc. By comparison, previous staff members of the targeted 5 dominant companies seemed more willing to give relatively valuable and sharper opinions with more criticism. 13 interviewees were interviewed twice and two interviewees are interviewed three times with my aim of getting deeper understanding of some companies' strategic dynamics and data analysis. Table 5.1 illustrates the number and types of organizations of the interviewees.

The online interviews were conducted between February 2008 and October 2009. The Internet efficiency facilitates the data collection via the online telephone survey. Here are advantages of online interviews. Firstly, they are much cheaper than real face-to-face in person interviews conducted in the physical location in China; secondly, they enabled the survey to take place over a long geographic distance; thirdly, the respondents could actively choose the most

convenient time and safest place for the survey which eliminated the uncertain or possible worries in the mind of the respondents.

No. of No. Interviewee characteristics No. of companies interviewees 1 Existing senior management staff and R&D staff 5 26 in the targeted dominant companies 2 Ex-management staff and ex-R&D staff of the 11 25 targeted dominant companies who are working in another 11 companies 3 13 R&D or management Staff from other less 11 dominant game companies, most of whom have work experience in online game joint ventures

Table 5.1 Interviewee Information in this Study

### Gaining Access to Interviewees

To gain access to the targeted companies, the first thing to do is to establish contact. Firstly, an Email was sent to targeted companies with the attachment of a well-worked proposal and a summary of the research guidelines. However, it did not work very well. Then, 'snowball' sampling via personal introductions was initiated, which proved effective. The networks of people that were tapped into are: Alumni networks of the author's academic institution, industrial people and academic people who were known during international conferences. Also families and social contacts, especially friends were the most prime sources for helping me gaining access to the interviewees. Thanks to the help of all these contacts (i.e. persons who know the author and helped the author to connect with others), some appropriate people could be introduced for the interviews. The more people could be gained access to, the more chances were available for contacting other interviewees and the easier sample searching became for this study.

### **Interview Procedures**

To facilitate the interview process and ensure the reliability of the interview data, two interview guides (see Appendix 2 and Appendix 3) were prepared prior to the first interview. One interview guide was for the existing and ex-staff members of the targeted 5 game companies. The other was designed for the people who have no work experience in the targeted 5 companies but are experienced in game R&D and management and most of those have work

experience in online game joint ventures. The purpose of the semi-structured interviews was to see how interviewees perceived and interpreted the effects of pricing and other factors upon the company's market share rankings in industrial competition.

A pre-interview Email (see Appendix 4) was sent to the interviewees after they agreed to accept my interviews with the help of PC cameras over the Internet on Skype. In order to facilitate the interviews, the research background, the use of the interview data, the confidentiality issues as well as confirming the interview time were stated in the Email details.

On the day of the interviews, a brief and informal talk with the interviewees was adopted as an ice-breaker, such as mentioning the contact who introduced the researcher or talking about the National Center of Computer Animation at Bournemouth University that interviewees were usually interested in, or making a short enquiry about Beijing or Shanghai where the interviewee working. At the end of the informal talk, the interviewees were told that all the information he or she provided would only be used for the study and that complete confidentiality would be guaranteed. Then, the interviewees would be asked whether they could give permission for recording the interview.

With the understanding and permission of the interviewees, formal interviews started under the direction of the interview guide. All interviews were conducted in Mandarin Chinese. The use of Mandarin Chinese created a relaxed, friendly and even reliable atmosphere. Besides, this helped the interviewees enjoy sharing more and deeper information with the author during the interviews. During the following data interpretation, the translation from Mandarin Chinese into English was recognized to be a tedious work. Even so, interviewing in Mandarin Chinese was still considered the best decision for this study.

During the interviews, in order to make the questions clear, academic concepts and jargon were avoided and simple questions were used as much as possible. As a patient listener, the author sometimes used the positive head nodding or eye contact to show the understanding or confusion during the interviews, which inspired the interviewees to keep on talking willingly. During the interviews, the author often made quick notes when hearing some unusual or confusing ideas for further investigation in the following interviews. Some interviewees later actively passed their friends for this research, which facilitated the data collection.

# 5.4.2 Secondary Information

Apart from interview data, other ways to obtain multiple sources of evidence were pursued. Secondary data in this study largely rely on the prospectuses of the public companies which are listed abroad, companies' annual reports or quarterly earnings transcripts, analysis reports from the CNNIC (China Internet Network Information Centre) and other renowned consulting groups (such as iResearch). The specific characteristic of "to be operated online" indicates that some related information may be available from each company's website.

The main problems with primary data are incompleteness and inaccuracy which need scrutiny. However, together with the extensive amount of reliable secondary data, I got the confidence to believe that the data truly said something certifiable about the relationship between pricing innovations and other internal and external factors during the online game companies' market share competition.

### 5.4.3 Synchronous Online Audio and Video Interview Application

More and more social scientists began to use online interviews, especially email interviews, as one of their main approaches to collect data (Bampton and Cowton 2002; Kivits 2005; James 2007). Till presently, only few researchers focus on the use of synchronous interviews (O'Connor and Madge 2001; Stieger and Goritz 2006). Online interviews can be classified into two main types: synchronous and asynchronous. Like traditional research interviews, all participants in the synchronous online interviews must be online simultaneously and questions and answers are posted in a way which mimics a traditional interview. Till now, this type of online interview has received the least academic attention. By contrast, an interviewer usually starts an asynchronous interview by emailing interview questions to interviewees who can answer the questions at their own convenience. Neither interviewers nor interviewees need to communicate with online at the same time.

Comparing to the substantial growth literature on asynchronous online interviews, the literature on synchronous online interviewing has been developing slowly (O' Connor *et. al.* 2008). Even so, as Chen and Hinton (1999) have observed, 'real time' online interviews provide greater spontaneity than online asynchronous interviews because it enables interviewees to answer immediately and interact with one another. They are easier to control and manage in real-time by the researcher, reflecting more traditional face-to-face groups (Gaiser, 2008), though they can be more complicated to set up than asynchronous interviews due to the technology

requirement. This is because at the design stage the researcher must select an appropriate software package to facilitate the interview.

#### Benefit of the Unique Free MSN Online Audio and Video Interview Application

Considering that the chosen interviewees in this study are professionals and management team staff in the IT field, the researcher in this study adopted online synchronous interviews with the use of the free software and messaging services (http://messenger.msn.com). Currently, a range of software facilitates researchers to conduct text-based synchronous interviews. By contrast, the unique advantages of free MSN Messenger are as follows:

- It offers audio and video options which facilitate the online synchronous interviews;
- The instant messaging software enables the interviews to be limited to the researcher and the interviewee, which helps the researcher a lot in controlling the discussion.
- It is not complicated to apply. Given the prerequisite is that users of one type of instant messaging software cannot communicate with users of a different type, the interviewees and the researcher must have installed the same software: MSN Messenger software. The software installation process is not complicated, as it just requires the selection of the software, software downloading and final installation to the personal computer.

Before conducting an online face-to-face interview, both sides of the interview must install webcams, microphones or speakers and other necessary audio and necessary equipments. Of course, even if this software is installed, participants of the interviews also need to ensure themselves access to a broadband internet connection.

# **5.5 The Use of Template Analysis**

A recent development in business and management research shows that more and more researchers conduct their qualitative research with the use of semi-structured, unstructured interviews or story telling data collection methods. The common problematic issue that qualitative researchers have to face is how to analyze and interpret the large volumes of textual materials.

There has been increasing growth in the use of template Analysis to rich unstructured qualitative data following the primary data collection phase (Waring and Wainwright 2008, p.85). A well-accepted source of how to understand and use the template analysis is that of King (2004), Miles and Huberman (1994). According to King (2004, p.261), the template analysis approach can be used to analyze data from "interview transcripts and any other kind of textual

data, including diary entries, open-ended responses on a written questionnaire." Based on the above reasons, template analysis was chosen as the key way to structure the qualitative data in this research.

# **5.5.1 Producing the Initial Template**

King (2004, p.256) points out that creating a list of codes is a necessity before starting template analysis. The codes represent "themes identified in their textual data and will be modified and added to as the researcher reads and interprets the text." These themes can either be priori codes, which "identify themes strongly expected to be relevant to the analysis". The main benefit of using *priori* themes is that they can help to speed up the initial coding phase of analysis, which is always time-consuming. Steps involved in the application of the template analysis technique are presented here.

- 1) Define *priori* themes as priori codes from the literature.
- Define other new themes according to the rich secondary information from media and companies' financial reports.
- 3) Design the interview guides (see Appendix 2 and Appendix 3) based on the academic literature and secondary information collected.
- 4) Make three interviews firstly and transcribe the interviews with the aim to identify issues strongly relevant to the analysis and discard the themes with little relevance.
- 5) Begin to produce the initial template in terms of the two points. One is when the author noticed that fewer new themes that were distinctly different from those identified previously came out of the preliminary coding. The second is the time restraint since a large number of interviews were waiting for the author and there was a tight deadline to meet.

#### Sources of Different Themes Defined in the Initial Template

In order to present the sources of different themes that were defined in the initial template, theme sources are listed in Table 5.2.

List of Themes in the	Themes	Themes	Themes appearing from the literature review
Initial Template	appearing	appearing	and related content shown in LR
	from the	from the	
	first three	secondary	
	interviews	information	
Case background	$\checkmark$		-
history			

Table 5.2 Initial Template Theme Sources for this Study

Individual company	$\checkmark$	$\checkmark$	-
history	$\checkmark$		LD. Section 2.5.2 Comparison and Sandar
Company's organizational	N	N	LR: Section 2.5.3 Carpenter and Sanders (2007),
behaviour and related			Fletcher and Russell-Jones (1997)
management			Pietener and Russen-Jones (1997)
Game product		√	LR: Shapiro and Varian (1999),
Game product	`	v	Flectcher and Russell-Jones (1997),
			Bowuman and MacInnes(2006, 2009),
			Porter (2004); Ernkvist and Ström (2008);
			Turner (2000)
Revenue contribution			LR: Section 2.4.3
of non-MMORPG			Asia-Pacific Research and Positioning (APRP)
games			(2007)
Revenue contribution			LR: Section: 2.4.3
of MMORPG games			Asia-Pacific Research and Positioning (APRP)
			(2007)
Number and the age of		$\checkmark$	-
the current hit			
MMORPGs			
Revenue contribution	$\checkmark$	$\checkmark$	-
trend from hit			
MMORPGs			
Situation of potential	$\checkmark$	$\checkmark$	-
hit MMORPG(s)			
influences from			LR: Section 2.5.2 Bowuman and
Internal factors			MacInnes(2006, 2009)
Pricing model	$\checkmark$	$\checkmark$	LR: Section 2.2, Section 2.4.1 Shapiro and
innovation	1		Varian, (1999) Section 2.6.1Velu( 2005)
Relationship between	$\checkmark$	$\checkmark$	LR: Section 2.4.3 Nojima (2007), Oh and Ryh
pricing model			(2007), Lin and Sun (2007), Section 2.6.1 Porter
innovation and market			(1980), Lynch (2006), Velu (2005)
share competition			
Relationship between			-
pricing model and	,	,	
revenue change			
Relationship between			LR: Section: 2.4.3
pricing model			Asia-Pacific Research and Positioning
innovation and ARPU			(APR2007)
and APA			
Financial capability		$\checkmark$	LR: Section 2.5.3 Porter (2004)
Internal - technology			LR: Section 2.5.2 , 2.5.3
			Shapiro and Varian (1999), Porter (2004)
			Flectcher and Russell-Jones (1997),
			Bowuman and MacInnes(2006, 2009)
Capability against	$\checkmark$	-	LR: Section 2.5.3: MacInnes and Hu (2005)
private servers			
Self game development	$\checkmark$	-	-
for potential hit			
products	1		
Capability in current	$\checkmark$	$\checkmark$	-
game product updating		1	
Hit game number and	$\checkmark$	$\checkmark$	-
age			
Hit game(s)' revenue	$\checkmark$	$\checkmark$	-
contribution trend	L		

	1	LR: Section 2.5.3 Capon (2008)
-	-	LR: Section 2.5.3 Fletcher and Russell-Jones
		(1997)
-		LR: Section 2.5.3: MacInnes and Hu (2005)
-		LR: Section 2.5.3
$\checkmark$		LR: Section 2.5.3: MacInnes and Hu (2005);
		Asia-Pacific Research and Positioning (APRP)
		(2007)
$\checkmark$		LR: Section 2.5.3: MacInnes and Hu (2005);
		Asia-Pacific Research and Positioning (APRP)
		(2007)
		LR: Section 2.6.1: Velu (2005)
-	-	
-	-	LR: Section Chapter 2: Kotler (2006),
		Bowuman and MacInnes(2006,2009),
		Kotler (2006), Porter (2004)
-	-	LR: Section 2.5.3
		Bowuman and MacInnes(2006,2009),
		Kotler (2006), Porter (2004),
		Shapiro and Varian (1999),
		Flectcher and Russell-Jones (1997)
$\checkmark$		Section 4.3.2 Lindtner and Nardi etc (2008)
		-
	- - - - - -	- \ - \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

*Note*:  $\sqrt{=}$  Yes, - = No

# Hierarchical Coding in the Initial Template Construction

The advantage of the initial template resides in that it enables this research to focus on areas which are close to the research aims.

A key feature of template analysis is the hierarchical organization of codes, with groups of similar codes clustered together to product more general higher-order codes (King, p.258). At the same time, parallel coding is used in this study, whereby the same segment is classified within different codes at the same level. The code list is available in Appendix 5. Returning to my study, main questions, such as 'Internal company structure', 'Pricing' and 'Domestic competition', are from the guide and can serve as the higher-order codes; while other subsidiary questions are classified as lower-order codes.

As can be seen in Figure 5.4, the initial template consists of five highest-order codes, subdivided into one, two or three levels of lower-order codes. From the sub-divisions, the depth of analysis can be seen, with the second, third and fourth highest-order codes. Coding levels are

numerically referred to so as to make the following explanation clear. That is to say, the highest order codes are coded as 'level one' and the lowest 'level four.'

1. Case background history 1.Individual company history 2. Company's organizational structure 3. Game product category 1. Revenue contribution of non-MMORPG 2. Revenue contribution of MMORPG 1. Number and the age of the current hit MMORPG(s) 2. Revenue contribution trend from hit MMORPG(s) 3. Situation of potential hit MMORPG(s) 2. Influences from internal factors 1.Pricing model innovation 1. Relationship between pricing model innovation and market share competitiveness 2. Relationship between pricing model and revenue change 2. Financial capability 3. Internal - technology 1. Capability against private servers 2. Self game development 3. Capability in current game product updating 1.Hit game(s) number and age 2.Hit game(s)' revenues contribution trend **3.**Marketing Issues 1. Game distribution and promotion in Internet caf és 2. Other marketing activities 4.Influences from external market changes 1.Private servers 2. Gold farmers 3. Domestic rivals 4.Global rivals 5.Customer demand 5.Influences from Governmental regulations 1. Internet caf é administration 2.Anti-fatigue regulation

# Figure 5.4 Initial Template for this Study

The first level-one code is 'Case background history', which relates to three level-two codes, one level-three code and three level-four codes. The three level-two codes are: 'Individual company history', 'Company's organizational structure' and 'Game product category'. Two level-three codes specify a company's game product types. However, as these biographical issues were tangential to the main research questions of the study, and as time and resources were tight, no further levels were defined. The three level-four codes cover the essential issues regarding products' revenue trend and their potentials which need deeper analysis.

The second level-one code 'Influences from internal Factors' comprises key issues for this study. This area is relevant to the study's aims and includes three levels of coding on the initial template.

'Marketing Issues', 'Influences from external factors' and 'Influences from Governmental regulations' are another three level-one codes, and also encompass key issues for the study. Both level-two codes under the 'Marketing Issues' specify types of distribution and promotions used by the target game companies. The five level-two codes under 'Influences from external factors' relate to factors which threaten each company's market share position.

Finally, 'Influences from the Government policy' is the last level-one code, which was subdivided as two second-order codes. The first identifies Government's administration to the Internet caf és and the second covers other Governmental regulations, such as its Anti-fatigue regulations.

# 5.5.2 Interpreting and Presenting Template Analysis

All the interviews have to be coded for the ongoing analysis when a template is developed. During this study, collected data were first translated from Mandarin into English and then the transcript was input into word format for saving.

# Manual Coding Used for Template Analysis Interpretation

Initial hand coding of a hard copy is advised by many researchers with a pencil or highlighter (Miles and Huberman 1994; Tesch 1990, Crabtree and Miller 1999). Throughout the process of manual coding in hand, in order to list codes quickly and accurately, the segments were marked in the margins and text relevant with the themes were highlighted with different colours.

Maylor and Blackmon (2005, p.347) recommend researchers to "collect and analyze the qualitative data using simple word-processing such as Microsoft Word unless you are collecting a lot of data and working for a team or doing a complex analysis." When completing the manual coding on the printed interview transcripts, everything was deleted except the text for a particular highlighter colour with the operation of a computer. Thus, for each transcript, only those segments pertaining to a particular code was left. During the computer operation, the search-and-replace function in Microsoft Word was fully used, which saved lots of time.

#### Matrices Used to Reveal Relationships between Themes

During the research, I noticed that although standard template has the advantage of presenting the relationship between themes as a linear one; it could not be used to depict the interactive relationships between themes. Therefore, matrices are recommended for displaying template analysis findings (Crabtree and Miller, 1999). According to Crabtree and Miller (1999, p.170), "the matrix displays can be ordered or arranged by cases and/or by categories such as time, social roles or concepts ... and can display relationships between all components." This would facilitate me to use matrix at the end of case analyses to identify what is missing or what other connections may exist or have been overlooked.

"Matrices essentially involve the crossing of two or more main dimensions or variables (often with sub-variables) to see how they interact (Miles and Huberman 1994)." Table 5.3 is the matrix that was designed for displaying the individual case studies.

Matrix building begins with the selection of predicators, which are called "preparedness factors" by Miles and Huberman (1994). The preparedness factors are retrieved from the coding lists and keep pace with the coding changes. In this study, the components of "preparedness" were summed up vertically which facilitated the comparison of different roles of preparedness onspecific conditions at the end of each case study in Chapter 6. When doing the cross case comparison, the cases were compared on a total "preparedness" index (see Table 7.1). Looking back at the research process, this research got the same conclusion as researchers did: having a manageable number of predicators is an important criterion.

For example, the 'Amount of hit products', 'Expansion pack release of current hit games' and the 'Relationship between the game developers and game operators' are listed vertically in the Product category. It is striking to note from Table 6.4 that the relationship change between The9 and its previous game developer Blizzard had a negative effect on The9's market share ranking.

When discussing how qualitative researchers should analyze the data from multiple cases, Yin (1989) advocated a replication strategy. In short, the researcher should adopt one theoretical framework to study one case in depth and then turn to examine other cases with the aim to see whether the pattern found matches that in the previous case. Therefore, this study use the same matrix utilized for the first case study (Shanda) to analyze the other four individual cases.

		Targeted company
Influence	Product	
from	Pricing	
internal	Marketing issue	
factors	(Distribution and promotion)	
	Organizational structure	
	Internal technology	
	(in game development)	
	Internal technology (in current game	
	product updating)	
	Financial capability	
Influence	Private servers and gold farmers	
from	Domestic rivals	
external	Global rival s	
factors	Customer demand	
	Government regulations	

 Table 5.3 Effect Matrix: Impacts of Internal and External Factors on Target Company's

 Market Share Competition

*Note*: +++ Most relevant, ++ Medium relevant, + Relevant, ±Irrelevant, - Negative

To conduct the cross-case comparison, a full set of tables are assembled and compared on each of the supporting conditions (i.e. the respective internal and external factors). This study, based the individual case analysis and cross-case analysis on the *effects matrices*, which is regarded by Miles and Huberman (1994, p.141) as the most easily-used way in multiple case analysis. They stated that "an effects matrix focuses on dependent variables, and displays data on one or more outcomes, in as differentiated a form as the study required." The outcomes can be positive and negative and their effects can bring primary changes or more general changes.

# **Quotes for Findings' Presentation**

King advocates that (2004, p.267) whatever approach is taken, the use of direct quotes from the participants is essential for the researchers' data interpretation. In his opinion, short quotes can be used for facilitating the understanding of specific points of interpretation – "such as clarifying the way in which two themes differ – and a smaller number of more extensive passages of quotation, giving participants a flavour of the original texts." All the detailed findings are therefore discussed with quotes in Chapter 6 and Chapter 7.

# **5.6 Summary**

The objective of this chapter is to explain the research philosophy and strategy and the research design. In the research design, the chapter outlines how the empirical data were collected and displayed through interviews for the multiple case studies. In addition, the use of template analysis approach for data analysis in this study is clarified. The next two chapters present the case studies and the cross-case comparisons.

# **Chapter 6 Findings from the Five Case Studies**

Based on all the collected empirical data, especially the data from interviews, this chapter presents the findings from the five case studies. Each case is discussed in terms of an outline of the effects of internal and external factors upon its market share competition. The first section of this chapter describes the findings from the case Study of Shanda, followed by the four subsequent cases. Conclusions from each case are drawn at the end of each case, which are to be combined and used as the basis for the cross-case analyses in Chapter 7.

# 6.1 Findings: Case Study of Shanda

Established in December 1999, Shanda (NASDAQ: SNDA) is the largest online game operator in China. Shanda is the only online game company to keep its No.1 market share position in the Chinese online game market for many years except 2006.

With millions of players, Shanda focuses primarily on the Chinese market. The massively multiplayer online games that Shanda operates include massively multiplayer online roleplaying games, or MMORPGs, and casual games. In August 2009, Shanda provided 18 MMORPGs and 11 advanced casual games, either licensed to it by other game developers or developed by Shanda in-house. Almost 95 percent of the company's revenues in 2008 were generated from online games. Around 10 percent of the revenues were created by casual games. The remaining 85 percent<sup>28</sup> of revenues were generated by MMORPGs, 77 percent of which was contributed by *The Legend of Mir II* (launched in 2001) and *World of Legend* (launched in 2003).

# 6.1.1 Internal Factors and Shanda's Market Share Competition

The findings indicate that 77 percent of interviewees regard Shanda's 'Pricing', 'Products', 'Organizational structure' and 'Financial capabilities' as the most relevant drivers keeping Shanda in the No.1 position in the Chinese online game market share ranking lists during the past decade. In the following, findings regarding the significance of each factor will be discussed.

<sup>&</sup>lt;sup>28</sup> The data is available from: http://tech.163.com/09/0227/06/5350RN87000915BF.html

### **Organizational Structure**

56 out of 64 interviewees who participated in the interviews equate Shanda's ranking with Chen Tianqiao's leadership and series of innovations in organizational structure and pricing. An experienced industrial insider during the interview confirmed,

Shanda would have had no future, but for Chen Tianqiao's determination in selfdevelopment which turned Shanda from a point-card seller into a virtual business trader.(WTT<sup>29</sup> in the interview)

From a pure foreign game licensee to a domestic game developer and operator
 As a family business, Chen Tianqiao together with his wife and his brother
 established Shanda Networking in Shanghai in December 1999. In its initial period,
 similar to other start-ups in its initial period, Shanda was unstable and struggling for
 survival.

We had spent most of the seed money invested by CDC Corporation in late 2000 and still no revenues from online advertising. It is really a big headache to find an alternative market for survival. At the very moment, Chen Tianqiao seized an opportunity of operating Korean-made online games, which changed Shanda's future. (CND in the Interview)

Prior to 2000, the global game industry had had a history of around 40 years, while the Chinese game industry only emerged in 1994. TZN recalled how Shanda got the rights license for its first foreign online game by accident.

In the spring of 2001, the Korean game developer Actoz took its most popular game Legend of Mir II (or Mir II) to see a big game company for possible cooperation. However, they were refused. On hearing this, Chen Tianqiao, the CEO of a small unknown Shanda at that time, spent the last of his start-up money (\$0.3 million) in acquiring the right to license this South Korean game.(TZN in the interview)

<sup>&</sup>lt;sup>29</sup> In reporting the analysis of the interview details, I use two or three letters to represent the surname and first name of the interviewee. For example, I use SDM to represent an interviewee called Song Danmei.

Chen's decision turned his company into one of China's largest online operators (So and Westland, 2009). After obtaining the license rights for Mir 2 in China, Chen made preparations for running the game, including renting computer servers from the government-owned Data Centers run by telecom operators. In November 2001, Shanda commercially launched *Mir II*, their first MMORPG. "Given the average payment of RMB 30 (\$3.75) a month by each game player, Shanda was estimated to earn over \$1 million a month. With the domination of *Mir II* in the Chinese online game market, and with over 140 million subscribers, Chen Tianqiao became the richest man in China in 2004"(So and Westland 2009).

The findings shows that the need for a change in the organizational structure was due to Chen's dissatisfaction with the licensee position, which is in line with Wang and Zhao, who argue that Shanda encountered a 'near-death experience' daily between 1999 and 2001 (Wang and Zhao 2004). As a licensee, Shanda had no right to gain access to source codes, which are kept by foreign game developers. Source codes enable the programmer to exchange ideas with the computer using a reserved number of instructions. Without access to source codes, Shanda was not allowed to do any correcting or updating to the game. What they can do is to provide feedback on content problems and expect the continual updates to the game by the foreign game developing side. Hence, the unavailability of source codes threatened Shanda's daily service, especially when game players complained about the loss of their virtual assets, which are quite valuable in the game's virtual world. The loss of assets is always due to the existence of bugs, security breaches or technical problems, which are always caused during the game development and can only be sorted out with the access of a source code to update the game programming. This explains why Shanda used the US\$40 million invested by SAIF (the Softbank Asia Infrastructure Fund) in March 2003 to create a self-developed game with a Chinese cultural context. When discussing the importance of having their own self-developed game products, Mrs Li from the Department of R&D remarked that:

It is true that we gained our great success, especially in the market share competition, we outperformed all other domestic rivals. However, behind the big fortune is a company without solid basis, especially in basic game development skill. In terms of the further development, we realized that we have to settle down to study again. (LC in the interview) Over 90 percent of interviewees agree that Shanda's change of organizational structure was mainly stimulated by the three-year legal battle between Shanda and Actoz after their short cooperation. Wemade (the Korean developer and provider of *Mir II*) and its Korean publishing partner Actoz sued Shanda in 2003, claiming that Shanda's in-house developed game *the World of Legend* had infringed on *Mir II*'s copyrights. The arbitration started in 2003 and was finally sorted out in early 2007.

The settlement was completed in two steps. Firstly, in August 2003, Shanda started to pay Actoz a share bonus, and signed *Mir II* China area dealership contract with Actoz. In November 2004, Shanda purchased 29% of Actoz's shares with approximately US\$91.7 million<sup>30</sup>, and became its biggest stockholder. Secondly, the issue was finally settled in 2007, with Wemade acknowledging Shanda's copyright for the online game *the World of Legend*. In turn, Shanda agreed a copyright jointly owned by Wemade and Actoz for the game *the Legend of Mir II* and Shanda got the right to operate this game in mainland China and Hong Kong.

The conflicts between Shanda and Actoz led Chen Tianqiao to intensify his decision to develop its in-house games. In October 2003, the release of *the World of Legend* (or *Woool*) which is Shanda's first in-house developed MMORPG indicated the big change of Shanda's organizational structure. From then on, Shanda was not a sole online game licensee anymore. The online game revenues kept increasing in the year 2003 (to US\$73.6 million) and 2004 (to US\$154.2 million), increases of 123.4% and 105.4% respectively (Shanda Form 6-K, 2005)<sup>31</sup>.

• From a domestic small game company to a public listed company in NASDAQ

In February, 2004, Tang Jun, former president of Microsoft China Co., Ltd, joined Shanda as the new president. His arrival into Shanda showed that people are at the heart of strategy. His valuable management experience in the USA and Microsoft China in the IT industry sped up Shanda's IPO on May 13, 2004 in NASDAQ.

 <sup>&</sup>lt;sup>30</sup> The data is from: http://china-netinvestor.blogspot.com/2004/11/shanda-to-acquire-controlling-stake-in.html
 <sup>31</sup> The data is from: Securities and Exchange Commissions of Shanda Ltd Form 6-K, WASHINGTON, D.C. 20549, February 2005.

• Shanda's establishment of its three business units in 2008

From April to July 2008, Shanda announced the establishment of its three business units of Shanda Games (SDG), Shanda Online (SDO) and Shanda Literature (SDL) respectively. Shanda Games, a spinoff of the Shanda Interactive Entertainment Ltd (SNDA), was listed publicly on the NASDAQ Exchange under the symbol GAME on September 25, 2009. As the parent company, Shanda Interactive still owns about 78 percent of its former unit's shares and 97 percent of the voting rights. When asked why Shanda carved out SDO for the IPO and its effect on Shanda's future market share rankings, several interviewees showed their positive opinions. As CND stated in an interview:

Chen Tianqiao is ambitious man with long-term vision. He does not want only to be a leader in the conflicting online games, but, a leader in the so-called interactive entertainment [industry]. Why he established SDO and SDL? ..., because he hoped to lift Shanda Games and draw public attention to other different business models.

He further added,

SDL has Qidian.com, jjwxc.com and hongxiu.com, all of them are the leading literature platforms with different levels of readers with diversified interests in China. See, Shanda is keen to be the leader of China's online literature market. I personally think that this is an emerging online market with more potentials than online gaming. Of course, SDL can make it easier to find literary works and stories which are truly created from the users and can be used to Shanda Games for game development. In short, I personally think, Shanda's No.1 ranking is not easily to be replaced in five year. (CND in the interview)

Compared to SDL, Shanda Online (SDO) was established to provide its one-stop integrated service for the third-party content providers, which includes digital content delivery, payment promotion and customer relationship establishment. However, it was found from the majority of interviewees' responses that there is little evidence of common interest. Rather, they were very cautious to use SDO's service. For instance, one interviewee stated, Believe me, their services are very tricky. Do not trust them. They always ask for high charges. Maybe firstly, you feel their services attractive. However, their high charges and blurring rules will let you feel fed up at last. To be more important, it will waste lots of your valuable time. Moreover, they are strong and you are weak. You cannot beat them even you are right. To be honest, I really want to devote 2-3 years to develop a game of my own team and try to sell it abroad. If you know some foreign game operator, it would be fantastic if you could introduce me to them. I really want to know what game they are looking for..... (HH in the interview)

In contrast, 8 percent of interviewees show their interest in the service that SDL offer and would like to have a try.

Why not to think of SDO's service and have a try if you have a game at hand? Anyway, it is too expensive to establish a platform to run your game. It will be horrible to seek kinds of guanxi for operating your game. So, I do not care to pay for Shanda's platform. Anyway, there is no such thing as a free lunch .(JLS in the interview)

# Products

The findings reflect the top relevance of Shanda's products in market share competition and also indicate the uncertainty of its hit-product availability. It is found that Shanda's products are critical in its market share ranking. Like YJ, lots of interviewees take a wait-and-see attitude to Shanda's online game products.

Shanda's two old games still bring over 70 percent of its whole revenues. They are too old and Shanda relies heavily on them. But have you seen one real money maker developed by Shanda? I have no idea about it. So, my conclusion is: I wonder how long each of the two hit games can survive because they are far too important for Shanda's market position. Let us see how many MMORPGs Shanda has been operating. Nearly 20, right? I am afraid Shanda will be a loser in its product strength if it still cannot find a hit game when customers show no interest or patience to the old games. So, I am not too optimistic to Shanda's products. However, let's see.... (YJ in the interview)

A member of staff from the marketing team of Shanda recognized their product weakness during the interview.

In 2006, after the adoption of free-to-play model, we were still busy with looking for another title which can be served as the company's new flagship game. We all understand the necessity, but unfortunately, it is difficult for the company to find a new real "hit" title. In addition, it will also consider lots of factors which can satisfy the game players' appeal and maintain this satisfaction as long as they can.(LFC in the interview)

Until now, Shanda has not turned its own in-house game into a real money maker. In Shanda Games' IPO prospectus, the company stresses the importance of new blockbusters to keep adding revenues.

### Pricing

• The leader of time-based pricing strategy

The findings in the Shanda case are in harmony with the opinions of Porter that "when the industry is highly concentrated or dominated by one or a few firms, the leader or leaders can impose discipline as well as play a coordinative role in the industry through devices like *price leadership* (Porter 2004, p.18)." Shanda is such a company, which has been acting as a price leader in the past 10 years' online game industry development in China. The development of the pre-paid card (or point-card) enabled Shanda to be the first Chinese online game operator who successfully adopted this time-based model and was followed by other Chinese online game operators, such as NetEase, The9 and Tencent etc. Within only one month's issue of the pre-paid card in 2001, all the investment was paid off. Half a year later, *the Legend of Mir II* was a success in the Chinese online game market.

• The leader of item-based pricing strategy

According to 55 interviewees' viewpoints, Shanda's pricing innovations are considered far greater and more significant in Shanda's market share competition than any other factors. As YJ remarked,

"Without the transplanting from time-based pricing to item-based pricing, our two flagship games maybe are already disappeared and are out of the game players' memory." (YJ in the interview) Shanda's financial report for the 3<sup>rd</sup> quarter of 2005 stated that total net revenues increased by 41.4% year-on-year; however, revenues from *Mir II*, decreased 33.5% quarter-over-quarter to RMB154.6 million (US\$19.1 million). According to Shanda, *the Legend of Mir II* and *the World of Legend*, which were commercially launched in the fourth quarter of 2001 and the third quarter of 2003 respectively, had already entered into a mature stage of their lifecycles. In order to effectively maximize the lifespan of *Mir II* and *the World of Legend*, at the beginning of November 2005, Shanda adopted the item-based pricing model for three of their leading MMORPGs: *Mir II*, *the World of Legend*, and *Magical Land*.

Under the new pricing model, game players are free to play the basic functions of an MMORPG and only need to pay when they decide to purchase in-game items and premium features, such as weapons, clothing and pets, for enhancing the game experience. Prices for the virtual items range from less than a dollar to more than \$100. Rather than charging for the time, Shanda makes the majority of its money from such item sales. In 2006, the new pricing model was expanded to most of Shanda's MMORPGs. With the frequent adjustments to meet the changing demand of the game players and constant release of new expansion packs, under the itembased pricing model, as the eldest MMORPG game, Shanda's *Mir II* is still active in the Chinese online game market. Both *Mir II* and *the World of Legend* have kept the excellent record of having concurrent game players of 0.6-0.8 million in 2009 (Q3 Shanda Call Transcript, 2009).

The findings reflect the fact that Shanda's innovation from time-based pricing to item-based pricing was not smooth. The direct short-run impact of Shanda's first pricing innovation was a decline of its share price during the first half of 2006; and in market share competition, Shanda lost its No.1 position to NetEase, which gave rise to suspicion and distrust of its strategy from outsiders and insiders.

Many insiders in Shanda and other companies thought our pricing revolution undermined the industry's rules and they even believed that we were digging a tomb for ourselves.(LC in the interview)

When asked the reaction from the Shanda staff after the pricing revolution, he stated,

After the announcement of the free game offer, each staff in Shanda can sense the decline of our companies' revenues and the stock price. Many staff began to wonder if Shanda's prosperity period was gone although Chen Tianqiao stressed again and again that 'adopting the item-based pricing will benefit the company in the long run.' Some talented people left the company due to the future uncertainty before Shanda's revenues rebounded in the first quarter of 2006. (LC in the interview)

The pressure of the pricing innovation was not only from within the Shanda but from its rivals, such as NetEase and The9 as well as millions of game players.

Lots of industrial insiders gave their negative comments on the item-based pricing model, Ding Lei, the CEO of NetEase said 'The adoption of item-based pricing, to some extent, equals to killing the hen for the egg in this industry'. More and more began to suspect Shanda's item-based pricing when NetEase replaced Shanda as the No.1 online game company in China in 2006. ... Lots of game players were not used to our pricing change and so turned to other games, such as World of Warcraft. You can see the sudden increase of The9 revenues in 2006. (ZYR in the interview)

However, compared with the short-run impact of Shanda's pricing innovation, it is evident that the long-run impact of pricing innovation on its market share competition is not only positive but consolidates Shanda's strength. It is showed in Shanda's Earnings Call Transcript<sup>32</sup> in the 4th quarter of 2006 that "although Shanda's total net revenues had dropped by 31.3% year-over-year by the end of March 2006, with a sequential improvement in each quarter in 2006, total net revenues grew by 7.7% quarter over quarter and 13.5% year over year in the fourth quarter of 2006. This was the first time Shanda had achieved growth on both a quarterly and yearly basis since the pricing model transition in late 2005." Since then, Shanda returned to its number one market share position (see Figure 6.1).

In the second half of 2006, an increasing number of online game operators have followed suit and announced that they would also operate their games under the

<sup>&</sup>lt;sup>32</sup> The data are available from: http://seekingalpha.com/article/26817-shanda-q4-2006-earnings-call-transcript

item-based model. According to statistics from IDC<sup>33</sup> China (2009), by the end of 2007, over 80 percent of online games on the Chinese market had adopted the itembased model, relying on virtual item sales to generate money, 10.1 percent of which adopted time-based pricing and 10.6% chose the use of mixed pricing models (iResearch 2009).<sup>34</sup>

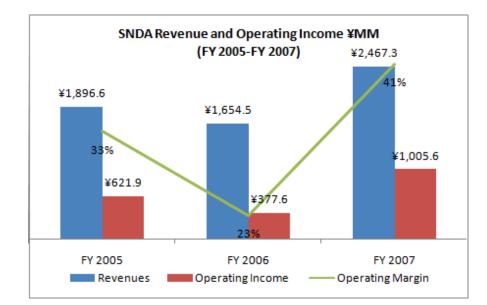


Figure 6.1 Shanda Revenues and Operating Income (2005-2007) (Shanda Interactive FY 2007 Results Press Release, 2008; Shanda Interactive FY 2006 20-F, 2006)

When interviewees were asked why other companies decided to choose the itembased pricing, the most obvious answer for 45 out of the 64 interviewees\_was to "follow for survival." But further probing discussions revealed why most of the less dominant Chinese online game companies followed Shanda's pricing innovation.

We are quite confused and a bit frightened when Shanda announced their decision. At that moment, we do not know what we should do. Nobody will tell whether Shanda's pricing innovation is correct or not. What we do know is that we can't compete with Shanda...Shanda is the price leader. Why, because they have capital while we don't. Moreover, we are clear that online games in China are all so similar in terms of content and we have no strength in our game content for competition. So, we have to follow Shanda. We do not want our

<sup>&</sup>lt;sup>33</sup> IDC is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets.

<sup>&</sup>lt;sup>34</sup> The data is available from: the data is available from: The data is available from: http://tech.sina.com.cn/i/2007-12-14/15431914192.shtml

*limited customers to be attracted by Shanda's free-to-play games. (JN in the interview)* 

LC explained the quick popularity of item-based pricing strategy from another aspect.

Maybe you are aware that most of the young online game companies are startups with 10-15 young people. Most of these guys dreamed to be another Chen Tianqiao when they left their previous employers. They may be good at game design and development, but they don't know how to monetize a game at all. Therefore, when they got to know some changes taken by Shanda or Giant, they would be the followers without any hesitation. They even regard the quick pricing change as a good opportunity to bring them a big fortune. (LC in the interview)

WB, a CEO of a less dominant company showed his confusion before his decision to replace the time-based pricing with the item-based pricing model for their two MMORPGs.

I am a 100 percent Chinese but got my masters degree from the USA. In China, people call the people who study abroad and come back to China 'Hai Gui'. A certain amount of the IT company founders in China have the same experience as mine. To be honest, our education background made me believe in only the time-based pricing model. Anyway, nearly all the western game companies they have been using this time-based model for about 20 years and their operation are quite successful. ..So, I did not take Chen Tianqiao's item-based pricing policy seriously.(WB in the interview)

However, he finally adopted the item-based pricing for all his company's games in 2007. When asked for the reason, he concluded that,

It is difficult to explain. But my own experience of failure taught me, if you design and operate a game with simple western-style, nobody in China will play it. More and more, I have to admit that the use of local knowledge to

understand the local consumers is more important. Chen Tianqiao knows them better than me.

The findings of this study also reinforce the work of Croll (2006, p.317) who found that "China's consumers already accounted for 11 per cent of worldwide revenues of luxury goods." YHX confirmed that a certain percentage of Chinese online game players have the relevant interest in purchasing the virtual luxury goods. He pointed out that,

Item-based pricing can satisfy the needs of different levels of consumers. If you have no money, you can play; if you are rich, you can enjoy more excitement with spending your money. The more you spend the more fun you can get. Can you believe one of our game players can pay several RMB1, 000 a day to buy the virtual weapons for constant upgrading? (YHX in the interview)

• Time-based pricing renaissance and emergence of diversified pricing models It seems that item-based pricing became prevalent and the time-based revenue model became almost obsolete in the Chinese online game market in 2005. However, nearly all dominant game operators later began to adopt the time-based revenue model again and the domination of the item-based pricing fell from 80% to 60% in 2008<sup>35</sup>(see Table 3.5 and Figure 3.1).

Since the beginning of 2008, several game operators announced their intention to include time-based billing as one of their revenue models. In July 2008, Shanda announced its adoption of a time-based revenue model for its new game Chang Chun and acted as pioneer again in the pricing evolution. Except iyoyo.com, other operators such as Giant, Perfect World and Kingsoft are all dominant operators in terms of their yearly revenues in 2007 (see Table 3.5). The emergence of diversifying pricing models was clarified by the following interviewees. Many interviewees agree that the constant pricing innovation was forced by the lack of differentiated game product in the market. It is just as Shanda's YJ remarked,

<sup>&</sup>lt;sup>35</sup> The data is available from: http://www.yxnpc.com/2009-09-24/00A6/10656054.html

It is not exaggerated to say, the probability of each game being a "hit" is too low even though there are over 200 games among the market. It seems that one in ten games is profitable.(YJ in the interview)

In terms of the lack of hit products in the online game market in China, nearly all interviewees showed their support to the mixed pricing application, as WW and HJ remarked,

Shanda is trying to use mixed pricing to maintain the richer who do not want to spend lots of time for struggling through endless monster-killing battle; on the other hand, he also still expects to attract the "diligent" game players with abundant times. (WW in the interview)

The mixed pricing strategy is the fairest strategy. It is a good way to balance the market demand. (HJ in the interview)

### Distribution and Promotion in the Market

Only 10 percent of interviewees talked about the significance of distribution and promotion in the market actively. When asked, common attitude to the distribution and promotion was that their significance was far more important in Shanda's initial period. Currently, their relevance to Shanda's market share ranking still exists, but not as important as before.

The first distribution channel that Shanda resorted to in the market was Ubisoft. In 2001, online games were mainly sold through software shops. The French company Ubisoft is one of few foreign game companies who entered China to sell its games (in CD form) in many computer software shops.

In the first three days of Mir II's launching, Shanda got 3,000 to 5,000 users, but three months after the launch it had 300,000 active users. It was without a doubt a big success. If each game player would pay RMB 30 (\$3.75) a month, Shanda can easily to make over \$1 million a month<sup>36</sup>. (CXY in the interview)

ZCM introduced Shanda's initial distribution channel operation like this,

<sup>&</sup>lt;sup>36</sup> The data is available from: So, S and Westland, J.C., (2009), Shanda: The art for getting paid. Available from: http://news.alibaba.com/article/detail/business-in-china/100122037-1-shanda%253A-art-getting-paid.html

Enlightened by the popularity of internet caf és in Korea, we targeted internet caf és as the main pre-paid card distribution channel. Usually we sell pre-paid cards to a group of regional distributors (i.e. first level distributors) and offer them a 15-20% discount off the face value of the cards. First level distributors pay us once the card is delivered, so that we have no inventory risks. They then resell their cards directly to Internet caf és and other retail points of sale, who usually take 5-10% of the face value of the cards.(ZCM in the interview)

In April 2006, Shanda adopted a new discount policy. Under the new policy, different discounts were given in terms of how much they sold and what kinds of pre-paid game cards they sold. Under the new policy, Shanda managed to have more control over the distributors and were also able to encourage the distributors to promote specific games. In addition, Shanda has built a nationwide E-sales system, which enables them to sell virtual pre-paid game cards, simplifies logistics by eliminating the cost of physical game cards and effectively avoids the piracy problems.

# Internal Technology

• Technology in game development

90 percent of interviewees admitted that Shanda lacked the technology in game development in its initial period, which explained why it had to act as a licensee to operate the imported games. However, the findings indicated that the technology weakness in game development did not bring any negative impact on Shanda's market share ranking. Instead, during the first two years' game operation, *Mir II* alone brought in Shanda daily revenues of RMB1 million (US\$130,000), and pushed Shanda to the No.1 market share rankings in 2002-2005 in China.

The findings from the interviews indicate that the real motivation to drive Shanda to obtain strong game development technology was its unfavourable organizational structure at that time, i.e. its licensee position., just as YJ pointed out,

In Shanda's initial period, the worries are from the lack of experience in online game operation and related services. At the first two years, we had only around 100 staff. " "When we went to law against Korean's Actoz, we feel the threat of death since Mir II was the only resource of our revenues and Korean company was holding the source code of the game development, but we didn't have them. (YJ in the interview)

The findings indicate that Shanda identified mergers and acquisitions (M&As) as the quickest and most effective way to attract talent and enhance its technology competitiveness, which is in line with the opinions of Johnson and Scholes (2002) that: "Mergers and acquisitions are a common method of development, largely because of speed and the ability to acquire competences not already held in-house." (p.401). TZN remarked in the interview that:

In 2004 and 2005, stiff competition may arrive quicker than anticipated. Even so, Chen Tianqiao and his management team still thought the barriers to the game industry entry quite low. So they focused on expanding the market size via investment and acquisitions for outperforming the competitors. (TZN in the interview)

Here are the list of Shanda's detailed Merger and Acquisition activities.

1) Acquiring a Stake in Haofang (July 29, 2004)

Shanghai Haofang is a privately-owned company that develops and operates the largest network PC game platform in China. Haofang's platform is especially appealing to home users because it is otherwise rather inconvenient for them to find other gamers to play together at the same time.

2) Acquisition of Bianfeng (August 4, 2004)

According to the 14th CNNIC report (2004), about 68.5% online game players chose casual games. Role-playing games rank second and win about 48.2% of online game players.<sup>37</sup> Hangzhou Bianfeng Software Technology Co., Ltd (Bianfeng<sup>38</sup>) is a leading developer and operator of chess and board games in China. Chess and board games are deep rooted in Chinese culture and have a large and loyal user following, especially among the more mature age groups.

<sup>&</sup>lt;sup>37</sup> http://english.iresearch.com.cn/online\_game/detail?views.asp?=4512.

<sup>&</sup>lt;sup>38</sup> Bianfeng offers over 50 different games, which attracted over 200,000 peak concurrent users in July 2004, according to data provided by Bianfeng's management.

3) Acquisition of Mobile Games Developer Digital-Red (September 7, 2004) Forecasting the rising trend of mobile gaming in China, Shanda signed an agreement to finish its acquisition of Digital-Red Mobile Software Co., Ltd. Digital-Red had already established a successful mobile games development platform. Its pre-loaded games are deployed by Nokia, Motorola, Sharp Sony, and Ericson, etc. and are played by users all around the world.

#### 4) Acquisition of Hurray! (September 7, 2004)

"On July 22<sup>nd</sup> 2009, Shanda announced that its wholly owned subsidiary Shanda Music would buy approximately 51% stake in wireless value-added service company *Hurray!* \$ 46.2 million (Hefflinger 2009)." Hurray! specializes in artist development, music production and wireless music distribution and other wireless value-added services in China. It also organizes concerts and other music events in China through its affiliated music companies. By acquiring Hurray, Shanda has managed to enter China's wireless service market. The acquisition of Hurray consolidated Shanda's efforts to establish a digital entertainment conglomerate.

Game design is the weakest link in the game development industry in China. The importance of a game designer to a game is like the importance of arteries to the human body. In order to avoid the talent exodus, each company has invested heavily in two fields: the first is development; the other is payment enhancement to the existing employees and to attract talented professionals from other rivals. For instance in 2007, Shanda launched its "Feng Yun Plan" and "18 Plan" with the capital scale of RMB 2 billion (US\$263.09 million) to acquire game-development talent to reinforce the company's capability to develop new games. At the Fifth China Digital Entertainment Conference in 2007, while others were talking about self-innovation, Chen announced three new plans.

- For salaries alone, the average rate of increase for common employees was to be 20% and over 40% for senior staff. Shanda introduced two major investment plans, "Feng Yun Plan," and "18Plan" in 2007.
- 2) Feng Yun Plan had been budgeted at RMB 2 million so as to acquire the newly emerged domestic online games to add to its game portfolios. He

promised to deliver RMB100 million (US\$13 million) to any Shanda-related team that could develop a game as good as Aurora Technology's 3D virtual game "Feng Yun Online" A game would not be considered by Feng Yun Plan unless it had more than 1.5 million players.

3) 18 Plan means that on the 18th of each month, Shanda's top leaders would meet the representatives from other domestic game development teams who had ideas for new games and were interested in being acquired by Shanda. Shanda would decide whether to acquire the team or not based on the representatives' statements.

The findings of the Shanda case study indicate that some small game developers are hesitant when confronting Shanda's "attractive" plans because lots of them think that Shanda would gain most from the small game developers who contribute most. Hence, 42 out of 64 interviewees interpreted Shanda's plan as unilateral and the lack of mutual goals and interests. Their opinion is well-expressed by WF below.

It would be very tricky to join Shanda's 18 Fund. If my understanding is correct, they need to charge firstly the distribution cost, marketing cost and IT service cost out of the gross revenues. You can only get 28 percent from the remaining net revenues. Do not forget, you have to deal with other operation issues, such as paying for your call center and Game Masters. So, what you can get is too limited. Giant put forward some similar plans. I have no interest to think of that because I do not believe them. I would rather to spend time in develop my own games than thinking of the low-margin co-publishing.(WF in the interview)

Apart from launching new online games, Shanda has been active in releasing game expansion packs for existing online games.

During the 3 months of the second quarter 2009, we are so proud to have released around 60 expansions for the games in operation. Together with corresponding online promotions, we are successful in enhancing the game players' loyalty and enriching their game play experience. (SDD in the interview) During the interviews, when asked for an evaluation of Shanda's present internal technology in game development, a typical response is that of RN, who concluded that:

Shanda's success in the two old game operations doesn't indicate its technology innovation. It can only say that Shanda is good at 'Product adaption.' Even so, we have to agree that Shanda's technology in product adoption is most relevant in expanding the life cycle of the Legend of Mir II and World of Legend. From this sense, I have to say, the technology will keep its top significance until the emergence of Shanda's new hit product. (RN in the interview)

• Technology in service efficiency

All the interviewees appear to recognize that Shanda has the top technology in service efficiency which outperforms less dominant companies. However, there seems to be no obvious difference between Shanda and other dominant companies' online game service.

Like its domestic rivals, Shanda faced an environmental threat from Waigua, which was used by many game users who wanted to increase levels quickly even when they are not playing the game at their computer.

CHH introduced Shanda's fight with Waigua during the past few years in the interview.

During Shanda's initial period, Shanda's technical solution was unlikely to sort out the Waigua problem. Mir II even became the most pirated online game in China in 2005, with Internet caf és and college students/entrepreneurs opening their own private Mir II servers. In 2005, Shanda paid a total of 80,000 Yuan to five people for information about plug-in makers for the Legend of Mir II. Shanda's bounty system for bugs and Waigua is an interesting attempt to use financial incentives to combat piracy. However, till 2009, private servers and gold farming plug-ins are still the biggest problems to be eradicated by online game operators. Shanda combated its piracy problems by placing bounties on pirate server operators, but met little success as many of the pirate operators had powerful protectors.(CHH in the interview) 51 out of the 64 interviewees complained during the interviews that the weak legal system in China enabled these alternative businesses not only to survive but flourish. It is said that it is because pirate operators had powerful protectors that Shanda met little success.

In China, guanxi influences the legislative process. Personal connections between the private server owners and the governmental officials make the piracy combat less transparent and powerless.(WF in the interview)

YQ stated very sharply during the interview,

What the officers in the local government concerns? It is not the social peace, nor the justice but the money they can get via the bribery. Who makes their pocket full of money who will be under their protection. The governmental officers cannot allow the private servers disappear. Why? The reason is simple, because they do not want to eradicate their own source to earn the money.(YQ in the interview)

However, rather than giving up, Shanda kept up its effort to protect its security system. In September 2009, Ji Xinhua was named the Chief Security Officer of Shanda Online. Prior to joining Shanda, Ji worked at Tencent for 5 years and also works as a technology expert of National Computer Virus Emergency Response Center. As a technology safety expert, Ji has the experience of work for the Beijing Olympics Security Safeguard Technology Coordination Committee.

In addition, most of Shanda's customers play the games in Internet cafés. During peak hours, there can be more than 2 million concurrent users. Usually, Internet cafés entice game players by providing superior hardware for un-interrupted service and consistently and reliably deliver flawless gaming experience. In order to prevent customer attrition, Shanda tries to provide innovative game content which can offer game players realistic and responsive interactivity and attract more users and keep current players. Hence, 17,000 Servers powered by 4-way and 2-way Intel Xenon processors are deployed by Shanda for delivering a stable and high-quality gaming experience to over two billion concurrent users (Ahmed, 2009).

The findings of the Shanda case enable the author to recognize a particular phenomenon. Lots of young people have no siblings because of China's one-child policy. They are keen to be involved in socialized and affordable entertainment with the relevant characteristic of interactivity. Therefore, although private servers created tough problems for Shanda, the relevant customer demand still brought Shanda large revenues, especially in the early 2000s.

# Finance Capability

The findings indicate that that all interviewees agree that Shanda's 'Financial capacity' and top management skills are the most influential factors on Shanda's market share ranking. They are the prerequisites for Shanda to take its measures in M&A (mergers and acquisitions) and investment, product development, exploring service systems, etc. The following are the two important measures of capital financing.

Receiving US\$40 million in financing from SoftBank Asia
 On March 4, 2003, Shanda received the completion of a US\$40 million strategic investment from SoftBank Asia Information Infrastructure Investment Fund (SAIF)<sup>39</sup>.

In addition to the financial resources, the SAIF investment also brings international management concepts to Shanda. This successful financing marks not only a key milestone in our journey into the global market but also the recognition of China's online game industry by international capital markets. (LYS in the interview)

# • Listed on NASDAQ

Being listed on NASDAQ is an effective way for Shanda Interactive Entertainment (SNDA) and its spin-off (GAME) to accumulate and expand their capital. After its initial public offering on May 13, 2004 at NASDAQ, from August to the end of 2004, Shanda's stock went up to around \$45.40 on December 30, 2004, four times of its \$11 IPO price. Cash and cash equivalents as of June 30, 2009 were \$51.6 million in total till the second quarter of 2009<sup>40</sup>.

<sup>&</sup>lt;sup>39</sup> SoftBank Asia Information Infrastructure Investment Fund was founded in 2001 by SoftBank and Cisco Systems. The fund invests in broadband, wireless, media and information technology firms in the Asia Pacific region and the United States.

<sup>&</sup>lt;sup>40</sup> The data is available from: http://seekingalpha.com/article/159964-shanda-q2-2009-earnings-call-transcript?page=2

• Tang Jun's road-shows in the Wall Street

In the second half of 2006, Tang Jun presented a road-show in New York. At that time, people were not quite sure about the new item-based pricing model that Shanda was proposing to adopt. As WF remarked in the interview,

The suspicion to the item-based pricing brought down its share price sharply. But the road-show brought up their confidence a bit, as the share price rose from 12 dollars to 20 dollars.(WF in the interview)

In October 2007, Tang Jun, president of Shanda network was in the second roadshow for the company's strategy in Wall Street, to further promote the developing strategy of Shanda.

YJ emphasized the contribution of Tang Jun's contribution to Shanda's stock price rebounce by saying that,

Tang Jun managed the Wall Street to know better of Shanda's pricing strategy and platform strategy. Tang Jun's two road-shows helped Shanda to reestablish its leading power in the domestic online gaming industry. By 2007, Shanda returned to its No.1 market share position again and was never swapped by NetEase and other companies.(YJ in the interview)

# 6.1.2 External Factors and Shanda's Market Share Competition

The findings show that Shanda's early-period development benefited a lot from the impact of the external 'Market environment'. The rapid growth of internet users, broadband popularity, PC penetration and the booming Internet café industry (see Section 4.2) played an important role in the takeoff of Shanda.

#### Impacts from External Technology Trend

The period between 1998 and 2002 was the booming era of Internet cafés, which are the premises for the pre-paid card distribution. Internet cafés are the premises for the distribution of online games' pre-paid cards. Between 1995 and 1998 was a period of fast development for China's Internet Cafés. During that period, few families had their own PCs. The main function of Internet cafés in China is to offer unconnected games to café users at a price of RMB 15-20

per hour. Between 1998 and 2002, Internet caf & flourished. After that, competition between Internet caf & became more and more severe.

In June 2004, Shanda had about 50% of the Chinese online game market share, down from its 68% percent in 2003 (Shanda's F-20 Form, 2007). Although Shanda was in an unfavourable bargaining position during the relationship with the Korean developer, *Mir II* was highly popularized because it was cheap interactive entertainment, in contrast to the Chinese rigid education system. The "one family, one child policy" in China pushed lots of lonely children to seek fun and instructiveness from the online games in the Internet caf és.

## Impacts from External Market Changes

• Global rival competition

The findings suggest the weak impact of global rival competition on Shanda's market share competition. One reason is that, Shanda focuses primarily on the Chinese market and offers a service to millions of domestic game players. In addition, the Chinese government's protection policies weakened the threat of possible global rivals.

## • Domestic rival competition

The findings of the Shanda case reflect that Shanda's market share percentage kept shrinking as domestic rival competition became more and more severe. For instance, Shanda's industrial market share declined from 68 percent in 2003 to 50 percent in June 2004. Confronting the lack of new hit game and the intensified domestic rival competition, in 2005, Shanda had to adopt pricing model changes to extend the life span of its two outstanding mature MMORPGs.

Since 2008, gaps between game operators' market shares became narrower due to the increasingly intensified market share competition. The market share gap between NetEase (No.2) and Sohu (No. 8) was RMB 240 million, which is around the revenues of one successful product. In addition, most operators' revenues relied heavily on its one flagship game. Once the sales of the game declined, the ranking would be negatively affected.

• Customer demand

Findings illustrate that recognizing and satisfying customer demand is the most relevant factor to affect Shanda's market share ranking. No matter what measures have been taken, there is just one aim: to enlarge the user base and attract the customers to pay willingly. As TZN remarked,

The reason undoubtedly is that 'Customer is the King.' Everybody knows it (TZN in the interview).

1) The adoption of item-based pricing and mixed pricing

With an attempt to consolidate its No.1 market share position, Shanda's itembased pricing innovation was motivated directly by the need to satisfy diversified customer demand, as was the later adoption of the mixed-pricing strategy. When discussing the emergence of diversifying pricing models, Mr Cheng from a Shanghai based company pointed out that,

Currently, a certain number of game players think only that time-based billing games are fair to play. In order to avoid the attrition of the game players, some dominant game operators began to adopt time-based billing for a new game. Some operators utilize two groups of servers for running one game. Each group of servers is responsible of charging game players with different billing systems.(CH in the interview)

### 2) Platform strategy applied to expand the player base

The findings enabled the author to notice Shanghai's adoption of platform strategy which aims to create a high degree of user stickiness, keep the current user loyalty and helps to attract new potential users. As LC and YD remarked in the interview,

In order to increase the game players' stickiness, Chen Tianqiao always stresses to his staff the importance of 'transforming Shanda into an online game platform'. As to a game player it seems he/she is doing shopping with his/her friends or relatives. Different styles of online games with different pricing strategies are the goods ahead of them for picking up. For the players who have no money but plenty of time, they can choose time-based time billing...... (LC in the interview) The item-based games are like the clothes in the shopping mall, which allow the game players to have a try for free. If the player likes it, he/she finds the game more exciting and then he /she can decide to pay. The advantage of platform will manifest, especially when few differences exist among new games from different companies. (YD in the interview)

### 6.1.3 Government Regulations' Impact

According to the findings, 55 out of the 64 interviewees agree that the impact of the Chinese government regulations on Shanda's market share competition has been positive. They had an impact when Shanda competed against other Korean-made games prior to 2005. With the industry becoming more and more mature, the impact of government regulations upon Shanda's market share ranking is turning out to be relatively weak. The following four points are relevant. Firstly, the Chinese government policy put the Korean online game firms at a disadvantage. However, it indirectly consolidated Shanda's market share position. ZD mentioned this point during the interview.

The long censorship deterred the new entry of Korean game into the Chinese online game market, which weakened or delayed the challenges to Shanda due to the operation of excellent imported games. It is a good opportunity for Shanda to attract more game users and expand its game user base. In addition, it is true that lots of in-house games were released in the Chinese online game market. The market was overcrowded in 2004... (ZD in the interview)

He further added after thinking for a while,

Unfortunately, I have to say, most of these domestic games are 2D games with poor quality. They are produced with low cost and high speed. Therefore, instead of making Shanda's fortune start to wane, Chinese government strict policy towards the entry of foreign games was good to keep Shanda's revenues and market share rising. (ZD in the interview)

In July 2005, the Chinese government released the anti-fatigue system which aimed to limit the online game players' game-play hours so as to avoid the gamers' addiction. Till 2005, almost all online game operators still adopted the time-based pricing model. Under this model, users are

charged based on the duration of time spent playing games. From this sense, in principal, this policy seems a regulatory obstacle that online game operators have to face.

Secondly, efforts were made by the Chinese government to deal with pirate online game servers, which comprised a national clean-up campaign against illegal online games. However, the enforcement power was limited especially with respect to prosecution at the local level.

You know, China is a country that stresses guanxi. Guanxi means that people rely on "the person trust" and do not trust the system. So, corruptions and co-called guanxi can never let pirate servers disappear. (ALS in the interview)

When asked about the installation of anti-addiction system on all games, it was found that lots of the professionals' attitudes were negative.

Online game operators had no options but installing the anti-addiction system because GAPP would give penalties for firms that had failed to install the anti-addiction system. No company wants to make himself into trouble. Is it useful? I doubt it.(TZZ in the interview)

ZJ argued against the installation of anti-addiction system bluntly in the interview.

In China, the people who do not understand the technology always are the policy makers and monitor the people who are expert at technology. Youngsters can beat the new screening program by using fake identities. It's hard to tell online if the player is a teenager or an adult. (ZJ in the interview)

Third, Shanda began to swap its pricing strategy from time-based to item-based following the Governmental release of anti-fatigue system policy. Shanda's revenues did increase then. However, compared with the financial reports of The9 and NetEase who kept on using time-based pricing model for running their hit products, there is no evidence to show any decline of their revenues in the second half of 2005 or in 2006. From this sense, we cannot see the negative impact of the anti-fatigue system towards online game operators' revenues.

Fourth, in February 2007, Chinese government's regulation of real-money trade (RMT) banned the use of virtual currencies to buy real world products and transfer the virtual currencies into real Chinese RMB. This regulation was intended to protect the game operators. On the other hand, it indicated that under the item-based pricing model, a number of issues which did not appear when using the time-based model began to appear and were unsolved by the game operators.

# 6.1.4 Discussion of the Shanda Case Study

In Table 6.1 below, the impacts of internal and external factors on Shanda's market share competition are listed and assessed.

Table 6.1 Impacts of Internal and External Factors on Shanda's Market Share Competition

		Shanda
Internal	Product( self-developed games)	Medium relevant
Factors		++
	Product (licensed games)	Medium relevant/ Most relevant
		++ / +++
	Pricing	Most relevant
		+++
	Distribution and promotion	Medium relevant
		++
	Organizational structure	Most relevant
		+++
	Internal technology	Medium relevant/ Most relevant
	(in game development)	++/+++
	Internal technology (in service	Medium relevant
	efficiency)	++
	Financial capacity	Most relevant
		+++
External	External technology trend	Medium relevant→ Irrelevant
factors		++→±
	External market changes	Relevant
	in domestic rival competition	+
	External market changes	Relevant
	in global rival competition	±
	External market changes	Relevant $\rightarrow$ Most relevant
	in customer demand	+-++++
	Government regulation	Medium relevant $\rightarrow$ Relevant/Irrelevant
		$++ \rightarrow +/\pm$

Note: +++ Most relevant, ++ Medium relevant, + Relevant, ±Irrelevant, - Negative

## **Internal Factors**

Shanda's case study indicates that internal factors of 'Pricing', 'Products', 'Organizational structure' and 'Financial capabilities' are the most relevant factors to put Shanda at the No.1 market share position. As the unique element in the internal factor of 'Distribution and Promotion', the role of Internet cafés was unique when Shanda acted only as a point-card seller in Shanda's initial period, which enabled Shanda to achieve the No.1 market share position in 2003 and 2004. However, with the rise of other domestic rivals and their entry into the Internet

cafés throughout China, the impact of Internet cafés upon Shanda's market share competition became weaker because it could not distinguish Shanda from its rivals.

## External Factors

Over time, the impacts of the external factors of 'Technology trend' (such as broadband penetration level and Internet caféuse), 'Global rival competition' and 'Government regulation' became weaker than ever in Shanda's market share competition. In contrast, the effect of external factor 'Customer demand' on Shanda's market share competition turns out to be the most relevant one.

- The impact of the external factor 'Global rival competition' on Shanda's market share competitiveness is still weak, because Shanda still relies on the domestic game players to generate its revenues.
- Shanda is good at sensing the intention of the Chinese government. Its skill at avoiding the possible conflict with the Chinese government makes the impact of Government intervention weak on its market share competition. On the other hand, the Chinese government's strict censorship and national protection policy weakened heavily the market dominance of imported games (especially the ones from Japan and Korea) and offered Shanda more room to explore its potential during the early stage of Shanda's growth.
- With the game players' increasing experience in game playing, it will become more and more difficult for Shanda and other companies to satisfy and maintain game players in their consumer base. Game players' waning interest in Shanda's two old games has been a threat to Shanda's current market position. For instance, worries about the life-span of the mature game products (Shanda's *Mir II* and *World of Legend*) motivated Shanda to adopt pricing innovation. In return, the adoption of the new item-based pricing will be carefully considered by Shanda's game designers when they decide to develop a new game. In addition, the successful operation of a game product would enhance Shanda's financial capacity, which is Shanda's prerequisite to put Shanda's plans into action. With the money generated by the game *Mir II*, Shanda could attract more and more capital investment for its public listing in NASDAQ. And then, with the ample cash in hand, Shanda could obtain more products via M&A's or other ways of investment. Moreover, Shanda can keep on expanding and consolidating its user base and enrich its product lines through acquisitions.

# 6.2 Findings: Case Study of NetEase

As the top two Chinese online game companies, NetEase and Shanda are the closest rivals to each other. NetEase was set up in 1997 by Mr. Ding Lei (or William Ding). It started its initial public offering (IPO) of American Depository Shares (ADS) at New York's NASDAQ stock market under the symbol of NTSE on June 30, 2000.

### 6.2.1 Internal Factors and NetEase's Market Share Competition

Based on the findings of the NetEase case study, the impacts of the internal factors on NetEase's market share competition are illustrated below.

### **Organizational Structure**

The findings indicate that the impact of internal organizational structure upon NetEase's market share has been shifted from medium relevance to uncertainty or maybe negative. Detailed discussions are demonstrated below.

Comments from 84 percent of interviewees indicate that Shanda and NetEase have implemented different business strategies for the market share competition. Over 90 percent of interviewees agreed that the difference stems mainly from the two CEO's different background and conceptual maps. Just as WL stated,

Chen Tianqiao admits himself that he knows little technology and he seldom plays games. So does their former CEO Tang Jun. Funny? They are speculators. However he has deeper insight into the market demand. Ding Lei (or William Ding) got Bachelor degree of Engineering. He was a high qualified technical engineer before the establishment of NetEase. His mode of thinking indicates that he only believes in product innovation. They are totally different. I really enjoy seeing them fight against each other and want to know who will be the final winner. (WL in the interview)

NetEase adopts a portfolio business strategy. Online game development and operation is just one of the Internet-based services that NetEase offers. From the establishment in June 1997 to 2000, services of NetEase mainly include: search services, free Web-based e-mail, advertising sales, online shopping mall and other e-commerce services in China, which enabled NetEase to have an expanding customer base. Between 2000 and 2004, NetEase concentrated on fee-based premium services and online entertainment services. Its revenues were mainly from online advertising and wireless value-added services by the end of 2004. Since the 1<sup>st</sup> quarter of 2005, the revenues from online gaming accounted for over 80 percent of the total revenues, while online advertising and wireless value-added services contributed for the rest of the revenues (see Figure 6.3).

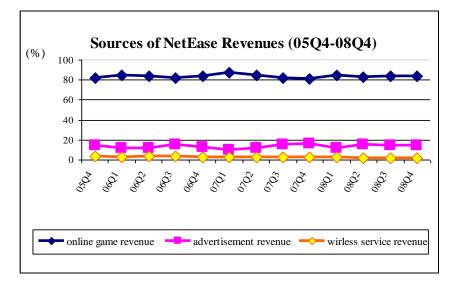


Figure 6.2 Sources of NetEase Revenues 2005Q4-2008Q4 (NetEase Annual Financial Reports2005-2008)

NetEase has kept its goodwill ahead of its industrial peers and the Chinese government because it insisted on developing games based on the Chinese culture. The case study findings of NetEase indicate that NetEase's change of organizational structure aims to consolidate or enhance its market share ranking. However, the result seems to be opposite to NetEase's desire and creates more uncertainties to NetEase's future. XG commented on NetEase's change in the organizational structure below.

NetEase has been proud of its game developing for many years. However, the absolute advantage seems waning. It failed to release a real hit game product during the past few years. Under the pressure of the game player attrition and no new hit products, licensing a world-level game is its most efficient way to enhance its user-base. Everybody can understand Ding Lei's motivation. That is why he was happy to establish a partnership with Blizzard, the world-famous game developer. Do you know how lucrative their cooperation plan to NetEase? NetEase would operate Blizzard's three MMORPGs (i.e. Warcraft III, StarCraft II, and Battle.net) in China (XG in the interview.)

In June 2009, Blizzard announced that it would license its most popular MMORPG *WoW* to NetEase for the next 3 years' operation so that it can facilitate NetEase to run all Blizzard

Entertainment games in China. From 2006 to 2009, *WoW* had been licensed to Shanghai-based The9 in China and brought about over 90 percent of The9's total revenues.

The findings of the NetEase case reflect the high expectations of Blizzard to NetEase over The9. Although *WoW* is over 5 years old, it is still the most popular time-based MMORPGs throughout the world. When asked about what NetEase's advantages over The9 for operating *WoW*, TZN, a professional game developer, stressed two points.

Firstly, WoW is an old game although it is still strong. Because the normal life span of a MMORPG is about 4-6 years. Blizzard hopes to find a licensee to prolong WoW's life span as long as possible From NetEase's successful operation of Fantasy Westward Journey, Blizzard has the reason to confirm that NetEase has the strong capability to keep a game fresh through the game expansion. Secondly, NetEase' super technical capability can be used to fight against the theft of accounts which is a big problem that aroused the complaints of WoW game players.(TZN in the interview)

In principle, "a good beginning is half done". However, NetEase's experience in organizational structure changes seems to be inconsistent with this proverb.

## **Online Game Products**

The findings of the NetEase case study show that 'Product' is the most relevant factor in deciding NetEase's market share ranking. NetEase launched their first MMORPG, *Westward Journey Online*, in December 2001 and began charging users for playing time in January 2002. Subsequently, they launched *Westward Journey Online II (WWJO)*. In January 2004, NetEase launched commercially another in-house MMORPG *Fantasy Westward Journey (FWWJ)*. *Datang* is NetEase'first 2.5D game which commercially launched in July 2006. Released to game players in 2007, *Tianxia II* is NetEase's first in-house developed 3D MMORPG which was also NetEase's first game to adopt the item-based pricing.

Prior to July 2007, NetEase was the last game operator to retain the time-based pricing model only. The revenues of NetEase are heavily dependent on *FWWJ* and *WWJO*. In the first quarter of 2006, *FWWJ* contributed 70% of the revenues and *WWJO* created 20% of the revenues. However, NetEase's revenues declined from Q2 2006 to Q4, 2006 (see Figure 6.3). The less optimistic situation was due to the revenues decline of the two old flagships, which pushed NetEase to begin the pricing strategy evolution.

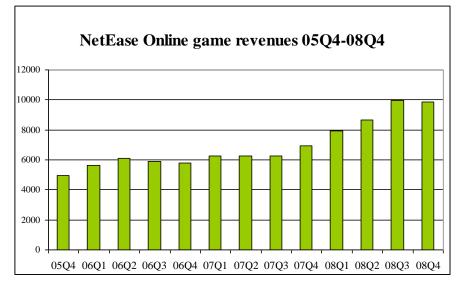


Figure 6.3 NetEase Online Game Revenues 2005Q4 - 2008Q4 (NetEase Quarterly and Annual Financial Reports 2005-2008)

# Pricing

Following Shanda's pricing revolution, the majority of Chinese online game companies switched their pricing model from the time-based model to the item-based model. It was found in the interviews that pricing innovation is seen as an alternative way forward if game products are not successful as expected. NetEase is such a case although Ding Lei insisted on refusing the item-based pricing prior to 2007. As QX remarked,

FWWJ seemed older and older. NetEase devoted technology and huge sum of investment to developing Datang and especially Tianxia II. However, game players were not satisfied with them. I am sure that NetEase felt disappointed about the result. Then, Ding Lei gave up his insistence and announced to adopt the pricing strategy evolution in July 2007, finally announced that its new games Datang and Tianxia II would use the itembased pricing model. Hence, NetEase was the last Chinese game company who decided to embrace item-based pricing model into its pricing strategies. (QX in the interview)

The findings of the NetEase case confirm that the adoption of item-based pricing to Datang and *Tianxia II* did not bring a big change in their revenue generation. Instead, the breakthrough in internal technology enabled the constant rise of peak concurrent users for *FWWJ* in 2007 and 2008 (see 6.2.1 for details). 85 percent of interviewees agreed that,

*FWWJ's strong capability in revenue generation in the past two years confirms the value of time-based pricing model. It should not be regarded as an obsolete pricing strategy. Besides, the technology innovation to the product is really the key.(CH in the interview)* 

### Distribution and Promotion in the Market

The study of the NetEase case shows that, similar to Shanda in the period of time-based pricing, till now, NetEase has sold MMORPG playing time to game players mainly in the form of physical pre-paid point cards or virtual point cards. Internet cafés were the most important distribution channels because they are the places that game players can access the games directly.

NetEase regularly organized marketing activities with game players, which effectively prevented customer attrition and deepened the understanding of the game players' demand. Below is an example of how NetEase distributes *FWWJ* in the internet caf és.

NetEase adopts intensive distribution strategy for distributing *FWWJ*. This game aims to cover all online game players in the country. NetEase has a strong distribution team whose members are easily seen in Internet caf és. Instead of putting advertisements here and there, the marketing staffs are famous for their distribution skills in the internet caf és, such as providing an introduction of the core services of their games and patient teaching to the new game players. However, all the interviewees seem to admit YQ's idea that,

As the competition in game developing becomes more and more important, the impact of distribution and promotion in the market to NetEase's market share competition (as well as other companies) will be weaker and weaker.(YQ in the interview)

## Internal Technology

• Internal technology in game development

The findings of the case study of NetEase confirm that 'Internal technology in game development' has been the most relevant influence on NetEase's market share ranking. According to the statistics of NetEase's quarterly financial report in 2007 and 2008, *FWWJ* accounted over 70 percent of NetEase's revenues. As LM remarked, NetEase's *FWWJ* has several advantages.

NetEase's FWWJ based on one of the four most popular the Chinese classic fictions of "Westward Journey". NetEase's technology in game development is explored fully in this game design. Players enjoy its cartoon style and the artistic style was fresh and dialogues are humorous. However, how to make the game always fresh? [It is] the constant release of expansion packs, just like NetEase to FWWJ. (LM in the interview)

The successful launching of new expansion packs for the game in the year was the main reason for the continued growth in popularity of *FWWJ* throughout 2006. When asked about the different performance of *FWWJ* and *WWJO*, an insider answered during the interview that,

NetEase made efforts to introduce new versions or substantive upgrades of its MMORPG games to maintain their popularity regularly and frequently. However, the online games market has a short history in China. Limited experience of game designers, changes in users' tastes or in the overall market for online games in China sometimes cannot be caught by the game designers and operators accurately. That is why the operation of FWWJ is more successful than WWJO. (YYW in the interview)

Since the second half of 2007, NetEase explored its full internal technology advantages for upgrading *FWWJ* with the issue of its expansion packs and adopting special promotions. The effective internal R&D support enabled *FWWJ* to outperform other game products with its competitiveness.

• Bottleneck of internal technology in new flagship game development

11 out 64 interviewees suggest that the success of the technological running and exploration in the *FWWJ* cannot hide NetEase's bottleneck of internal technology in operating and running other newly-developed games. Here is the explanation.

- Datang: It is NetEase'first 2.5D game, which was commercially launched in July 2006 and was found very limited success.
- Tianxia II: As NetEase's first in-house developed 3D MMORPG, it was long anticipated by NetEase. *Tianxia II* had been under the development of NetEase for three years before its release to the public in 2007. However, the

game players' feedback was much less positive than NetEase expected. Mr Li from NetEase mentioned this during the interview.

In order to cater to the game players' appeal, we changed the chief game designer, added more features and altered a lot so as to please the game players. You know, as a 3D game, the process of altering needs lots of cost. "(LM in the interview)

The game entered unlimited closed beta testing in June 2007. With the release of a new expansion pack, *Tianxia II* began to attract the game players although its progress was slow. According to NetEase's financial report Q1 2009, following *FWWJ* and *WWJO*, *Tianxia II* became the third most important source of online game revenues in NetEase<sup>41</sup>.

• Internal technology in services

NetEase took a number of measures to provide security to online game players after a crime organization stole thousands of accounts, which frustrated the game players. The less dependence of security on static passwords makes the theft of accounts nearly impossible. Mr Liu introduced the importance of OTP hardware tokens during the interview.

Since 2005, we produced and sold 8 million One-Time Password (OTP) hardware tokens. This device generates one-time passwords which change every minute. This kind of token requires the user not only to be aware of the static passwords, but also ensure that they "physically have the tokens. (LM in the interview)

By the end of 2006, 260 personnel were employed as game masters by NetEase. They appeared as game characters in the game world. Their tasks are: monitoring the game environment and providing help to players. They also monitor the game players' behaviour so as to keep the game environment funny and fair. Over 400 people in the customer service center provide 24-hour-a-day service.

<sup>&</sup>lt;sup>41</sup> The data is from: http://tech.qq.com/a/20090520/000397.htm

In December 2008, NetEase and Blizzard established a joint venture company named *Shanghai Storm* in Shanghai, which aimed at offering technical support to deal with problems, especially private servers and piracy problems during the forthcoming *WoW* operation in China. Mr QB from NetEase explained,

NetEase devoted to the fight against the private servers for 8 years. It is reasonable to establish such a joint venture to sort out the private servers because NetEase will only be responsible for the operation of Blizzard's games in China while the related technology and sore codes are controlled by Blizzard.(QB in the interview)

## Financial Capacity

As in the Shanda case, NetEase's 'Financial capacity' is the premise for its actions, such as obtaining the licensing right of *WoW* from Blizzard, game expansion, new game development and talent attraction.

It is widely thought by interviewees that the impact of 'Financial capacity' on NetEase's market share ranking may not be direct, but its impact will be the most relevant. It is I agreed by the interviewees that NetEase is the strongest in terms of revenue generation in the Chinese online game industry because "prior to 2009, by developing games in-house, NetEase did not need to pay the expensive licensing fees and could enjoy the margin expansion (with gross margin at 90% and operating margin worth of 60%)" (Morgan Stanley 2005, p.35).

## 6.2.2 External Factors and NetEase's Market Share Competition

Based on the findings of the NetEase case study, the impacts of the internal factors on NetEase's market share competition are illustrated below.

### External Technology Trend

The findings suggest that the impact of 'External technology' on NetEase' market share competition was not very strong and would become more and more irrelevant. According to the recall of SDD,

The internet popularity began in China in the late 1990s. But, it affected our service in emails, advertising sales, and searching services in early 2000s. However, it did not have any strong impact on NetEase's online game section. Our online game revenues ascended when FWWJ began to launch in 2004. What the game companies concern are the rivals' products, their strength in R&D, whether they got public abroad...... (SDD in the interview)

## **External Market Changes**

• Domestic rival competition - talent war

The findings show that the loss of talented professionals had a negative effect on NetEase's market ranking. Just as YQ remarked,

In 2006, Xu Bo, lead game designer of the Fantasy Westward Journey(FWWJ), left NetEase and was recruited away by KingSoft to establish a new studio in Guangzhou, to develop a new Q-style game to go after Fantasy Westward Journey. Several core staff followed Xu Bo to KingSoft as well..... Xu Bo's departure made it rather difficult for NetEase to continue the game's expansion which is needed by every game to prolong its life span. Do you know why our revenues kept falling down for one year since the third Quarter of 2006?, because the soul of our creation team left.(YQ in the interview)

Another element that made NetEase and other dominant companies feel worried was the threat from the growth of Shanda, the emergence of Giant and other new startups in the following three quarters. At the start of 2006, Shanda's market share was behind NetEase's due to its pricing revolution. However, NetEase's top 1 place only lasted 3 quarters before Shanda returned the No.1 place (see Table 6.2).

	Shanda		NetEase		The9	
	rank	Market	rank	Market	rank	Market
		share %		share %		share %
2005 Q4	1	31%	1	31%		
2006 Q1	3	20%	1	38%	2	21%
2006 Q2	2	21.00%	1	27.29%	3	15.12%
2006 Q3	2	22.28%	1	25.51%	3	12.5%
2006 Q4	1	23.13%	2	22.19%	3	13.07%
2007 Q1	1	18.4%	2	17.5%	4	9.8%

Table 6.2 Market Share Comparison between Shanda, NetEase and The9 (2005Q4-2007Q1)

It should be noticed that in the  $1^{st}$  quarter of 2007, with a market share of 14.85% (see Figure 6.4) Giant rose quickly to the No.3 place with the adoption of a pricing model for the operation its only game, *ZT online*. Giant's aggressive performance was a big challenge to NetEase.

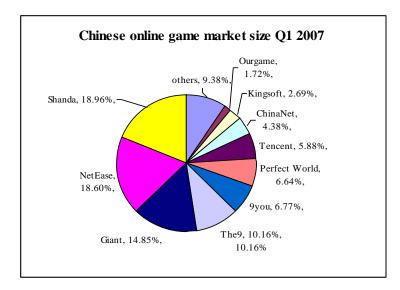


Figure 6.4 Market Share Comparison of the Top Companies in the First Quarter of 2007 (Analysis International, 2007)

• Customer demand

Similar to the findings discussed in 6.1.4, 'Customer demand' are of the most relevant factors to affect NetEase's market share competition. Customers require more and more to be satisfied because they keep on accumulating their experience in game playing and their understanding to the game contents is deeper and deeper. It is a trend that who can gain the customers will win in the industry competition finally. As for NetEase, the poor feedback from customers to *Tianxia II* threatened NetEase's market share rank. That is why NetEase decided to run *Tianxia II* via item-based pricing so as to attract and retain the customer base. With much effort that has been made on *Tianxia II*, its strength in revenue generation is still much weaker than that of the two old flagship games of NetEase.

## 6.2.3 Government Regulations' Impact

The findings of the Case study of NetEase reflect the totally different attitude of the Chinese government towards NetEase's in-house game FWWJ and licensed game WoW. The Government's negative attitude towards WoW's content and the subsequent suspension of WoW has negatively affected the NetEase's revenues as well as its market share ranking.

## Advocating NetEase's National Flagship Game

On August 7, 2009, CCTV, China's largest official TV station, broadcast a 3.5-minute report on *FWWJ* in the morning news programme. The news praised *FWWJ* because it spread effectively Chinese culture. It regards *FWWJ* as an example of a healthy made-in-China game. The friendly and positive gesture from CCTV indicates the government's recognition and support to *FWWJ*.

## After Getting the Licensing Right to Run the Imported WoW

Blizzard Entertainment, *WoW*'s developer, started to face a new problem when it switched to a new local operator for *WoW* in China, i.e. the online gaming company NetEase. New operators of foreign games have to submit the games for government approval and apply for a license and submit the games for content screening. *WoW* would not be allowed a full re-launch until that process is completed.

After six weeks of downtime, the Chinese government ministry MoC (Ministry of Culture) approval arrived, which allowed NetEase to restart the *WoW* operation on July 20 2009, but only previously registered players will be allowed to play (Fletcher, 2009). However, the GAPP concluded on July 22<sup>nd</sup> 2009 that a number of changes have to be made by Blizzard and NetEase before it is allowed to restart. Not only have piles of bones in the NetEase-run Chinese version of WoW been newly replaced with sandbags, but the colour of blood from some monsters and opponents has been changed from red to black, leading to community jokes about petroleum running through characters' veins. In addition, several of WoW's in-game talent tree icons, such as skulls, severed heads, and blood *must be replaced with boxes*.

### Tiff between two Chinese Government Ministries

MoC announced on July 20, 2009 that it approved NetEase to operate the licensed *WoW* after a content check. On September 7 2009, the MoC pointed out that supervisory power of the online gaming industry was being taken away from GAPP and given to MoC.

However, On Oct 9, 2009, GAPP stressed at the Game Developers' Conference in Shanghai that "foreign companies are not allowed to operate online games in China in any form". In addition, GAPP emphasized that it still controlled the issue of licences for all commercial websites hosted in China. The notice also emphasized that "foreign game companies are prohibited from investing in China-based online game operators as a sole owner, joint venture partner or cooperative partner."<sup>42</sup> GAPP had already started a crackdown on "online games operating illegally and featuring unhealthy content". As of early October, more than 200 online games had been investigated and 45 overseas online games banned, the newspaper reported.

On Nov 2 2009, GAPP halted the operation of the latest version of *WoW* due to "gross violations" of regulations. GAPP posted a statement on its website demanding that NetEase stop charging users to play the game, and should not register new accounts.

The tiff between the two government departments suspended the *WoW* operation in China. Interviewees all showed their big concern on NetEase's operation of *WoW* in China. As CH remarked in the interview,

It is estimated that NetEase would lose millions of Renminbi everyday in terms of the server renting. It is unclear when WoW can come back to the Chinese online game players. Maybe the answer will not be available until the tiff between the GAPP and MoC is over. Do you agree that NetEase is only a victim during the political battle? I really do not understand why WoW has so many troubles in China while it can run peacefully in other countries?(CH in the interview)

## 6.2.4 Discussion of the NetEase Case Study

In the following Table 6.3, the impacts of internal and external factors on NetEase's market share competition are listed and assessed.

### Internal Factors

The findings reflect that internal factors of 'Pricing', 'Products', 'Organizational structure' and 'Financial capabilities' are NetEase's most relevant factors during its market share competition. The unique strength of NetEase lies in its capability in product innovation. In contrast, NetEase's 'Pricing innovation' did not work too much when NetEase's hit product *FWWJ*'s revenues declined. Rather, *FWWJ*'s revenues went up a lot due to their technological breakthrough in upgrading *FWWJ*'s content. The NetEase case argues against the obsoleteness of time-based pricing and indicates the weak influence of pricing innovation in NetEase' market share competition. However, the failure of *Datang* and *Tianxia II* showed NetEase's problem in game development.

<sup>&</sup>lt;sup>42</sup> The data is available from: http://www.marbridgeconsulting.com/marbridgedaily/2009-10-12/article/30186 /gapp\_reasserts\_role\_in\_online\_game\_approval

In addition, the findings indicate that the impacts between some different factors are reciprocal. This kind of reciprocal relationship exists in three pairs of factors: 'Product' and 'Pricing', 'Product' and 'Financial capacity', and 'Financial capacity' and 'Organizational structure' (such as Spinoff, public list abroad and M&A).

At last, the successful operation of self-developed *FWWJ* and *WWJO* enabled NetEase to have the higher profit margin and consolidated NetEase's internal factor of 'Financial capacity', which is its prerequisite to put NetEase's plans into action.

		NetEase
Internal	Product (self-developed games)	Most relevant
Factors		+++
	Product (licensed games)	Negative $\rightarrow$ ?
		- →?
	Pricing	Irrelevant
		±
	Distribution and promotion	Medium relevant
		++
	Organizational structure	Medium relevant $\rightarrow$ Negative
		$++ \rightarrow -$
	Internal technology in game	Medium relevant/ Most
	development	relevant
		++/+++
	Internal technology in service efficiency	Medium relevant
		++
	Financial capacity	Most relevant
		+++
External	External technology trend	Medium relevant→ Irrelevant
factors		++→±
	External market changes	Medium relevant
	in domestic rival competition	++
	External market changes	Irrelevant
	in global rival competition	<u>±</u>
	External market change s	Relevant $\rightarrow$ Most relevant
	in customer demand	+-+++
	Government regulations	Medium relevant $\rightarrow$ Negative
		++→ -

 Table 6.3 Impacts of Internal and External Factors on NetEase's Market Share

 Competition

*Note*: +++ Most relevant, ++ Medium relevant, + Relevant, ±Irrelevant, - Negative

# **External Factors**

Like Shanda, the effects of the 'External technology trend' (such as broadband penetration level and Internet café use), and 'Global rival competition' is weak in Shanda's market share competition. In contrast, the impact of 'Government regulation' is negative on NetEase's market share competition, so is the impact of 'Organizational structure changes'. Chinese government's strict censorship on imported games and the tiff between MoC and GAPP created serious problems for NetEase.

The impact of 'Customer demand' is sometimes positive and sometimes negative which is restrained by the customers' taste to the specific game. Game players' waning interest in NetEase's *Datang* and *Tianxia II* have been threats to NetEase's current market position.

The impact of the external factor 'Global rival competition' on NetEase's market share competitiveness is still weak, because instead of relying on exporting games for the revenue generation, NetEase still relies on the domestic game players to generate its revenues.

The impacts of other external factors on NetEase's market share competition are of little relevance or no relevance.

# 6.3 Findings: Case Study of The9

Located in Shanghai and NASDAQ-listed, the9 Limited (NASDAQ: NCTY) is another leading online game operator in China.

# 6.3.1 Internal Factors and The9's Market Share Competition

Based on the findings of The9's case study, the impacts of the internal factors onThe9's market share competition are illustrated below.

### **Organizational Structure**

The findings of the Case The9 indicate that its 'Organizational structure' is one of the most influential factors upon its market share competitiveness. Working as a licensee to operate Blizzard's *WoW* since 2004 enabled The9 to be ranked as No.3 in the market share competition. Changes of The9's organizational structure and the following impacts on the company's market share competition will be discussed below.

Like Chen Tianqiao, Zhu Jun, the CEO of The9 does not know much about computer technology. However, under his management, The9 kept its 3<sup>rd</sup> place before 2007 and was ranked No.4 in 2007 in the Chinese online game market share ranking lists.

Without finishing his undergraduate study, Zhu Jun left Shanghai Jiao Tong University and worked as a secretary in a state-owned company. Making his fortune in an international trade, Zhu registered his company GameNow in Hong Kong in 1998 and changed the name to The9 Ltd in February 2004. Prior to offering online game services, The9's revenues were from kinds of hardware and software training and a variety of different website solutions, such as website development and construction, website maintenance and website advertisements. Unfortunately, Zhu's company had been in debt prior to 2002. The running of Webzen's MMORPG *MU Online* in February 2003 was the company's turning point, which made online game services become The9's absolute income contributor. Since 2007, the revenues generated from The9's online game services accounted for over 95 percent of The9's entire revenues (see Figure 6.5).

## • Exclusive licensee for Blizzard's WoW

In June 2004, Zhu signed up with American video game developer and publisher Blizzard Entertainment to operate its *WoW* in China. As the online game licensee, The9 had to pay high upfront fees to Blizzard for licensing and operating *WoW*  exclusively in China.<sup>43</sup> After paying the stringent high fees to Blizzard, The9 benefited the remaining revenues. As WJ stated, The9 was well aware of the risk and mentioned their worries in some official documents.

The9 understands very well that their business would be harmed... if Blizzard will not renew is license agreement with them. You can find their worries in many documents.. However, they never imagined that Blizzard stopped the renewal so early [in 2009].Indeed, The9 worked very hard to operate WoW. (WJ in the interview)

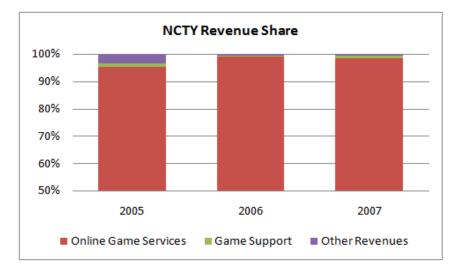


Figure 6.5 The9's Revenue Share 2005-2007 (Wiki invest, 2008)

• Listed on NASDAQ

Shortly after getting *WoW*'s licensing right in 2004, Zhu Jun flew to the United States for his company's initial public offering on the NASDAQ exchange, which seemed unlikely to be successful. But Zhu made it.

Before The9's IPO, The9 was not profitable at that moment. The IPO was nearly aborted....The9 met the big trouble in September 2004. Its original American underwriter quitted and Zhu Jun had no way to take back because he had to raise money for WoW's operation. [Localization, paying royalty fees to Blizzard and preparing for WoW's commercial launching]. Luckily, another

<sup>&</sup>lt;sup>43</sup> The fees include: royalties equal to 22% of the face value of WoW pre-paid cards; "online points or either 37.7% or 39% of the face value of the CD-Keys sold by The9 by making recoupable advances against royalty payments in an aggregate amount of approximately US\$51.3 million over a four-year period" commencing from the commercial launch; spending a certain percentage of WoW gross sales in the marketing and promotion of WoW in China during the four-year period of the license. (Available from: the9, 20-Form 2008).

*investment bank named Bear Stearns showed their willingness to be the underwriter. (ZHC in the interview)* 

On December 15 2004, The9 Ltd was listed on NASDAQ under the symbol of NCTY. The direct benefit The9 received was US\$100 million from the IPO.

• Accepting EA's strategic equity investment in The9

On May 21<sup>st</sup> 2007, Electronic Arts, a renowned American developer and operator of a portfolio of sports games and casual games, announced a licensing agreement with The9. According to the agreement, EA would be The9's shareholder with an equity investment of US\$167 million <sup>44</sup>to The9. In return, EA will own approximately 15 percent of the common shares of The9. Moreover, EA agreed to be The9's partner so that EA would give The9 exclusive publishing rights for EA Sports FIFA Online in mainland China.

When asked about the strategic value from the Electronic Arts investments, The9's YD expressed that,

It seems that casual games will become more and more popular in the Chinese online game market. EA has the unique leading position in publishing sports games and casual games, and even in the console game area. That is what we lack. EA's casual game products or the possible console game area can enrich our product pipeline. (YD in the interview)

After the announcement of this strategic alliance, many industrial insiders guessed that Blizzard would stop the *WoW* contract with The9 sooner or later. As CH, an experienced CEO of a dominant online game company explained,

It is well known that EA and Blizzard are the rivals in global video game industry. Everybody can see that Blizzard's WoW contributes over 90% of The9's revenues and EA is now The9's shareholder. How would Blizzard like to do business with one of its greatest competitors? (CH in the interview)

<sup>&</sup>lt;sup>44</sup> The data is available from: http://www.chinatechnews.com/2007/05/22/5413-the9-gets-equity-investment-fromelectronic-arts

Facing all kinds of warnings, Zhu seemed very confident about it. When asked whether the strategic investment from EA would bring negative effects to the relationship between The9 and *WoW*'s publisher Blizzard, in the The9 Limited's First Quarter 2007 Earnings Conference Call, Zhu Jun replied that in public,

I don't think this will have any impact on our relationship with Blizzard..." "Because EA's franchise, the portfolio is mainly on the casual game and the sports stream area, but to Blizzard to be our focus is on the 3D, MMORPG areas so I think it's no conflict here. (Chu, First Quarter 2007 Earnings Conference Call)

• The loss of licensing right to operate *WoW* 

In fact, Zhu's confidence did not last long. In April 2009, Blizzard announced the transfer of their *WoW* license in China from The9 to NetEase. The9 shares dropped 22% in April 2009 after the news was released. More news came out that NetEase could become a permanent partner for Blizzard in China, not only for one or two games but across all of Blizzard's other games as well.

Here is a brief review of The9's excellent operation over Blizzard. Blizzard reported that there were over 3.5 million subscribers to WoW in China in the beginning of 2007, while there were only 2 million subscribers in North America, and 1.5 million in Europe<sup>45</sup>. In April of 2008, The9 announced that it had achieved peak concurrent users of WoW over 1 million.

## Products

The findings show that The9 has been weak in developing its in-house high-quality products. It is evident that the time-based WoW is the only game product which is the determinant of The9's market share ranking, although it is rich in licensed game products with the adoption of different pricing strategies.

In February 2003, The9 began the distribution and operation of its first 2.5D MMORPG *MU Online* developed by Korean developer Webzen in China. Then, The9 obtained exclusive licenses to operate additional MMORPGs in China, including *WoW* from Blizzard and *the* 

<sup>&</sup>lt;sup>45</sup> The information is from: <u>Blizzard Games Press Release</u>, January 11, 2007.

*Ultimate Nation (or SUN)*, a 3D MMORPG from Webzen in 2005 and other games<sup>46</sup>. In addition, The9 released its first self-made MMORPG titled *Joyful Journey West (JJW)* in September 2006.

By August 2009, with the loss of the licensing right of *WoW*, The9 was primarily focusing on operating a portfolio of 8 MMORPGs which are mainly from other foreign developers. Another 8 games are under localization development and have not been launched yet.

### Pricing

The findings of The9's case study indicate that the adoption of the pricing strategy innovation (i.e. from pure time-based pricing to the combination of time-based and item-based pricing) did not consolidate or enhance The9's market share ranking as expected. Instead, many games with the application of item-based pricing by The9 not only had weak capability in income generation but drew The9's attention to the licensing fees and other costs for launching other licensed games.

• Drivers for The9's pricing evolution

The9's CEO Zhu Jun decided to adopt item-based models for some of its MMORPGs so as to expect new games to attract more game users. *SUN* was the first one to adopt this pricing strategy in May 2007. The9 adopted item-based pricing for the following reasons.

1) Heavily reliance on WoW

Given that over 90% of all game-related revenues were brought in by *WoW*, it is obvious that The9 relied heavily on *WoW*. It is evident that The9 would be vulnerable if it loses the license right of *WoW* or if The9 would meet any problems or issues with the WoW's popularity.

2) Other games: limited revenues generated and high expenses needed Compared with *WoW*'s contribution, the revenues brought from other games are too limited. Furthermore, The9 had to pay licensing fees and other costs to launch other licensed games. Furthermore, operating other new games means

<sup>&</sup>lt;sup>46</sup> Other games licensed from other companies include: Games, "Mystina Online" and "ZhiZun" licensed from online game developers in China, "Granado Espada" licensed from Hanbitsoft, Inc., a Korean online game developer, Guild Wars, a competitive online role-playing game from NCsoft Corporation in 2006.

that The9 has to invest huge resources to cope with the marketing and distribution challenges as well as technical challenges.

# Distribution and Promotion in the Market

The findings suggest that The9's 'Distribution and promotion' strategies in the market are very helpful for enhancing *WoW*'s market share percentage and consolidating *WoW*'s leader position. However, the impact of The9's 'Distribution and promotion' strategies upon Th9's market share ranking could never be more relevant than that of the factor of 'Product'.

Here is the illustration of *WoW*'s distribution by The9 in the Internet caf és. With more than 10 million players worldwide, half of them are in China. Game players that The9 targeted at for *WoW* are mainly in the eastern coastal, economically-developed cities. These game players are of a wide range of ages and different demographics.

- Direct marketing: Internet café owners and The9's marketing team staff are always available to help players learn WoW in the Internet cafés.
- Promotion strategy: The top one game content of *WoW* not only brings customers to the Internet caf és, but also promotes the upgrading of the hardware industry. The9 collaborates with Intel, the global leading innovative chip manufacturer and Blizzard, the developer for promoting Blizzard Entertainment's upcoming expansion pack, *WoW: The Burning Crusade.* ZYR was involved in the *WoW*'s marketing activities and stated the effort they made for *WoW*'s popularity in the Internet caf és.

We chose a number of Internet caf és who have high-quality computers as "The Burning Crusade" themed Internet caf és. After that, we held a series of nationwide gaming competitions for Chinese players. We did the WoW popularity in the Internet caf é so well that game players would regard an Internet Caf é fall short of the standard if this caf é's computer can not meet the demand of running WoW smoothly. In 2007, many Internet Caf és upgraded their computers because of this.(ZYR in the interview)

### Internal Technology

The findings indicate that The9's weak technology in new game development did not seem to affect its market share competitiveness. In comparison, its capability in game localization and

game service efficiency are strong drivers for *WoW*'s high income generation and also a driver to consolidate The9's market share ranking.

• Technology in game development

The9's R& D efforts are primarily focused on the localization of licensed games from foreign developers and the maintenance of websites. In addition, The9 aims to enhance its internal game development capabilities by developing its own MMORPG. The9 released its first self-made MMORPG titled *Joyful Journey West* (*JJW*) in September 2006. Unfortunately, little success was met. Many interviewees agree that WoW is specifically localized for the game players in the Internet caf és. MDC gave a detailed explanation to show how WoW was successfully localized and designed to satisfy the game players.

Instead of emphasizing on individual heroism, it underscores the team work and collaboration. Majority of the guild activities within the online games are at night, so lots game players who always know each other show up late in the Internet café. They enjoy exchanging ideas and playing together. (MDC in the interview)

WoW does not demand full concentration at all times, that is why some friends can play for a period of time and then go out to the nearest restaurant for dinner and or a chat. Its activities involved are so varied and some are violent and some are peaceful, which can meet the demand of different customers. Its unique content excellence is widely imitated by Chinese online game developers. Do you believe it or not? No games surpass its significance in the global game industry. (MDC in the interview)

- Technology in service efficiency
  - 1) Game localization

68 percent of interviewees implied that The9's strong technology in game localization has strong impact upon its market share competitiveness. The9 made lots of effective efforts to localize the text and voice elements of the game in simplified Chinese. The9 managed to issue expansion packs to different games so as "to create customized content and periodically have world events that are culturally tailored to appeal to Chinese gamers." In addition, The9 prepared in advance with a significant local server infrastructure.

2) Security measures

Game masters are available to respond to players' inquiries, initiate the bug reporting and removal process, as well as to identify, record and deal with players' inappropriate behavior such as cheating and fighting. Customers of the *WoW* game are required to buy an access code, or CD-Key, to play the game in China. CD-Key is used as a measure to reduce the use of cheating tools by *WoW* players. When finding a *WoW* player is using cheating tools, The9 would terminate that user's account and the user will have to purchase another CD-Key to activate his account to play *WoW* from the very beginning.

3) Membership management and payment system

The9 developed Pass9, an integrated membership management and payment system, to facilitate its distributors and customers. This system creates a profile to each customer which allows them to pay and use once they log in. Pass9 incorporates a variety of interactive activities, such as chat rooms and bulletin boards in which registered game players can communicate with each other via posting notes or inquiries and corresponding responses.

### Financial Capacity

It is evident to see that The9's strong financial capacity and high market ranking were largely due to the contribution of *WoW*. Prior to 2009, The9's financial strength was the solid premise for The9 to pay upfront fees for licensing other foreign games. The9's financial capacity fell dramatically when the licensing right of *WoW* was lost.

• The Big fortune generated by the operation of *WoW* 

Prior to the commercial launching of WoW in June 2005, the company's primary revenues were from MU Online, In Q4 2006, the revenues from MU Online started to decline. However, its popularity dropped in 2004. However, the availability to run licensed WoW changed the fate of The9.(CH in the interview)

The absolute significance of *WoW* on The9's revenues can be illustrated according to the following figures. The revenues grew 112% between 2005 and 2006 (see Figure 6.6) due to the launch of *WoW* in June of 2005 in China. Although The9 has a portfolio of over 10 titles, 99%, 92% and over 90% of the company's total revenues came from *WoW* in 2006, 2007 and 2008 (The9's annual financial report in 2007, 2008 and 2009).

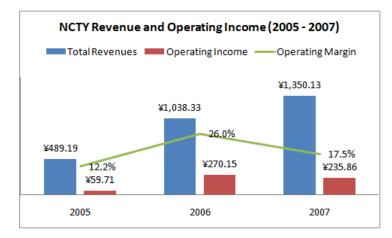


Figure 6.6 The9's Revenues and Operating Income 2005-2007 (Wiki Invest, 2008)

## 6.3.2 External Factors and The9's Market Share Competition

Based on the findings of The9's case study, the impacts of the external factors onThe9's market share competition are illustrated below.

## External Technology Trend

Similar to the Shanda case, the impact of 'External technology trend' was strong upon The9's market share ranking in its initial period. Like Chen Tianqiao, Zhu Jun noticed the trend of Internet development as well as the profitability that interactive entertainment can bring to the company and became the early mover of the Chinese online game industry. Over time, its impact became smaller and smaller.

### External Market Changes

• Domestic rival competition

It is evident that 'Domestic rival competition' had a negative impact upon The9's market share ranking, which drove The9 to adopt pricing innovation. The market share of The9 was ranked No.4 in the first quarter of 2007 due to the emergence of new rival Giant (see Figure 6.4). This was the first time that The9's market share

was out of the top 3 and was down to less than 10% of the total industry market share.

• Customer demand

Based on the findings of the case study of The9, *WoW*'s high revenue generation indicates that customer demand to the *WoW* operation was well satisfied. 'Customer demand' is the most important factor for consolidating and enhancing *WoW*'s market share ranking, as LM stated in the interview that,

Can you imagine that playing WoW in the Internet café is a fashion and necessity in China? ....Yes, it is true, especially to the youth in the eastern urban cities during the past few years. (LM in the interview)

In contrast, the game players showed their dissatisfaction with The9's other itembased games. In April 2006, The9 announced its acquisition of the licensing right of the Korean-made MMORPG *Guild War*. Just two years later, on April 1<sup>st</sup> of 2008, The9 announced to stop running *Guild War* in China for some operational reasons.

In Q4 2008, item-based games *SUN* and *GE* created net revenues of 3.4 million, representing a 29% decrease quarter over quarter, and a 40% decrease year over year (Q4 2008, The9's financial report). The9 admitted that the decrease of revenues of these two games was due to the game player attrition.

## 6.3.3 Government Regulations' Impact

It is notable that the Chinese government's strict censorship of the imported games has had a negative impact on *WoW*'s operation. However, it did not make any real impact on The9's market share ranking although the censorship progress did intervene in *WoW*'s operation sometimes.

The content of *WoW* has been under the close scrutiny by the Chinese government, especially for the launch of *WoW*'s expansion pack. The launch of *WoW*'s first expansion pack *The Burning Crusade* in 2007 aroused the strict Chinese censorship and got its launching approval in China six month later after the availability of the game's upgraded version in Western markets. In terms of the Chinese government's concern over "controversial" content and with the aim to pass the censorship, The9 made numerous modifications to *WoW*'s content according

to the requirement of GAPP. For example, the skeletons, regular characters in *WoW* were needed to grow flesh in the new version and the bones symbolizing dead characters were required to be changed to graves.

The censor result for *Wrath of the Lich King*, the second expansion pack of *WoW*, was even worse. In March 2009, *Wrath of the Lich King* was refused for launching because of too much depiction of skeletons. The Chinese government's censorship aim is clear: try to promote a healthy and harmonious online environment. The9 told GAPP in March 2008 that it would go into bankruptcy if it failed to sell the second expansion.

"Given the non-renewal of *WoW* license agreement, as well as considering the performance of other licensed games whose revenues are much lower than expected, the company's annual net income in 2009 was between 55% and 75% lower than that in 2008" (The9's 2009 Annual Report, 20-F).

### 6.3.4 Discussion of the The9 Case Study

In the following Table 6.4, the impacts of internal and external factors onThe9's market share competition are listed and assessed. Here is a brief analysis of the impact of each internal and external factor, the impact extent as well as the change of impact extent on The9's market share competition.

## Internal Factors

The findings of the The9's case study indicate that internal factor of 'Product' is the one that affects The9's market share competition most. The loss of *WoW*'s licensing right led The9's market share down to the bottom.

The impact of The9's 'Pricing innovation' upon its market share ranking is not as strong as in the Shanda case. The experience of The9 demonstrates that time-based pricing is not obsolete and it reveals that a game with item-based pricing is likely to fail if it cannot satisfy customer demand.

## **External Factors**

Although the external factor of 'Government regulation' is quite strict with the imported games and deterred the normal release of its updating pack, this did not have a very big negative impact upon The9's market share. Rather, it was The9's loss of its licensing right that led to the sharp decline of its market share.

The impact of the external factor 'Global rival competition' onThe9's market share competitiveness is still weak, because instead of relying on exporting games for the revenue generation, The9 still relies on the domestic game players to generate its revenues.

The impacts of other external factors on The9's market share competition are of little relevance or no relevance.

		The9
Internal	Product (self-developed games)	Irrelevant ±
Factors	Product (licensed games)	Most relevant $\rightarrow$ Negative
		$+++ \rightarrow -$
	Pricing	Negative
		-
	Distribution and promotion	Medium relevant
		++
	Organizational structure	Medium relevant/ Most relevant $\rightarrow$
		Negative
		++/+++→ -
	Internal technology in game	Relevant
	development	+
	Internal technology in service	Medium relevant
	efficiency	++
	Financial capacity	Medium relevant $\rightarrow$ Irrelevant
		++->±
External	External technology trend	Medium relevant→ Irrelevant
factors		$++ \rightarrow \pm$
	External market changes	Medium relevant
	in domestic rival competition	++
	External market changes	Irrelevant
	in global rival competition	<u>±</u>
	External market changes	Relevant $\rightarrow$ Most relevant
	in customer demand	++++
	Government regulations	Medium relevant $\rightarrow$ Negative
		++-→ -

Table 6.4 Impacts of Internal and External Factors on The9's Market Share Competition

*Note*: +++ Most relevant, ++ Medium relevant, + Relevant, ±Irrelevant, - Negative

## 6.4 Findings: Case study of Giant

The Giant Interactive Group (NYSE:GA) was founded in November 2004 with its original name of Shanghai Zhengtu Network Technology Co., Ltd, or Zhengtu. On June 11, 2007, Giant changed its name to the Giant Interactive Group Inc. Network. Compared with Shanda, NetEase and The9, Giant is a newcomer to the Chinese online game industry. In November 2007, due to the success of its only game *ZT Online*, Giant successfully publicly listed in the New York Stock Exchange (NYSE) under the symbol of GA.

## 6.4.1 Internal Factors and Giant's Market Share Competition

The case study findings of Giant reflect that Giant is a marketing-oriented company, which distinguishes itself from other Chinese online game companies. Its unique internal marketing strategy enabled Giant to enter the group of dominant Chinese online game company quickly. Giant is China's first company which can understand the need of the game players to the itembased pricing. It is also the first company which can actively design its game product according to the characteristics of item-based pricing. According to the findings, 'Product', 'Pricing' and internal 'Distribution and promotion' strategies are the three most relevant factors to influence Giant's market share competition. These will be analyzed in details below.

### **Organizational Structure**

It is found from the case study of Giant that the leadership of legendary Shi Yuzhu enabled Giant to be recognized and become listed in NYSE. The successful IPO in NYSE has a positive impact on Giant's market share competition. The measures taken by the Giant management team in 2008 and 2009, such as the investment in 51.com and restructure different departments all aimed to enlarge the user base and optimize the human resource management. However, their impact on Giant's market share competition is not yet known.

• Legend of Giant's CEO, Mr Shi Yuzhu

Mr. Shi Yuzhu is the founder, Chairman and CEO of Giant Interactive. It is not exaggerating to say that Shi has experienced more dramatic ups and downs than other Chinese businessmen. He was a billionaire ranked 8<sup>th</sup> in the list of richest people in the Chinese mainland by Forbes Magazine in1995; but then, he was in

deep trouble with liabilities of over RMB200 million (US\$29.2 million)<sup>47</sup> in 1997. However, he rebounded once more, rising to become 7<sup>th</sup> in the Forbes 2008 global top internet entrepreneurs list with an estimated wealth of US\$2.8 billion.

Shi Yuzhu was awarded a Master Degree in Computer Software in 1989. Four months later, as an expert in software, he earned his first RMB 1 million by selling his invention of Chinese operation software. In 1991, he established the company Giant Group. In 1994, the company's new healthcare product "Nao Huangjin" went for sale in the market and made a huge profit. However, later in 1996, due to problems in investment and management of the Giant building project, the Company plunged into financial difficulties. The construction project stopped, and public investors came to see Shi Yuzhu for repayment.

Shi Yuzhu promised to repay all investors. Facing the great suffering, Shi began to work for other companies. Three years after Giant's bankruptcy, with RMB 500 thousand he earned within 5 months, he called up a few trusted friends to set up a new company to begin his Nao Baijin healthcare product business. Nao Baijin soon became well-known throughout China; the soaring profit enabled Shi Yuzhu to pay back all the investors in the Giant Building project. In 2004, Yuzhu sold his production technology, assembly line and brand of Nao Baijin by RMB 1.2 billion. In November 2004, Zhengtu Network Company was founded in Shanghai and Shi Yuzhu began his entry into the Chinese online game industry.

Looking back at Shi's failures and successes, his previous colleague Mrs Liu concluded:

When he met his bankruptcy, about twenty of his former subordinates did not abandon him but followed him and helped him to gain today's success. Why? We just trust him. We saw the success that he created and we believe the success will come back again. His words can always inspire the young people with ambition. (LM in the interview)

<sup>&</sup>lt;sup>47</sup> The data is from: http://www.cognet.cn/shiyuzhu%27s%20Column/shiyuzhu\_jianli02\_eng.html, entitled: China Famous Private Entrepreneur ---Shi Yuzhu, May 2005, written by Gary

When asked how Shi could keep the team working stably in the hardest time during the interview, ZhZH explained the secret:

During the hardest time, the company could not provide employees with sufficient material profit, but we can feel Shi's hearty sincerity and we believe in the significance of the company's prospects. In one word, we are confident for the company's future.(ZhZH in the interview)

• Listed on NYSE

A unique feature in the development of the Chinese online game industry is that Giant and other main online game operators and developers are domestic private and not state-owned enterprises. The Chinese government's support to domestic enterprises enables the game companies to possess great room for market and capital operation (Cao& Downing 2008).

Giant's IPO and NYSE listing on November 1, 2007 created many milestones, as Giant was the largest IPO from a Chinese entrepreneurial company to go public in 2007 and the first Internet online game company from China to list on the NYSE. The successful IPO helped Giant to raise \$887 million<sup>48</sup>.

## • Big investment to 51.com

Giant announced on July 1<sup>st</sup> 2008 that it invested approximately US\$51 million for a 25% stake in Five One Network Development Co., Ltd (or 51.com), the largest independent social network service provider in China. "As of June 15 2008, the total number of registered users on 51.com was approximately 120 million, average daily page views were approximately 350 million, and average monthly page views were over 10 billion<sup>49</sup>." XYR told the author during the interview that,

The 51.com has strong operating capabilities and is famous for its good understanding of their customers. Our company [Giant] has been trying to find a way to combine community-building and our online game. 51.com has a strong user base and we have an excellent online game platform. Therefore, the investment in 51.com will let us benefit a lot. We are expecting to strengthen

<sup>&</sup>lt;sup>48</sup> The data is available from: http://www.nyse.com/press/1193912590376.html

<sup>&</sup>lt;sup>49</sup> The data is available from: http://www.prnasia.com/pr/08/07/08412011-1.html

user stickiness, and if possible, prolong the lifecycles of our games. We have such a good plan, do we? (XYR in the interview)

During the second quarter of 2009, Giant began to reorganize its R&D teams in terms of respective projects and tasks so as to inspire the creativity and entrepreneurship of the R&D talents. Efficiency has improved and the research staff are busy with testing new internally developed games.

### Products

The findings of the Giant case study indicate that 'Product' is the most important factor to influence Giant's market share competition. It is evident to see that the excellent operation of *ZT Online* brought Giant huge amount of revenues and enabled it to be the third largest Chinese online game company in terms of market share ranking in China in 2007.

Targeting the needs of diversified game players, Giant released different versions of *ZT* and another game Giant Online. In addition, by the second quarter of 2009, another eight online games are in Giant's pipeline and will be launched sequentially in the near future<sup>50</sup>. *ZT Online* is currently operated in mainland China by the company in Hong Kong, Macau, Taiwan, Malaysia and Singapore via a license to Lager Network. Giant also licensed VinaGame to operate *ZT Online* in Vietnam. In October 23, 2009, Giant granted a license to Astrum Nival, an online game operator and publisher in Russia, to operate *ZT Online* in Russia.

It is confirmed during the interviews that Giant's revenue generation is still heavily on the *ZT Online*, as YYW mentioned in the interview that,

We have a certain number of online games. However, to be honest, it seems we have not found a real cash cow as outstanding as ZT Online is. It is a problem if we only rely on ZT Online during the market share competition.(YYW in the interview)

## Pricing

Nearly all interviewees agreed that Giant was the first Chinese online game company to observe the limitation of time-based pricing and the strength of item-based pricing. With Giant's

<sup>&</sup>lt;sup>50</sup> The eight online games are: ZT Online Green Edition, King of Kings III, ZT Online II, Dragon Soul, The Golden Land, My Sweetie, XT Online, and Empire of Sports.

understanding of the pricing strategy differences, the effective application of pricing to meet customer needs, Giant successfully developed *ZT Online* and became the No.3 dominant online game company in terms of market share in 2007. Since 2008, Giant began to adopt the mixed pricing strategy for their game operation. By comparison, the diversified pricing application did not consolidate Giant's top ranking. Rather, it descended from No.3 to No.7 in the market share ranking. The findings from the interviews are illustrated below.

#### The Adoption of item-based pricing

ZhZH explained in the interview why they decided to adopt the item-based pricing.

The commonest complaints usually you heard from the online game players in 2006 were like these: 'How long will it take me to achieve the maximum level? Will it be over 8 months or even a year or ages?' The problem ahead of many players is that they were immersed in the game community which made them reluctant to leave the game. But they really have no time to fight for the time-consuming upgrading. ... (ZhZH in the interview)

He then changed to another topic after thinking,

Game players complained due to the short of time. Do you know who helped them to sort out the problem? ...No, it is not the game operators but the black market 'gold farmers'. They employed some workless game players to work day and night to harvest the gold or other items firstly. Then, they sold to players who have not enough time to play the games for upgrading. Horrible life to us because of the gold farmers! They will badly damage the online game industry. (ZhZH in the interview)

YYW identified another social phenomenon which drove them to develop itembased games.

Most parents and schools hate the online games because their children are addicted to the time-consuming online games, which distract the children from the studies. Therefore, why not correct our image with the adoption of itembased pricing? We tried and we made it work. The free-to-play model enables us to build quickly a large base of active players, providing us with a large number of potential customers to purchase our virtual products and services.(YYW in the interview)

Giant believes that its approach to sell virtual products and services is unique to MMO games in China and is helpful to create player loyalty and high average revenue per user (ARPU) for the core players. For instance, if a game player wants to build a virtual sword in the game, he or she has to buy raw materials (such as steel) that are virtually produced in Giant's games. Then, the player assembles following the completion of in-game tasks. This "build your own" virtual products and services feature allows players to make incremental purchases so as to enhance virtual products they already own. In addition, with the regular monitoring and the analysis of game players' in-game purchase and consumption behaviour, Giant keeps on developing innovative virtual products and services for satisfying the game players' tastes.

#### Mixed pricing adoption since 2008

The findings of the case study of Giant also suggests that Giant changed its itembase pricing strategy to a mixed pricing strategy (i.e. the combination of adopting item-based and time-based pricing) at the end of January 2008 with the release of a time-based pricing strategy for *ZT Online PTP* version. Furthermore, in July 23 2008, Giant released another ZT version, *ZT Online Classic Edition*. This version adopted the evolutionary pricing innovation. When playing *ZT Online Classic Edition*, ingame promotional activities are eliminated and 90 percent of in-game charging features (such as opening a treasure box) which are still available in current itembased *ZT Online* would disappear or be free in the *ZT Online Classic Edition*.

However, with the issue of the item-based *ZT Online Classic Edition* under the pricing evolution, the market share and the revenues of Giant kept declining for three quarters (see Table 6.5).

With reference to Giant's market share decline, interviewees showed their different opinions. 45 percent of interviewees attributed it to the entry of more powerful competitors, such as Sohu and Tencent. 52 percent of interviewees thought that low game quality is the big problem, which is reflected from ZhCM's comments.

The key problem is the game quality, I personally think. I can understand that Giant aimed to attract more game players with the issue of other editions of ZT Online. Two or three editions were issued during such a short period of time. How can it be so quick?! Can they guarantee the quality of product? No, I am afraid not. The reason is so simple. If you can not satisfy the game players, they will leave you. You will be replaced by others.(ZhCM in the interview)

 Table 6.5 Giant Market Share Dynamics in the Chinese Online Game Industry (2007Q3-2009Q2)

	Year	Year	08Q1	08Q2	08Q3	08Q4	09Q1	09Q2
	2006	2007						
Market share	5.2%	12.9%	10.1%	9.8%	10%	6.9%	6.6%	5.8%
Ranking	No.6	No.4	No.3	No.3	No.4	No.7	No.7	No.7

## Distribution and Promotion in the Market

The findings suggest that Giant's distribution strategy in Internet caf & may be distinguished from the marketing strategies adopted by other companies. Giant's effective 'Distribution and Promotion' strategies in Internet caf & had a very positive impact on Giant's quick market share enhancement. It should be noted that the impact of Giant's promotion activities upon the market share competition is unstable. When the promotion activities come to end, Giant's revenues will have a certain level of decline.

Shi Yuzhu is a businessman, who is good at applying marketing strategies. Shi's Nao Baijin, the health care product, generated huge sales through a massive nationwide marketing and sales team. Giant's flagship game ZT Online adopted the same marketing strategy. As MT commented,

We designed ZT Online as a 2D game and it has very low requirement to the computer's connection speed. That is to say, it can be played not only in major metropolitan areas but it can also be played in the medium and smaller sized cities in China as well. So, different a lot from the other online game publishers and operators, who primarily do their marketing through much online advertising and industry events like conferences, Shi Yuzhu established a huge distribution network on medium and smaller sized cities in China.(MT in the interview)

As of August 31, 2007, Giant's distribution network consisted of over 200 distributors and reached over 116,500 retail outlets which enabled GA to get more and more customers. Its marketing network consisted of over 250 liaison offices located throughout China<sup>51</sup>.

Internet caf és are the main locations to play online games in medium and small sized cities in China. According to the introduction of MT,

Our national marketing network entered Internet caf & with putting up posters of ZT Online on every corner, from the wall, the door handle, to the restroom. They even offered a ZT-Online-exclusive incentive to the Internet caf &. Those that signed up for this incentive would be well paid and they agreed to only operate ZT Online exclusively in the caf & during the incentive period. (MT in the interview)

The social marketing strategy was quite helpful in enlarging Giant's user base and made great contributions to Giant's market share competition. However, the number of people in Giant's marketing force was reduced in 2009. HH gave his explanation on this phenomenon,

One reason is Giant's distribution strategy in the Internet caf és is very easy to be copied. Currently, it is not a unique way any more because many companies used the same way as their marketing strategy already. So, it seems meaningless to keep on the marketing campaigns. (HH in the interview)

#### Internal Technology

The findings of the Giant case study further indicate that Giant's game development technology together with Shi Yuzhu's understanding in the needs of customers enabled Giant to develop *ZT Online*, which has been one of the most relevant factors in Giant's market share ranking.

• Technology in game development When talking about the design of *ZT Online*, SDD emphasized the important role of ShiYuzhu during the development of *ZT Online*.

Shi Yuzhu is an experienced game player. Can you imagine that he has always spent more than 10 hours, sometimes 15 hours each day in playing online games that different operators offered? While playing, he usually attended two

<sup>&</sup>lt;sup>51</sup> The data is from: http://seekingalpha.com/article/51987-giant-interactive-group-leading-position-in-a-growing-industry

*MSN chat groups. One is the community for players and the other for Giant's developers. (SDD in the interview)* 

The findings also show that there is uncertainty about Giant's R&D capability in the release of game expansion packs.

• Technology in service efficiency

The services and technology aspects went hand in hand in Phase I. Giant's server technology allows up to 40,000 players to simultaneously interact in the same shard, which provides game players a chance to interact with each other in the virtual world.

#### Financial Capacity

The findings of the Giant case study indicate that 'Product', especial the game of *ZT Online*, acts as one of the most relevant factors upon Giant's 'Financial capacity', which decides Giant's market share ranking. In November 2007, due to the sales created by the only game *ZT Online*, Giant publicly listed in the New York Stock Exchange (NYSE).

In turn, the strong financial capacity enabled Giant to release expansion packs to the existing games, license imported games or purchase games for enriching its product pipeline. Due to the time reason, we cannot get the conclusion whether the 8 new games in Giant's pipeline can generate enough revenues to strengthen Giant's financial capacity and also enhance its market share ranking. As four the *ZT Online* series, their revenue generation is still weak in comparison with the original *ZT Online*. HY explained the reason for releasing different ZT Editions in the interviews,

The launch of ZT Online Classic Edition aims to meet this demand of early players of ZT Online. In ZT Online Classic Edition, we eliminated all the promotional in-game activities and eliminated the treasure box." He added that "ZT Online Classic Edition became to perform steadily in 2009. ZT Green Edition aims at attracting lower spending and non-paying accounts, along with additional maps, skills, items, and other game play features. It will be operated concurrently and independently of the existing item-based ZT Online games. (HY in the interview)

As to the decline of Giant's market share in 08Q4, 09Q1 and 09Q2, he thought, "The decrease of marketing efforts caused the decline of the revenues."

Until June 30, 2009, Giant had cash and cash equivalent of \$73.71 million (RMB 503.44 million) (Giant's Second Quarter Financial Report, 2009).

## 6.4.2 External Factors and Giant's Market Share Competition

Except for the factor of 'Customer demand', the findings of the Giant case show the relatively weak impact of other external factors upon Giant's market share ranking.

#### External Technology Trend

The rise of broadband penetration and the internet connection speed create more opportunities for game players to try different types of games. However, compared with the impact of other internal and external factors, 'External technology' trend does not have a direct or important impact on Giant's market share competition.

### External Market Changes

The findings of the Case Giant indicate that 'Intensified domestic competition has had a negative impact on Giant's market share competition. Giant identifies the importance of good game products and talented individuals who have the capability to develop game games. Giant has released its Win@Giant plan with the aim to strengthen its R&D capability. Here is a demonstration of how Giant uses its strategy to attract talented people.

• Domestic rival competition - talent war

Most top game companies rely heavily on their only hit product. The gaps between companies are narrower than before. How to attract game players and solidify their customer base is very important. Here is Giant's strategy in talent attraction and maintenance.

1) Overall salary increase despite economic downturn

Giant announced in February 2009 that it planned to start an overall salary increase, in which the average increase rate of all employees was 14% and the highest was 30% <sup>52</sup>, especially to the R&D team. Since 2008, Giant has invested huge in the research and development sector.

<sup>&</sup>lt;sup>52</sup> The data is available from: http://www.chinatechnews.com/2009/02/23/8943-giant-announces-overall-salary-increase-despite-economic-downturn/

2) Giant's online game incubation program

Shi Yuzhu, Chairman and CEO of Giant Interactive announced in January 2009 that Giant would launch its online game incubation program named "Win@Giant" and it is open to teams who possess special expertise and innovative young talents in the Chinese online game industry. According to this plan, 20% of profit at most will be offered to a team if their games are successful. Win@Giant is a long-term strategy for attracting innovative talents to the company. With the win-win purpose, this plan is open to a team or individual talent in any of the areas of game design, project management, programming, and other specialties related to online games can choose a proper project and give their talents into full play after they join the program.

• Customer Demand

The findings show that 'Customer demand' is one of the most important factors affecting the market share ranking of Giant and other companies. Whether a company can succeed in market share competition depends on whether it has a game product which can satisfy the customer demand. If not, the company will have to face player attrition and the decline in its market share ranking.

## 6.4.3 Government Regulations' Impact

Based on the findings, Giant's good relation with the Government indicates that there is no negative impact of Government regulations on Giant's market share competition.

In 2005, GAPP advocated the development of an anti-fatigue system that limited playing time of online games; in 2006, a rating system for online games was considered. The Chinese government's highly-involved supervision forced the Chinese online game companies to scrutinize their strategies in product content and quality, pricing and marketing from time to time. Shi Yuzhu advocated the adoption of a rating system in the Chinese online game market. He emphasized the importance of a rating system for the protection of young adolescents. Giant stressed in public that their games are only suitable for adults and not for young people under 18 years old.

Additionally, gambling-like elements are being evaluated by the Chinese government and could result in significant changes to game play if they are stripped out. Obviously, investors fear that the removal of this functionality could make the game less compelling to players.

# 6.4.4 Discussion of the Giant Case Study

In the following Table 6.6, the impacts of internal and external factors on Giant's market share competition are listed and assessed. Here is a brief analysis of the impact of each internal and external factor, the impact extent as well as change of impact extent on Giant's market share competition.

		Giant		
Internal Factors	Product (self-developed games)	Medium relevant ++		
	Product (licensed games)	Irrelevant $\rightarrow$ ? $\pm \rightarrow$ ?		
	Pricing	Most relevant $\rightarrow$ Medium relevant +++ $\rightarrow$ ++		
	Distribution and promotion	Most relevant $\rightarrow$ Medium relevant +++ $\rightarrow$ ++		
	Organizational structure	Medium relevant /Most relevant ++/+++		
	Internal technology in game development	Medium relevant /Most relevant ++/+++		
	Internal technology in service efficiency	Most relevant $\rightarrow$ Medium relevant ++++ $\rightarrow$ ++		
	Financial capacity	Most relevant $\rightarrow$ Medium relevant +++ $\rightarrow$ ++		
External factors	External technology trend	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow \pm$		
	External market changes in domestic rival competition	Medium relevant ++		
	External market changes in global rival competition	Irrelevant ±		
	External market changes in Customer demand	Relevant $\rightarrow$ Most relevant + $\rightarrow$ +++		
	Government regulations	Relevant +		

#### Table 6.6: Impacts of Internal and External Factors on Giant's Market Share Competition

*Note*: +++ Most relevant, ++ Medium relevant, + Relevant, ± Irrelevant, - Negative

## **Internal Factors**

The findings of the Giant case study indicate that 'Product' and Giant's 'Marketing strategy' are the two factors that affect Giant's market share competition in its initial stage.

Over time, with the easy copying of Giant's social marketing network, the impact of the marketing-oriented strategy, i.e. the impact of 'Distribution and Promotion' on the market share ranking becomes weaker. By comparison, 'Customer demand' would become more and more influential to market share rankings of Giant and other online game providers.

The factor of 'Pricing' made an important impact upon Giant's market share ranking over time. However, the impact of 'Pricing' upon the market share became weaker according to Giant's recent experience.

## **External Factors**

Little or no conflict with the Chinese government means that the impact of the Chinese 'Government regulations' on Giant's market share competition is relatively weak.

The impact of the external factor 'Global rival competition' on Giant's market share competitiveness is still weak. Giant's game exporting strategy is still in its early stage, and it has to rely on the domestic game players to generate its revenues.

Except for the customer demand, the impacts of other external factors on Giant's market share competition are of little relevance or no relevance.

# 6.5 Findings: Case Study of Perfect World

Established in March 2004, Beijing-based Perfect World Co., Ltd. (NASDAQ: <u>PWRD</u>) is a leading online game developer and operator based in China. Perfect World was the only pureplay Chinese online game company listed on NASDAQ with running its own self-developed games on July 13, 2007. It is also the sole game operator that has adopted diversified pricing strategies to design different MMORPGs before their commercial launch. Besides, with the application of its unique distribution strategy, it is also a leader in exporting the majority of its game products abroad.

Mr. Chi Yufeng is the founder, chairman and CEO of PWRD<sup>53</sup>. He received his bachelor degree in chemistry in 1993 from Tsinghua University, the top university in the field of Science in China. Most of the technicians in PWRD graduated from Tsinghua University. Some young talented technicians in PWRD always regard Bell Labs as their example and object.

## 6.5.1 Internal Factors and PWRD's Market Share Competition

Based on the findings of the PWRD case study, the impacts of the internal factors on PWRD 's market share competition are illustrated below.

#### **Organizational Structure**

The findings of the PWRD case study indicate that its organizational structure has a relevant impact on its market share ranking because PWRD exports many of its games abroad. As a game licenser, its revenues from abroad have a direct impact on its market share ranking.

• Exclusive licensing to licensees abroad

PWRD is the pioneer in exporting the Chinese-made MMORPGs to other countries from China. PWRD authorizes most of its licensees exclusively in terms of operating, marketing, and offering customer services in their specific countries or territories. In return, licensees pay PWRD an initial upfront fee and recurring royalties which are primarily based on the amount of money charged from game players' accounts. The licensees have rights to set the price of virtual items and are also generally in charge of maintenance of the network infrastructure. PWRD offers technical support, especially game localization and upgrading.

<sup>&</sup>lt;sup>53</sup> In order to distinguish the MMORPG titled *Perfect World* with the company named Perfect World Ltd, the author refers to the company as PWRD and refers to the game as italic *Perfect World*.

PWRD has licensed a certain amount of its games to leading game operators in more than 60 countries and regions in Asia, Europe and South America. In April 2008, the establishment of the wholly-owned subsidiary in the United States facilitated the localization and operation of PWRD's games in North America.

Mr. Zhang Yijun from GAPP announced at the China Game Industry Annual Conference in January 2009 that China's online game export industry generated an export value of USD 70.74 million in the 2008. PWRD earned export revenues of USD 27.3 million (i.e. 38.6 percent of total export revenues in the Chinese online game market), ranking the company first among the 15 Chinese online game exporters<sup>54</sup>.

#### • US subsidiary: a different organizational model to adopt

The US-based Perfect World Entertainment., a wholly-owned subsidiary of PWRD, was established in the United States in April 2008. Instead of authorizing the selfdeveloped games to the local licensees, the North American subsidiary is responsible for operating PWRD's own game titles in local markets. This model shows that Perfect World began to challenge itself in international operations with the aim to have a deeper understanding of the local market demand through its subsidiary.

WTT explained the value of the US subsidiary establishment during the interview,

If we keep on using the old ways, that is, to license our games to local operators and share the profits with them, it will be quite easy for us to make money. However, if so, we will never be able to get an in-depth knowledge of the local market. You know, we are ambitious, and want to be a real international online game publisher in the long run.(WTT in the interview)

#### When asking for the cost of localization, ZhQ said,

It took us about around RMB10-20 million (US\$1.5-3 million) to develop a new game. If the game contents can appeal to the international users, the cost of a game localization (including translation and props amendment) only accounts for a small fraction of the total development cost. This is the reason why many

<sup>&</sup>lt;sup>54</sup> The data is available from: http://www.tradingmarkets.com/.site/news/Stock%20News/2410103/, entitled with Perfect World leads Chinese online game export market, SinoCast Daily Business Beat via COMTEX, July 8 2009.

developers began to focus on overseas markets.....Localization cost is not always a big problem, the failure to export games is always caused by the attrition of local customers. Why? They fail to realize the real localization due to the lack the understanding or misunderstanding of the local culture and the needs of local game players .(ZhQ in the interview)

## **Products**

The findings of the PWRD case study indicate the strength of developing diversifying game products, which has a positive effect on PWRD's market share ranking.

PWRD primarily develops online games based on proprietary game engines (i.e. its 3D game engine Angelica and its 2D game engine Raider) and game development platforms. LC from PWRD pointed out in the interview that,

Our strength in market share competition lies in our relevant R&D, extensive local knowledge and effective marketing strategies which enable us to release games that satisfy the preferences of different customer segments. In addition, our self-developed game engines and platform guarantee us to develop the games frequently and rapidly with low costs. (LC in the interview)

Since 2006, PWRD has launched 8 MMORPGs and one casual game with high development speed and top quality (see Table 6.7). By the time of its IPO in July 2007, PWRD was offering several products. It provided the first game *Perfect World* which is charged by the hour, while *Perfect World International* adopts the item-based pricing. PWRD's *Zhuxian Online* is based on a popular Chinese martial arts online novel, and Legend of Martial Arts (*or called: Wulin Waizhuan*), a "cartoony" MMORPG, is based on a TV kung-fu costume drama respectively. PWRD aims to create a multiple-product product line.

## Pricing

The findings of the PWRD case study clarifies that, unlike other dominant companies, PWRD did not change the original pricing strategy to any of its existing games when the game's revenues declined. The pricing setting of each MMORPG was decided carefully by PWRD before its commercial launch. The factors under consideration include its technological feature, price comparison with other related games and characteristics and needs of the game's game players. In terms of this, no MMORPG has resorted to the 'Pricing innovation' for consolidating or enhancing its market share ranking. Unlike other dominant rivals who have tended to resort

to 'Pricing innovation' when seeing a game's revenues declining, PWRD has not changed the original pricing strategy to any game which is now under PWRD's operation. In terms of this, the majority of interviewees come to the conclusion that for the PWRD case, the impact of 'Pricing innovation' on PWRD's market share competition is very weak or may have had no impact.

• Pricing Strategy

Unlike other Chinese online game operators who are active in their pricing model innovation, PWRD is the only game company to use diversified pricing strategies in the first year of its revenue generation (see Table 6.7). *Perfect World* is PWRD's only game that adopted a time-based pricing model. Eight months later, PWRD launched its second game *Legend of Martial Arts* through the item-based pricing model. Since then, all MMORPGs that were released by PRWD adopted the item-based pricing model. Till now, it has not adopted responding pricing evolution or revolution although it shows its intention to explore and innovate new business models for its MMORPGs to maximize the shareholders' profit maximization<sup>55</sup>.

Table 6.7 Launching Time and Pricing Model Adoption of PWRD Online Games

Launching time	Game name	Pricing model		
2006 January	3D MMORPG Perfect World	Time-based		
2006September	3D MMORPG Legend of Martial Arts	Item-based		
2006 November	3D MMORPG Perfect World II	Item-based (first exported game)		
2007 May	3D MMORPG Zhu Xian	Item-based		
2008 January	3D MMORPG Chi Bi	Item-based		
2008 October	3D MMORPG Pocketpet Journey West	Item-based		
2009 April	2.5 DMMORPG Battle of the Immortal	Item-based		
2009 August	2D MMORPG Dragon Excalibur	Item-based		
2008 March	3D Casual game Hot Dance Party	April 10, 2008, launching the "Zero		
		Point Plan (100% free) to Hot Dance		
		Party.		

What PWRD has done is make a pricing innovation to its sole casual online game, *Hot Dance Party*. On April 10, 2008, PWRD launched the "Zero Point Plan (100% free) to *Hot Dance Party*. It is not expected to be a driver of the revenue enhancement due to the characteristic of 100% free but it is used as a complementary

<sup>&</sup>lt;sup>55</sup> The data is available from: http://www.pwrd.com [Accessed Oct 2009]

element in PWRD's product pipeline and a way of attracting the causal game players. "It has become a medium-sized game in terms of its revenue contribution to PWRD" (Chi Yufeng, CEO of PWRD, Earnings Call 2008Q4).

When asked how they set prices to the virtual items according to their pricing strategy, WTT gave a detailed reply during the interview.

The price setting was decided when open beta testing period was approaching to the end. Usually, it was decided upon several elements, such as the prices of other comparable games, the game's technological feature and game players' market segment. Under the item-based model, players can play the basic functions of the game free of charge for as long as they want. Our revenues are from the sales of performance-enhancing in-game items. We determine the price of each in-game item (such as clothing, pets and accessories) before its introduction. The pricing of each item is always carefully compared with the price of similar items available in other online games, e.g. market price of the corresponding real-life. You know, we concern very much of maintaining a stable and reasonable price for our games and in-game items. (WTT in the interview)

• Market share position of PWRD

The revenues of the Chinese online game market in 2007 was about RMB 12.8 billion (i.e. \$1.6 billion), of which PWRD generated RMB 0.62 billion with a rank of No.8<sup>56</sup>. Table 6.8 shows that the market share rankings of PWRD in the Chinese online game market. PWRD's market share ranking has kept ascending with a higher growth rate than that of the whole Chinese market.

Table 6.8 Perfect World Market Share in the Chinese Online game Industry 2008Q1-
2009Q2 ( iResearch, 2008, 2009)

Perfect World Ltd	2008Q1	2008Q2	08Q3	08Q4	09Q1	09Q2
Market share percentage	6.5%	8%	9%	7.1%	7.1%	6.8%
Ranking in the Chinese online game industry	No.7	No.7	No.5	No.5	No.6	No.4

Distribution and Promotion in the Market

<sup>&</sup>lt;sup>56</sup> The data is available from: http://seekingalpha.com/article/57071-china-online-search-vs-mmo-game-market

The findings of the PWRD case study indicate that PWRD's methods of game distribution and promotion enlarged the games' user base and established effective communication between the PWRD and game players. Therefore, it can be concluded that PWRD's methods of game distribution and promotion have a positive impact on PWRD's market share competition.

Like other Chinese online game operators, PWRD distributes their physical and virtual pre-paid game cards through different distribution channels. The virtual cards are not only sold via PWRD's E-sale system, they are also available through the sales services through response phone, mobile and broadband services provided by telecommunication operators in around 30 cities in China.

#### • Effective marketing campaigns in China

PWRD spent enormous amount on marketing and sales. For instance, sales and marketing expenses increased by 42.8% (or RMB21.8 million), from RMB50.9 million in 1Q09 to RMB72.7 million (USD10.6 million) in 2Q09. This was largely due to an increase in advertising and promotional expenses associated with the launch of *Battle of the Immortals*.<sup>57</sup> Marketing campaigns consist primarily of activities for the promotion, advertisement and sponsorship of media events. For instance, Press Conference of Perfect Yifei 2005 was held in Beijing. Ms. Liu Yifei is a famous movie star. She dressed up as a character of "Perfect Angel" in the game and presented a charming Perfect Angel ahead of her fans. Another instance is the Ceremony for 300,000 Online Registrations of Perfect World in 2006. The big ceremony was held in Great Wall Hotel of Beijing. Over 300 VIP attendees including Mr. Kou Xiaowei, the vice officer of GAPP, attended this ceremony. This ceremony was reported by more than 100 media organizations.

#### • Distributions in the Internet caf és

Here, PWRD's game *Zhu Xian* is illustrated as an example. Selective distribution strategies are applied because PWRD targeted *Zhu Xian*'s customers at the youth in urban areas. Developed and operated by PWRD, the game content is based on the extremely popular novel that dominates the top ten most popular novels of Baidu<sup>58</sup>. Considering the popularity of this novel, lots of Internet caf & would like to be the *Zhu Xian- themed* Internet caf &.

<sup>&</sup>lt;sup>57</sup> The data is available from: http://www.prnasia.com/pr/09/08/09529711-1.html

<sup>&</sup>lt;sup>58</sup> Baidu, incorporated on January 18, 2000, is a Chinese search engine for websites, audio files, and images. Baidu offers 57 searching and community services. In December 2007 Baidu became the first Chinese company to be included in the NASDAQ-100 index

In September 2007, PWRD and Nestle jointly launched an advertising campaign in 23 provinces and regions across China, which brought the Internet caf és more new customers. Within a one-month period after its launch, the advertising campaign was available in thousands of supermarkets and shops across the country which has helped increase sales of Nescaf é nationwide. In return, a wide range of Nescaf é products now contain game top-up cards for *Zhu Xian Online*, integrating the two influential products of Nescaf é and *Perfect World*. In addition, lots of big parties are held in the Internet caf és which not only issue prizes to some game players but also create good communication between the game operator, game players and the Internet caf és.

#### Internal Technology

The findings suggest that PWRD's 'Internal technology in game development' and the 'Internal technology in game service' are the most relevant factors to affect on PWRD's market share ranking.

- Internal technology in game development
  - 1) The excellent R&D team

The success of creating diversified games, the development of PWRD's game engine and its game development platform are rooted in the possession of the talented professionals. The availability of experienced R&D staff is for PWRD's achievement. As ChY in charge of game development from PWRD remarked in the interview,

At the beginning of developing the game Perfect World, we met lots of problems. R&D team set up their aim as making classic native online game. During the 3-year period of development, it is strong spiritual support that guided all team members to conquer various difficulties before the launch of Perfect World. In 2006, we had more than 160 staff at that moment and 17% of whom got the degrees of Master or PhD. Each member possessed successful 3D online game development experience, especially several of them have participated in two native 3D computer games—Freedom and Glory, Brave General of Qin Dynasty. So we have confidence to say that our Perfect World can arrive at the top level of in-house3D games. (ChY in the interview) The experience of the R&D staff in 3D game development and the further recruitment of talented professionals from abroad in the field of programming, game design and art solidified the unique game development strength in PWRD.

The strength of PWRD is its ability to use its relevant R&D capabilities and leading technologies to offer a diversified portfolio of games in the 3D, 2.5D and 2D markets. The highly differentiated games can satisfy requirements from different segments of game players, which prompted PWRD's significant growth in the market share competition. In addition, by spending more time and resources on developing games and releasing larger expansion packs regularly, PWRD effectively lengthen the games' life span.

The game of *Perfect World International*, for instance, has a wide variety of features that help differentiate it from other MMORPGs. One of its main features is its character customization system. Game players can utilize an extensive toolset to create even every aspect of their characters. The level of detail is rich, enabling players to change the shape and sculpt their face to either imitate the celebrity they like, or even recreate themselves in-game.

Another example is *Dragon Excalibur*, the first 2D fantasy online game. It is developed by PWRD's Shanghai R&D team with the use of their own-developed Company's proprietary 2D game engine Raider. *Dragon Excalibur* displays a fantasy world where human beings, demons and gods meet in a simulated historical scene. Game players place themselves into a world where they can shuttle between different dynasties and they can try to alter the fate of history with their courage in the game. The innovative play modes bring game players a different game experience.

#### 2) Powerful game development platform

The game development platform developed by PWRD itself enables its game designers and graphic artists to quickly upgrade the game play, design and settings without being deterred by complex and technical computer programming problems. The platform advantage significantly shortens the cycles of PWRD's game development and facilitates it to quickly update game

content and features to satisfy game players' demand. Their game development platform builds in multiple-language capability, which makes the localization process more convenient in international markets.

Internal technology in service efficiency

In order to attract game players and keep their interest in the game, PWRD has weekly upgrading and two or three yearly updates for each game. Since owning the source code and the platform, PWRD can sort out account theft, hacking and cheating activities relatively quickly and effectively.

As to the technical services in the USA, HJ stated in the interview that

We usually provide the licensed game upgrading every three to six months. Our services are also involved in helping the licensees to solve technical problems such as how to prevent, detect and sort out hacking and cheating activities.(HJ in the interview)

## Financial Capacity

The findings of the PWRD case study indicate that PWRD's strength in game development and game operation attracted the investment of venture capital, which speeds up PWRD's public list. The listing in NASDAQ in turn enhanced PWRD's revenue generation and its market share ranking.

The second Chinese online game company invested by SAIF59
 In 2004, SAIF injected its initial investment of US\$40M to Shanda. 18 months later, the investment was increased to US\$550M, which means SAIF gained around 14 times of return.

Perfect World was chosen by SAIF for its second investment into the online game sector. On September 6, 2006, SAIF injected US\$8M to Perfect World so as to foster Perfect World to achieve its IPO. On July 26, 2007, Perfect World debuted on NASDAQ. Holding 84 million shares (around 35.85% in total capital stock) of

<sup>&</sup>lt;sup>59</sup> SAIF Partners is a leading Asian private equity firm headquartered in Hong Kong, with dedicated local offices in China and India. SAIF currently manages over US\$2 billion.

Perfect World before this listing, SAIF gained 50 times of return from US\$8M to US\$4B in 10 months, which broke SAIF's list of achievement it has made.

• Listed on NASDAQ

For the period from the establishment of March 2004 to December 31, 2005, Perfect World was in the process of developing its game engine, game development platform and its first MMORPG, Perfect World. Hence, they were at a loss and did not generate any revenues in 2004 and 2005. PRWD has grown significantly since the launching of its first MMORPG *Perfect World* in January 2006. The cash and cash equivalent till the second quarter of 2009 in PWRD is \$138.5 million (RMB 945.7 million).

## 6.5.2 External Factors and PWRD's Market Share Competition

Compared with the impact of other internal and external factors, 'External technology trend' doesn't have direct or important impact on PWRD's market share competition. However, it should be noted that as a game exporter, the global online game publishers would be a challenge to PWRD and would bring a negative impact on PWRD's revenue generation abroad and on PWRD's domestic revenue ranking. The relationship between foreign game players' needs and PWRD's revenue generation is reciprocal. If they enjoy the PWRD's games and would like to pay, their impact on PWRD's market share competition is positive. On the contrary, their impact on PWRD's market share competition would be negative if the foreign game players are not satisfied with PWRD's games and go for other game publishers' games.

## External Technology Trend

The rise of broadband penetration and the Internet connection speed create the game players more opportunities to try different types of games. On the other hand, it will make the customers' tastes more and more uncertain.

#### **External Market changes**

• Domestic rival competition

In order to avoid the talent exodus, in the 2<sup>nd</sup> Quarter 2008, R&D cost of PRWD increased by 30 percent year-on-year (PWRD's annual financial report, 2009).

• Global rival competition and customer demand abroad

The global economic recession which commenced in 2008 seemed did not seem to affect the online game industry too much. Rather, it is possible that unemployed people may choose to play relatively cheap online games and enjoy the relaxation and personal achievement which he or she failed to get from the real world.

Comments of the interviewees indicate that 'Global rival competition' has a relevant impact on the market share ranking of PWRD because the exporting revenues only account for a small number percentage of RPWD's total revenue generation. During the interviews, what the PWRD staff emphasized is the difficulty to "win the recognition and loyalty of gamers in overseas market". "Western game players require a game with particularly high quality." ZhK said in the interview.

We made a lot of preparations to adapt our products to overseas markets. Before we initiate a new game, we usually try to find internationally-accepted themes or topics, analyze what players in China and abroad both have in common, how we can win the favour of game players from different countries and regions and make related changes in the game design. For example, in order to make the games easily accepted by the overseas game players, we swamped the Chinese garments into Kimono-style in the Japan version. For the Southeast Asia version, characters are designed to have bamboo hats. (ZhK in the interview)

As to the difference between the Chinese online game market and the online game market in the western countries, JLS stressed,

It is rare or even impossible to see hundreds of thousands (or by millions) of game players playing a game concurrently in overseas market. Maybe it can only happen in China. However, the small number of concurrent players can create much higher average revenues per user (ARPU) than their Chinese counterparts. For instance, online gamers in North America usually spend US\$100-200 per month, while their Chinese counterparts spend RMB50-200 (US\$7.3-29.3).Here, I give you another example. Do you know that the number of game players of WoW in China is over 20% of WoW's total registered game players? However, how about their contribution? It accounts for only 6% of

WoW's global revenues. You can understand how attractive the overseas market although it is risky to explore it.(JLS in the interview)

## 6.5.3 Government Regulations' Impact

Given the external factors mentioned in previous cases, it seems that the Government regulations' and 'Technology development' have not brought any negative impacts on constant rising trend of PWRD's online game revenues (see Figure 6.6). The findings of PWRD case study suggest that, instead of regarding the Chinese government regulations as an intervention, PWRD established a good relationship (or guanxi) with the Chinese government. In November 2007, the Chinese governmental officials conducted a tour of PWRD. Mr Sun Shoushan, Deputy Administrator of GAPP, expressed his impression of PWRD's achievements, especially in overseas licensing markets and hoped that PRWD could be "a role model for promoting domestic online games to the World<sup>60</sup>.

## 6.5.4 Discussion of the PWRD Case Study

In the following Table 6.9, the impacts of internal and external factors on Giant's market share competition are listed and assessed. Here is a brief analysis of the impact of each internal and external factor, the impact extent as well as the change of impact extent on Giant's market share competition.

## Internal Factors

Unlike other dominant rivals who tend to resort to 'pricing innovation when seeing a game's revenues declining, PWRD has not changed the original pricing strategy of any game which is now under PWRD's operation. In terms of this, it can be concluded that for the PWRD case, the impact of 'Pricing innovation' on PWRD's market share competition is very weak or irrelevant.

#### **External Factors**

The findings of the Case PWRD indicate that factors that impact PWRD's market share competition most are 'Customer demand', 'Domestic rival competition' and 'Global rival competition'.

The good image of PWRD in the mind of the Chinese government means that the impact of the 'Government regulations' on PWRD's market share competition is weak as well. The impacts

<sup>&</sup>lt;sup>60</sup> The data is available from: The data is available from: http://www.reuters.com/article/pressRelease/idUS40648+30-v2007+PRN20071130?pageNumber=1&virtualBrandChannel=0

of other external factors on Giant's market share competition are of little relevance or no relevance.

		PWRD		
Internal	Product (self-developed	Medium relevant /Most relevant		
Factors	games)	++/+++		
	Product (licensed games)	Irrelevant		
		±		
	Pricing	Irrelevant		
		±		
	Distribution and promotion	Most relevant		
		+++		
	Organizational structure	Relevant/Medium relevant		
		+/++		
	Internal technology	Medium relevant /Most relevant		
	(in game development)	++/+++		
	Internal technology (in service	Medium relevant		
	efficiency)	++		
	Financial capacity	Medium relevant		
		++		
External	External technology trend	Medium relevant→ Irrelevant		
factors		++→±		
	External market changes in	Medium relevant		
	domestic rival competition	++		
	External market changes in	Relevant		
	global rival competition	+		
	External market changes in	Relevant $\rightarrow$ Most relevant		
	customer demand	+++++		
	Government regulations	Relevant / Irrelevant		
		$\pm/\pm$		

Table 6.9 Impacts of Internal and External Factors on PWRD's Market Share Competition

Note: +++ Most relevant, ++ Medium relevant, + Relevant, ± Irrelevant, - Negative

# 6.6 Summary

In this chapter, all the evidence for the five case studies have been presented. Data are collected from multiple sources, with qualitative interviews as the overriding principle. The incorporation of these principles into a case study investigation will increase its quality substantially (Yin 2003, p.83). At the end of each case study, all related data are converted on the same set of facts (i.e. a systematic category of internal and external factors) which facilitates the cross-case analysis in Chapter 7.

# Chapter 7 Cross-case Comparisons, Unexpected Themes and Revised Conceptual Framework

# 7.1 Introduction

This chapter has four sections. It begins with an illustration of how the initial template was revised and developed during the data collection. The following section is about the cross-case analysis, which compares the empirical findings that are derived from the five individual cases in Chapter 6. Two unexpected but interesting themes emerged during the analysis and interpretation of the cross-comparison. So, in the third section of Chapter 7, these two themes will be discussed. They are 'Talent Exodus' and 'Strategic Alliance Management'. The results of the cross case analyses, and the investigation results on talent exodus and strategic alliance management serve as the basis of the empirical findings and the answers to the research questions set out at the beginning of the thesis. Finally, the revised conceptual framework will be presented at the end of this chapter, which is based on the findings and insights gained throughout this study.

# 7.2 Revising the Template

King (2004, p.261) emphasized that "once you have your initial template, your task is to develop it until you feel it gives as good a representation as possible of the themes you have identified in the data". In terms of this, all relevant segments were coded with the application of the template on each interview transcript, and then modified the template according to various kinds of change requirement. In Figure 7.1 and Figure 7.2 four main types of modification were illustrated during the revision of the initial template.

## Deletion

In the initial template, the initially defined level-one code 'Case background history', two leveltwo codes of 'Individual company history' and 'Gold farmers', and one level-four code 'Situation of potential hit MMORPGs' were deleted at the end of the process of template construction simply because most interviewees believed them to have no relevance or limited relevance to a dominant online game company's market share competition and so there is no significance to keep these as separate codes. As CH commented in the interview, "Since the current competitions are too tough, some old renowned game companies were already disappeared and could not be remembered by game players. So, a company's splendid history only indicates its past and means nothing when discussing a company's market share competition (CH in the interview)

When discussing the gold farmers' impact on the dominant companies' market share competition, most interviewees suggested ignoring it. Firstly, they thought the threat of gold farmers was limited especially with the popularity of item-based pricing and the Chinese government' regulation restraint; secondly, as an external factor, gold farmers annoyed all the companies instead of targeting one specific company.

The theme of 'Situation of potential hit MMORPGs' was deleted after some interviews. FYC, JN, YD and other interviewees (See Appendix 7 and Section 7.2.1) emphasized that several factors would turn the potential hit MMORPGs into question marks, such as: game developers' confusion towards the Chinese government's policies, the uncertain customers' demand and employees' negative attitude (i.e. the lack of devotion in game development). In terms of this, it is impossible to estimate the possible revenues that the so-called hit MMOPRG(s) can bring to each company.

On the other hand, it very soon became apparent that the initial level-two code 'Company's 'organizational structure and related management' was an issue of wide relevance to the levelone code of 'Internal factor influences', and therefore the template was revised by deleting it from the initial template and included it as a level-two code under the first level-one code of 'Internal factor influences' (see each case study in Chapter 6).

# Insertion

"Where the researcher identifies an issue in the text of relevance to the research, but not covered by an existing code, it is necessary to add a new code. (King, 2004)" The most significant insertion in this analysis was the insertion of three sub-categories ('Strategic alliance management, 'Organizational structure changes' and 'Capability to handle talent exodus and attraction') under the level-two code of 'Companies' organizational structure', because over 70 percent of interviewees thought it important to state and compare certain companies' market share changes during and after their organizational structure transition (see each case study in Chapter 6). Also, based on much of the interviewees' discussion, two sub-categories 'Money reward' and 'Training' were added as the fourth level codes under 'Capability to handle talent

186

exodus and attraction' (see Section 7.4 and 7.5 in details). Also, 'Talent war' was added as the second level code under the first -level of 'Influences from external market changes'.

econd level code under the first -level of finituences from external market changes.
1. Case background history —
1.Individual company history —
2. Organizational structure♦
3. Game product category
1. revenue contribution of non-MMORPG
2. revenue contribution of MMORPG
1. Number and the age of the current hit MMORPG(s) $\blacklozenge$
2. Revenue contribution trend from hit MMORPG(s) $\blacklozenge$
3. Situation of potential hit MMORPG(s) —
2. Influences from internal factors
1.Pricing model innovation
1. Relationship between pricing model innovation and market share
competitiveness
2. Relationship between pricing model and revenue change
2. Financial capability
3. Internal - technology
1. Capability against private servers
2. Self game development
3. Capability in current game product updating
1.Hit game number and age
2.Hit game(s)' revenue contribution trend
3.Marketing Issues ▼
1. Game distribution and promotion in Internet caf $\bigstar$ $\checkmark$
2. Other marketing activities $\checkmark$
4.Influences from the external market changes
1.Private servers
2. Gold farmers —
3. Domestic rivals
4.Global rivals
5.Customer demand
5.Influences from Governmental regulations
1. Internet caf é administration
2.Anti-fatigue regulation
Figure 7.1 Processes of Constant Development towards the Initial Template

## Figure 7.1 Processes of Constant Development towards the Initial Template

*Note*: Deletion —; Scope change ♥; Higher-ordered classification change♦

In addition, interviewees talked a lot about the CEOs' roles in creating and sustaining each company's market share competition (see each case section in Chapter 6). Given that "organizational structure defines the formal relationship and use of people in organizations (p.7 Newstrom and Davis, 1997), I added the "Role of leadership" under the level-one code of 'Companies' organizational structure' and related management.

## **Changing Scope**

During the interviews, it can be seen that promotion, game distribution and other services were completed by the five targeted dominant companies themselves (see each case study in Chapter 6). Finding that the initial third level-one code 'Marketing Issues' was too broadly defined to be useful, I then reduced it in scope to a lower level-two code under 'Influences from internal factors'. Both of its initial sub-categories followed and were turned into two lower level-three codes.

## **Changing Higher-ordered Classification**

"The researcher may decide that a code initially classified as a sub-category of one higher order code would fit better as a sub-category of a different higher-order code (King 2004, p262)." This kind of modification was extensively done in developing the template in this study. For example, 'Company's organizational structure' was initially included as a level-two code under the initial level-one code of 'Case background history.' After dozens of interviews (see interview details of each case study in Chapter 6), the author decided to delete the code of 'Case background history', but removed the second-level code of 'Company's organizational structure' and applied as a second-level code under 'Influences from internal factors'. In addition, many interviewees were interested in analysing each company's hit game number, age and forecasting their revenue trends (see interview contents in each case study in Chapter 6). Therefore, two initial level-four codes (under the previous first level-one code) which had comprised revenue contributions of MMORPGs (including 'hit game number, age and revenue trends') were placed as fourth-level codes under the higher-order classification of 'Capability in current game product updating.' Also, the dominant companies' strength against private servers and related effectiveness were regarded as parameters by most interviewees to measure the impact of internal technology on each company's market share competition (see interview contents in each case study in Chapter 6). Hence, the initial level-two code of 'private servers' was also redefined again, as a third-level code under the level two code of 'Internal-technology'.

1.Pricin	g model innovation
	1. Relationship between pricing model innovation and market share
competitiveness	
	2. Relationship between pricing model and revenue change
2. Finar	ncial capability
3. Inter	nal - technology
	1. Capability against private servers
	2. Capability in game development
	3. Capability in current game product updating
	1.Hit game number and age
	2.Hit game(s)' revenue contribution trend
4. Mark	teting Issues
	1.Game distribution and promotion in Internet caf és
	2.Other service delivery activities
5. Com	panies' organizational structure
	1. Leadership 🕨
	2. Strategic alliance management ►
	3. Organizational structure changes (Spin-off, public list abroad, M&A )
	4.Capability to handle talent exodus and attraction <b>&gt;</b>
	1.Monetary reward ►
	2.Training ►
2 .Influences from	n external market changes
1. Taler	nt war ►
2. Dom	estic rivals
3. Glob	pal rivals
4. Custo	omer demand
3. Influences from	n Governmental regulations
1. Inter	net caf é administration
2.Anti-	fatigue regulation

## Figure 7.2 Revised Template for the Study of "Market Share Competition in the Chinese Online Game Market"

*Note*: Insertion  $\blacktriangleright$ 

## The 'Final' Template

One of the most difficult decisions to make when constructing an analytical template is where to stop the process of development (King, p.263). Although "re-coding could in theory go on indefinitely", given the constraints of time and resources, the template revision stopped when each code was thought to have its suitable location under the four types of modification mentioned above. Further, most of the interview transcripts were read through above three or four times. In order to get more confidence, two outside experts were invited (one of my interviewees Mr Huan Cheng and Dr Xiaosong Yang) to comment on the final template before finally stopping the modification.

# 7.3 Results of Cross Case Comparison

At the end of each case study in Chapter 6, the key results of analysis are listed into a matrix as a summary of the case study. In Table 7.1, the results of the five cases are put together, which serves as the basis for a cross case comparison.

Table 7.1 shows that the impacts of different internal factors and external factors upon each company's market share competition have many similarities within the five cases. As highlighted, the striking differences in impact lie in the internal factors of 'Product', 'Pricing', 'Organizational structure' and the external factors of 'Government regulations'. The case study results show that the external factor of Market Issues merely has a strong influence on PWRD due to its exporting business abroad.

## 7.3.1 Differences between the Impacts of 'Product'

As seen in Table 7.1, one of the striking differences in impact is the internal factor of 'Product'. This study suggests that all of the five targeted companies have recognized the decisiveness of possessing high-level core products with a long life span for a company's market share ranking. Companies would always give each newly-launched game product high expectations due to product differentiation. However, the majority of game products were found to be in the non-critical category for different reasons. This can explain why Shanda relies heavily on its 7-year-old *Mir II* and NetEase is dependent on its 5-year-old *FWWJ*. Similarly, The9 depends on *WoW*, and Giant on *ZT Online*. By comparison, the revenues of PWRD are from its game product portfolio and not highly dependent on one special game.

		Shanda	NetEase	The9	Giant	PWRD
Internal Factors	Product (self- developed games)	Medium relevant ++	Most relevant +++	Irrelevant ±	Medium relevant ++	Medium relevant /Most relevant ++/+++
	Product (licensed games)	Medium relevant/ Most relevant ++ / +++	Negative $\rightarrow$ ? - $\rightarrow$ ?	Most relevant $\rightarrow$ Negative +++ $\rightarrow$	Irrelevant $\rightarrow$ ? $\pm \rightarrow$ ?	Irrelevant ±
	Pricing	Most relevant +++	Irrelevant±	Negative -	Most relevant $\rightarrow$ Medium relevant $+++\rightarrow ++$	Irrelevant ±
	Distribution and promotion	Medium relevant ++	Medium relevant ++	Medium relevant ++	Most relevant $\rightarrow$ Medium relevant $+++\rightarrow ++$	Most relevant +++
	Organizational structure	Most relevant +++	Medium relevant $\rightarrow$ Negative ++ $\rightarrow$ -	Medium relevant/ Most relevant $\rightarrow$ Negative ++/+++ $\rightarrow$ -	Medium relevant /Most relevant ++/+++	Relevant/Me dium relevant +/++
	Internal technology (in game development)	Medium relevant/ Most relevant ++ / +++	Medium relevant/ Most relevant ++/+++	Relevant +	Medium relevant /Most relevant ++/+++	Medium relevant /Most relevant ++/+++
	Internal technology (in service efficiency)	Medium relevant ++	Medium relevant ++	Medium relevant ++	Most relevant $\rightarrow$ Medium relevant $+++\rightarrow ++$	Medium relevant ++
	Financial capacity	Most relevant +++	Most relevant +++	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow\pm$	$\begin{array}{ll} Most & relevant \\ \rightarrow & Medium \\ relevant \\ +++\rightarrow ++ \end{array}$	Medium relevant ++
External factors	External technology trend	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow\pm$	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow\pm$	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow \pm$	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow\pm$	Medium relevant $\rightarrow$ Irrelevant $++\rightarrow\pm$
	External market changes in domestic rival competition	Relevant +	Medium relevant ++	Medium relevant ++	Medium relevant ++	Medium relevant ++
	External market changes in global rival competition	Irrelevant ±	Irrelevant ±	Irrelevant ±	Irrelevant ±	Relevant +
	External market changes in customer demand	Relevant $\rightarrow$ Most relevant $+\rightarrow +++$	Relevant $\rightarrow$ Most relevant $+\rightarrow +++$	Relevant $\rightarrow$ Most relevant $+\rightarrow +++$	Relevant $\rightarrow$ Most relevant $+\rightarrow +++$	Relevant $\rightarrow$ Most relevant $+\rightarrow+++$
	Government regulations	$\begin{array}{l} \text{Medium} \\ \text{relevant} \rightarrow \end{array}$	Medium relevant	Medium relevant	Relevant +	Relevant / Irrelevant

Table 7.1 Key Analytical Summary from Five Case Studies

Relevant/Ir	→Negative	→Negative	+/±
relevant ++	++	++	
→+/ ±			

Note: +++ Most relevant, ++ Medium relevant, + Relevant, ±Irrelevant, - Negative

In light of the analyses presented above, each dominant company has a dependency on its next real hit game product. In terms of this, each company has taken different measures to search for the next hit product. It is not difficult to see that except for PWRD, Shanda, NetEase, The9 and Giant all have a dependency on the licensed games. They all try to combine self-developed games with licensed games for their product portfolio in an attempt to enhance the possibility of finding their next flagship game as early as possible. However, what distinguishes them is the extent of dependency as well as the different impacts upon their market share rankings.

Shanda has been heavily running the licensed games, which helped Shanda to start from scratch and obtain its current No.1 market share ranking. In comparison with Shanda's desired dependency on licensed games, The9's dependency on licensed games and that of NetEase have been less desirable. The9's poor results came from its failure of its relationship management with Blizzard. In comparison, NetEase's poor results are due to bureaucratic rivalry over game censorship control. Giant is still busy with the preparation of licensed games and there is a lack of evidence to forecast. Detailed analysis will be available in 7.3.3 and 7.3.4.

The cross case study shows that, PWRD is the only company to keep exploring its own R&D capabilities in in-house development and is active in expanding its markets out of Asian countries.

## Reasons for Seeking Hit Products via the Alliance Strategy

Interviewees showed their strong interest in the discussion of 'Why is a hit product so difficult to get?.' Based on the findings, the reasons are demonstrated to explain *why hit products are so rare and why dominant game companies in China have to resort to seek their hit products via the alliance strategy*.

• The conflict between profit motive and long period of game development

All game development teams agree that it usually takes over 3 to 5 years to finish developing a high-quality and durable game. However, given the fact that one single game can bring a company most of its revenues and the robust growth in the Chinese online game market, it is harder and harder for a company to ignore the profit motive

and concentrate on developing a game for over three years. JN's comments represent the ideas of majority of the interviewees.

Why they [dominant companies] cannot continue to release more games with the same [high level] quality? ...Two reasons. One is no previous passion. Before releasing the first game, lots of companies were always in debt. The pressure motivated them to work day and night with full devotion. However, when their hit product got the recognition, they got the ample payment, began to indulge in their new life and felt difficult to work hard as usual. The other reason is, they began to pursue the profit blindly instead of working steadily. Just like a manufacturer, one game and after another were released very quickly. However, they are all rubbish. (JN in the interview)

## • Threat from the decline of market share

Since 2006, the market shares of China's top three online games developers, Shanda, NetEase and Giant, began to decline, as more and more local companies with independently developed online game products have taken part in the market competition. More online game companies took the market share from the top three giants by the use of the success of only one or two online game products, resulting in a further decline in industry concentration. And as the company expands to other businesses such as home entertainment platform, recreational games will gradually become the main source of the company's game income. Other vendors such as NetEase, Kingsoft, and GuangTong also entered the competition. And those vendors with recreational games as their main business, such as QQ GameOnline, OurGame and 9you, all performed very well in 2005. Among them 9you's O2JAM has been at the top rank of China's games for a long time.

#### Customer demand uncertainties

Although MMORPG remains the market leader in China currently, the constant changes in game players' tastes always confuse the dominant game companies. As CH stated,

Customers are too difficult to understand. However, we feel that MMORPG is not tailored to needs of office people because they have not enough time to play MMORPG. Another trend we can sense is that game players adore less of 'team spirit, courage, and dignity', but change to "easy, free, and fun.. (CH in the interview)

• Technology uncertainties and strategy uncertainties

For Chinese online game companies, talents have long been a bottleneck. There are insufficient talents, to various degrees, in respect of planning, art design, R&D, and operation. And frequent job-hopping has been prevalent in this industry. But taking into consideration China's immature training and educational market, existence of incapable educational institutions, and the not so normative curriculum, it's hard to train a large number of qualified talents in a short time.

Burgeoning demand and inadequate high-quality game supply stem from the newness of the industry, which is in line with Porter's argument that, "the essential characteristic of an emerging industry from the viewpoint of formulating strategy is that there are no rules of the game" (2004, p.215 -216). The competitive problem in an emerging industry is that all the rules must be established such that the firm can cope and prosper under them. The absence of rules is both a risk and a source of opportunity; in any case it must be managed.

The current situation in the Chinese online game market echoes Porter's "uncertainty" conclusion in emerging industries' technology, strategy (ibid, p.217-218). Due to the technology uncertainty, incumbent industries are not certain about "What product configuration will ultimately prove to be the best? Which production technology will prove to be the most efficient?" So many uncertainties make the dominant companies more cautious and drive them to seek hope from the licensed games.

## Short time horizon

In many emerging industries the pressure to develop products to meet demand is so great that bottlenecks and problems are dealt with expediently rather than as a result of an analysis of future conditions (Porter, 2004, p.219). At the same time, industry conventions are often born out of short time horizons and pure chance. Confronted with the need for game differentiation, for example, one firm develops a game which appeals to the game players, and the other firms in the industry imitate for lack of a ready alternative. This explains why lots of Q-style online games are crowded in the

Chinese online game market. Another instance is the overrunning of "Three Kingdom (or: Sanguo)" games. The classic novel "Three Kingdom (or Sanguo)" is popular in China and even throughout Asia. Because of this, till the end of 2006, six "Three Kingdom (or Sanguo)" were in operation and another several "Three Kingdom (or Sanguo)" were under the development.

## 7.3.2 Differences between Impacts of 'Pricing Innovation'

According to Table 7.1, the impacts of 'Pricing innovation' on each company's market share competition are quite different. Namely, some impacts of pricing innovation are positive while some are negative. In the Chinajoy Conference<sup>61</sup> 2008, Giant's CEO Shi Yuzhu proposed that all companies in the Chinese online game industry should work together to identify a true business model (either called pricing model or revenue model) which suits the development of the specific Chinese online game industry. The largest scale of innovation throughout the Chinese online game industry is the pricing innovation which was led by Shanda at the end of 2005. All other incumbents responded to this sooner or later. Since 2006, the majority of online game companies pursued the pioneer of Shanda to adopt the item-based pricing strategy. However, Shi Yuzhu's proposal indicates that lots of problems still exist after the pricing innovation and most companies seemed to lose their direction after the pricing innovation.

As Table 7.1 shows, as the leader of pricing innovation, Shanda benefited most from the pricing innovation. The effective pricing innovation prolonged the life span of Shanda's two old flagship games and has enhanced Shanda's financial growth and consolidates Shanda's No.1 position. Giant is the other winner with the adoption of item-based pricing strategy. The deep understanding and full application of item-based pricing strategy enabled Giant to accumulate enough fortune with the operation its only game *ZT Online*. With this success, Giant gained a public listing on the NYSE.

It should be noted that in the second half of 2008, Shanda and Giant both re-adopted time-base pricing for their online games in an attempt to satisfy the demands of more game players. However, the efforts seemed not very influential.

As to the impact of pricing innovation on NetEase's competition, the impact seemed not strong enough. The motive for NetEase to adopt item-based pricing in early 2008 was due to the unsatisfactory performance of its new time-based game *Tianxia II* in the market. The reasons for

<sup>&</sup>lt;sup>61</sup> Chinajoy Conference is the most important online game industry conference in China, which is held annually.

the failure are complicated and it was hard to make improvements within a short period of time. Under this situation, adopting item-based pricing as a trial seemed the best option for this game. The late pricing innovation adopted by NetEase and The9 were not due to the obsoleteness of their time-based pricing strategy because their initial time-based flagship games are still relevant in terms of revenue generation. In this sense, it is concluded that NetEase and The9 have been less innovative and Shanda has been more innovative in pricing innovation. The real driver to inspire NetEase and The9 to utilize item-based pricing were the weak competitive strength of the rest of their games.

According to Netease's financial performance in 2008 and 2009 (see Section 6.2.1), *Tianxia II*'s capability of revenue generation is still limited even with the adoption of item-based pricing. Rather, with effective internal R&D support, Netease enabled its old *FWWJ* to outperform other game products with its competitiveness in 2009.

The9 was the first company to encounter a quick failure after adopting the item-based pricing strategy for its two newest games. Unfortunately, the two item-based games stopped running earlier than other time-based ones in The9's pipeline. The9's lesson indicates that item-based pricing is not the panacea as expected. The author has no intention to attribute the failure of these two games to the adoption of item-based pricing. Rather, the author wants to stress that other elements such as services, HR management capabilities and R&D capabilities are all critical for a game's successful operation.

PWRD is the company who adopted time-based pricing for its first game *Zhu Xian* and adopted item-based pricing for the rest of its games six months later. With regard to pricing adoption, Shanda, Netease and The9 tend to use pricing adoption as a supplementary way to prolong a game's life span when seeing a game become less popular during its operation. By comparison, as Giant did, PWRD matched a game's pricing with its design and customer expectation very well before the commercial launch. In this sense, together with the company's other strengths, PWRD is the only company that can understand the features of both pricing strategies before the game design and explore the different pricing strategy potentials in game operation.

#### 7.3.3 Differences between Impacts of 'Organizational Structure'

In the cases of Shanda, Giant and PWRD, the impacts of 'Organizational structure' on their market share competition are positive. In contrast, the impacts of 'Organizational structure' towards NetEase and The9 are negative, which created problems for them in embarrassment in

the late half of 2009. In principle, the relationship between the game developer and licensee should be characterized by a willingness and commitment to the alliance. The9's loss of the licensing right of WoW from Blizzard seemed mainly due to The9's failure in its relationship management. The commitment between The9 and Blizzard was negatively affected by The9's partnership with EA (i.e. the rival of Blizzard). The9 stressed again and again that its alliance with EA only aimed at exploiting new opportunities to enter sports games. Even so, The9 should realize that since EA became the stakeholder and relevant partner of The9, such commitment cannot easily be found in the relationship between The 9 and Blizzard as before. The final result that The9 has to accept is loss of a collaborative spirit and harmony between Blizzard and itself and the loss of over 90 percent of its previous revenue generation. Therefore, along with the above analysis, it is evident to see that the relationship between The9 and Blizzard is likely to break up because the collaboration is insufficient to satisfy Blizzard's goals of mutual benefits and fails to ensure a proper match between these two companies. The9's lesson reminds its industrial counterparts that, in order to ensure that future alliances remain profitable, a company must have the capability to benefit from all the time and resources that it spends.

## 7.3.4 Differences between Impacts of 'Government Regulations'

As seen in Table 7.1, the fourth main impact difference concerns the impact of Government regulations upon the market share competition. The table shows that the Chinese government's regulations brought negative impacts upon the market share growth of NetEase and The9, while its impacts towards the other three are irrelevant. Here, in terms of related findings collected, the author would like to explain why government regulations are needed in China firstly and then analyze their impacts on the dominant companies' market share competition.

#### The Need of Government Regulations

The findings found that the need of the governmental regulation can be discussed from the following two points.

• Expectations from society

The main features of emerging industries are: many newly established firms, lack of standards, technological uncertainty and erratic product quality. Video game defects, such as gambling and online marriage in some online games, have seriously affected the image and credibility of the entire industry or even have led to the social worry

and repulsion. This is why lots of parents and schools expect the government to sort out their problems.

• Expectations from the industry and game players

Together with its rapid development, the Chinese online gaming industry has encountered issues such as the loss of virtual assets and ID, the application of private servers, and the lack of standards. All the industrial incumbents and game players hope the government policies can help to create a well-regulated industry environment. According to research by the University of Manchester (Ivan, 2009), 80 - 85 percent of the gold farmers are in China, who can create annual income of \$ 200 million to \$1 billion<sup>62</sup>.

## Impacts on The9 and NetEase

• Impact on The9

The difficulty of The9 to pass Chinese government's censorship on WoW's expansion pack and the game players' dissatisfaction due to the late release of the expansion created problems for The9 (see Section 6.3.3).

• Impact on NetEase

As mentioned in Section 6.2.3, the negative impact of the Chinese government regulations on NetEase was triggered by the operating right transfer of WoW from the Th9 to NetEase.

The General Office of the Chinese Ministry of Culture (MoC) requires a reapplication of the regulatory approval and content revisions for a game when there is a change in the operation ownership. During MoC's censorship for the transfer of *WoW*'s Chinese operations from The9 to NetEase, *WoW*'s operation had to be suspended for two months. When NetEase got MoC's approval, GAPP stressed that *WoW*'s re-launch could not work without its input. Since then, NetEase's *WoW* operation became the focus of the power struggle between two different government groups.

In addition, GAPP announced in October 2009 that, in the online games market, the Chinese government would ban foreign investment in any domestic online games,

<sup>&</sup>lt;sup>62</sup> The data is written by Tom Ivan, June 2009, with the title of "Chinese Government Moves to OutlawGold Garming- report."

and no foreign online games would be allowed in China and there would be no funding for Chinese companies developing and supporting such games. In this sense, *WoW* could disappear from the Chinese market.

The new regulations specifically ban foreign investment in domestic online games, but this extends to joint ventures and cooperatives, and also means no foreign companies setting up a Chinese subsidiary to get around such rules. As TZN analyzed in the interview,

GAPP's announcement posed a major threat to the future of NetEase's WoW partnership with Blizzard. Moreover, it is a shock to many Western companies who aims to operate their games in China's robust online game market. GAPP's declaration makes it harder to understand how this will affect existing partnerships and foreign games on the Chinese market. (TZN in the interview)

NetEase ignored GAPP's approval and relaunched *WoW* on September 19, 2009. Targeting this, in early November 2009, GAPP required NetEase to stop collecting fees and suspend new account registration because *WoW* violated the regulation agreements. In terms of this, GAPP decided to return NetEase's application to operate in China.

The interviewees' comments were nearly the same when analyzing *WoW*'s relaunch in China, as WB remarked,

The lack of specific age ratings for MMORPGs in China makes the showing of bones or the undead a gray area. The two governmental departments are keen to stuggle for the online content controls. Lack of industrial standards makes NetEase the victim. (WB in the interview)

### Impacts on Shanda, Giant and PWRD

Findings indicate that the above-mentioned conflicts over online games are unlikely to have negative effects on Shanda, Giant and PWRD. Interviewees all believe that,

These three dominant companies and other emerging companies, such as Tencent and Sohu, have already been in compliance with the Governmental regulations. They can learn a good lesson from The9 and NetEase. (WTT in the interview)

## 7.3.5 Discussion

The result of the multiple case comparison shows that the five cases all adopted the item-based pricing strategy which was followed by the mixed pricing strategy during the past two years. However, the impacts of the same pricing innovation on each company's market share competition are quite different and erratic. Besides, the impacts of 'Product', 'Organizational structure' and 'Government regulations' also vary from company to company.

Porter (2008) points out that one feature of an emerging industry is that "No 'right' strategy has been clearly identified, different firms are groping with different approaches to product/market positioning, marketing, servicing, and so on, as well as betting on different product configurations or production technologies." This conclusion is verified by the result of multiple case analyses.

Each company has noticed that pricing is only a part of the marketing mix. Therefore, instead of look at pricing in isolation, each company has explored their own specific advantages for enhancing their competitiveness according to their own resources available. That is why Shanda emphasizes its platform strategy; while Giant stressed its marketing strategy in the two or three-tiered cities and PWRD insists on developing its in-house games with the application of its engines and keep on exporting games abroad.

It is noted that the negative impacts of 'Product', 'Organizational structure' and 'Government regulations' towards The9 and NetEase are all due to the involvement of *WoW*, the worldwide popular MMORPG. The above analysis suggests that there are tensions and goal conflicts that influence the market share competition of NetEase and The9 directly, as Porter points out that, "emerging industries often face delays and red tape in gaining recognition and approval by regulatory agencies" (2004, p.323).

Superficially, 'Government regulations' constrained the operations of imported games. In fact, based on the integration of interviews, the findings of this study suggest that these conflicts are caused by two deeper reasons: a lack of talented professionals who can offer the hit-products that they satisfy the customer demands and a lack of understanding of strategic alliance management from the perspective of the current online game incumbents.

Hence, sections of 7.4 and 7.5 will concentrate on discussing these two emerging themes: the talent exodus in the Chinese online game labour market from the viewpoint of human resource

management and the analysis of strategic alliance management based on the failure of Korean and Japanese licensed games in China. The purpose of the detailed discussion in Section 7.3 and Section 7.4, together with the case studies in Chapter 6 and Chapter 7, is to present all conclusions in this study.

## 7.4 Unexpected theme 1 – Talent Exodus

The findings of this study reveal that the majority of interviewees showed their strongest interest in talking about salary satisfaction, growth potential, and the opportunity for promotion when discussing the theme of the talent exodus. In addition, talents with different professional levels have different concerns with respect to this theme.

## 7.4.1 Reasons for Talent Exodus

### Junior Professionals

About 70 percent of the interviewees agree that offering higher salaries than competitor companies is the main effective way for a company to attract talented people. Some interviewees from the management teams admitted that lots of less experienced employees complained that salaries were lower than they expected. LX remarked during the interview that,

According to my own management experience, around 1/3 of less experienced employees aimed to gain some work experience from the current post and leave for another job with higher salaries in one or two years. (LX in the interview)

In addition, high work pressure, salary delay and lack of training are other reasons for the departure of junior professionals from medium or small companies. According to the Investigation of Chinese Online Game Professionals with Less than 3 Year Work Experience throughout China with the samples of over 1000 (Gao, 2007), <sup>63</sup>

- Only about 5 percent of samples are satisfied with their current salary and 10 percent of interviewees are very dissatisfied with their income level. 30 percent junior professionals in small companies always complained the delay of their salaries (ibid).
- Comparing with the low salary, more than half of junior professionals have to work overtime for about 10-20 hours weekly (ibid).

<sup>&</sup>lt;sup>63</sup> The data is available from: http://games.sina.com.cn/y/n/2007-01-09/1931182802.shtml, titled 'Current Situation of the junior R&D Professionals in China' (中国游戏开发业新人现状调查), written by Gao Yuan in Chinese.

• Less than 10 percent of samples think that their companies can offer systematic and effective training. 1/3 of junior professionals confess that they have never any training (ibid).

According to the figures above, employees' basic needs are not met in many companies. The failure to consider the motivation of people on time can explain the loss of the talents in medium-sized or small companies and may also explain why the top 10 companies occupy 93 percent of the market share in the Chinese online game industry in 2007.

## Mid-level Professionals

For the mid-level professionals, their satisfaction is not restricted to making more money. They are also concerned with non-financial rewards that satisfy their needs for job variety, achievement, responsibility and career development. As YYW explained,

My colleagues and I concern more in skill development. I even can give up a pay rise if I can get a valuable training or send me to co-develop a game abroad. Valuable experiences are most important to a game development staff.(YYW in the interview)

Many professionals realize the importance of avoiding a sense of stagnation. Therefore, they are keen to get systematic training to improve their knowledge and skills to cope with changes in the fast-growing industry. By comparison, WJ is relatively lucky.

I have worked in this medium-size company for 4 years. What attracts me to stay here is not the pay (other companies offered more). My employers and I have built mutual trust and they would help me rise fast and they talked about development opportunities and gave a very clear path to my career growth. I was sent to a Korean game company for extra training twice.(WJ in the interview)

## High-level Professionals

The lack of growth potential within a given company can frustrate high-level professionals. Limited opportunity for promotion, the challenge of handling more responsibilities and the dreamof being another "Chen Tianqiao, Ding Lei or Shi Yuzhu" motivate high-level professionals to try to establish their own businesses to realize their own ambitions. In contrast, the exodus of high-level Professionals is usually motivated by the expectation of having more freedom to organize their time and having more opportunities for creativity. They are keen to face the challenging job to realize self-fulfilment.

## 7.4.2 HR Problems in the Chinese Online Game Industry

Whether a company's HR team has sufficient capability to handle the talent exodus is important for a company. Given the findings collected, the author demonstrated some typical problems that interviewees emphasize during the interviews.

### Pay System in Need of Big Improvement

The pay system in China is unique and differs from those in western countries. In Mao's era, employee motivation was based on "serve the people" and the distribution principle was based on "the equality norm". Since late 1980s even China has joined The WTO, the basic wage is still based on the egalitarian culture although bonus has become the driving force. Hence, many scholars concluded that "Chinese workers are very sensitive and have low tolerance toward income gaps between individuals or between groups in the same companies (Shirk 1981; Easterby-Smith *et al*, 1995)." They think this as potentially disruptive in collective social systems that put group harmony and social adhesion as the top priority (Yu 1998; Cooke 2002; Taylor 2002). Many interviewees expressed their dissatisfaction with the constant increase in pay differentials during this study. It is also found that egalitarianism still remains characteristic in employees' attitude. Therefore, management teams should consider the questions, such as how to create transparent job evaluation policies; how to link them with the fair performance-based pay for employees' work motivation.

### Monetary Reward is Important but not One Size Fits All

The aim of offering the reward system within a company is to attract and retain the human resources the organization needs to achieve its objectives. Although levels of reward influence employees to decide whether to join a company or stay at a company, it would be wrong to assume that pay is the primary concern. Sometimes, money cannot satisfy the employee's psychological needs, such as achievement, recognition, responsibility, opportunities to acquire skills and career development. Sometimes, the non-financial rewards can have the same motivation effect. Some interviewees show their understanding of Xu Bo's departure from NetEase.

Of course, salary is absolutely not the problem. What drives him is the desire to pursue bigger challenges and self-ambition. It is just because he wants to create more space for his own growth potential.(GJY in the interview)

### Lack of Training in Talent Retention

Over 90 percent of interviewees agree that the training system is quite weak in the Chinese online game companies. One reason is the lack of concern of the HR department and the other reason is the lack of qualified trainers, especially in middle and small companies. As to the training in most Chinese online game companies, trainees rely heavily on experience of what happens at work. A certain number of Chinese companies regard training as time-consuming and worry that trainees would leave to look for another job in other companies when the training is over. The worries are not absolutely unreasonable. However, around 70 percent of interviewees agree that the worries can be weakened with the application of the following ideas, as CH suggested,

The training plan can put the needs of the company at the top priority, though the needs of individual employees could be satisfied indirectly. Before the training, the company should identify the deficiencies which could be remedied by training. Also, the training should allow employees to feel a sense of recognition.(CH in the interview)

80 percent of interviewees\_stressed that the training should be congruent with the achievement of corporate objectives. After being trained, employees are motivated to acquire new skills, particularly when rewards follow the acquisition and use of these skills. In addition, firms that provide training may consider adjusting their training plan so as to reduce the cost as much as possible.

### Lack of Motivation at Work

Nearly 50 percent of interviewees think that they are not well regarded or recognized. Weightman (2003) points out that at the basic contract level, the team leaders' or managers' work is to ensure that individual's motivation is sufficiently engaged. He further mentions that this requires the leader having the ability to listen well, give feedback and serve as a mentor to staff so as to enhance their satisfaction with the job. However, according to the survey, a certain percentage of team leaders or managers failed to fulfil their roles in supporting their staff. They lack the skills to look after the staff and motivate the staff within the work context.

## Other Factors for Talent Attraction and Retention

• Prejudice towards online game playing in the society

It should be noticed that excellent university graduates, skilled workers and technicians compete against each other for the posts in joint ventures and foreign firms (such as Intel, IBM and Sun etc in the IT field) while domestic private firms have to face the recruitment problems because graduates are unwilling to go to or stay in domestic private firms. The private online game companies find it difficult to establish a long-term employment relationship with the key talents. Many reasons can explain why graduates usually put private game companies as the last option, such as the imperfect payment system, less attractive employment package etc. Another main reason is from the negative attitudes of society. A number of parents complain that their children have wasted lots of time in the internet caf és, neglected their studies and spent all their lunch money on game-playing.

Some commentators blame online games for pornographic and violent content because they are regarded as the biggest threat to the children's growth, although many academic scholars confirm that there is no positive relation between juvenile delinquency and the online game playing. The first long-term research into online video game playing was conducted by the University of Illinois at Urbana-Champaign with Nanyang Technological University in Singapore. Contrary to pop-cultures, the results showed that, complete with FBI statistics, juvenile violent crime has decreased in the last 10 years as video game playing by young people has increased. That is to say, there is no high level of link between video game violence and aggressive behaviour in players (Jenkins 2005)<sup>64</sup>.

• Scarcity of professional management staff

Currently, most Chinese online game companies are private ones and still retain family control. Many Chinese online game companies, especially the ones who went public abroad, have professionalized their management systems and offered the top positions to the best available professionals. Even so, many management teams in the medium and small Chinese online game companies lack the skills to manage people.

<sup>&</sup>lt;sup>64</sup> The data is available from :http://www.gamasutra.com/php-bin/news\_index.php?story=6201.

In line with Wong and Law (1999), there is a great scarcity of high-quality managerial and professional staff in China. A certain amount of interviewees emphasize the importance of job recognition and they think that the fastest way to lose most talented staff is to let them do repetitive work without meaningful interaction. All of them point out the importance of listening to the employee's voice, treating employees with consideration and respect and offering employees a happy workplace for talent retention. LZM, a Vice President with years of management experience expressed in the interview that,

For companies' CEOs, in order to keep the staff engaged with their work, the essential ways to provide for career satisfaction are simply listening to your staff, providing recognition for jobs well done and creating opportunities for people to grow within their current position.(LZM in the interview)

It is necessary to figure out what the staff expect from their jobs, encourage the employees to tell you what goals they would like to achieve. Sometimes, ideas from junior professionals are less mature or native. Even so, the best way to help employees fit into the work is still to listen to them patiently and then help them to recognize and correct the limit of their opinions.

In summary, the leaders should play the following roles (Kretch, Crutchfield and Ballachey, 1962) in their organizations, such as, co-ordinator, planner, policy maker, expert in the technology or process of the organization, organization's external group representative, mediator to resolve conflicts and parent figure who can sort out unexpected.

## 7.5 Unexpected Theme 2 – Strategic Alliance Management

In early 2000s, many foreign game companies took their self-developed games to China for corporations by means of joint ventures. It is summarized that the prosperity and decline of foreign games in China in previous chapters due to the Chinese government's national protective policies etc. However, can it be said the failure of Korea-developed and Japan-developed games in China means that they have lost their competitive advantages. The truth is the opposite.

## 7.5.1 Have Foreign Online Games Lost their Competitive Advantages?

Online gaming sales in Japan totalled 112.1 billion yen in 2007(about 1.05 billion US dollars), up 110 per cent from 2006<sup>65</sup>. There are about 50 million registered online game accounts, which account for half of the total population in Japan. All these figures indicate that online games in Japan have strong appeal.

With direct sales totalling almost 1.8 trillion won (about 1.61 billion US dollars) in 2006 alone<sup>66</sup>, Korean online games have become Korea's 'flagship' products to enter the global IT market. ChH, a game designer who was involved in operating 2 Korea-developed games, agreed during the interview that,

We cannot say Korean games or Japan games are the losers. They are strongly appealed by their domestic game players. At the same time, Korea and Japan are taking the lead in the world online game industry. However, I really do not understand why their competitiveness disappeared in China. (ChH in the interview)

When talking about the importance of the similarity of national culture, HJ, a programmer in a top ten Chinese online game company and ZhM who is a marketing manager in a Beijing based game company, during the interviews pointed out that,

Japanese games and Korean ones did offer some games to China and opened our horizon. We cannot deny that their games are easier to let Chinese online game players due to the familiar background. However, this kind of similarity can't guarantee the success of foreign licensed games. (HJ in the interview)

The main reason for the strategic alliance failure is mainly because they do not understand the Chinese market and they were over-optimistic in their management control. They usually adopt their Japanese or Korean management idea can work and do not know how to operate their companies in China under the control of Chinese government policies? (ZhM in the interview)

<sup>&</sup>lt;sup>65</sup> The data is available from: http://www.varietyasiaonline.com/content/view/5274/53/

<sup>&</sup>lt;sup>66</sup> The data is available from: http://www.koreatimes.co.kr/www/news/biz/2008/08/234\_14687.html

## 7.5.2 Reasons for the Failure of Foreign Games' Operation in China

American management has been committed to total quality management (TQM). The top one core value advocated by TQM is the customer-driven focus (Luthans and Hodgetts, 1996), which means 'all methods, processes and procedures are focused on meeting or exceeding the expectations of both internal and external customers'. 80 percent of interviewees think that the lack of understanding or the misunderstanding of the Chinese online game market turned the foreign licensed games' competitive advantages into competitive advantages, which are embodied as follows.

### Technical Competence 1: Lack of Knowledge in Marketing and Customer Demand

JLS was involved in the operation of 5 Korean-developed games in China. He complained that,

The Korean side seldom concerns localization recommendation or always delay the localization or updating activities. Their reasons are always the same: 'The successful testing and operation of this game in Korea means it will be out of question in China as well.' However, they did not realize the differences between game players in Korea and China. (JLS in the interview)

• Population income difference

"One of the key differences between South Korea and China is income level." "China is still an emerging economy with annual urban income levels of \$1,300; whereas South Korea's annual income levels approximate \$16,000 (Caldwell, 2006)<sup>67</sup>." Although over 70 percent of these players have an average monthly income below RMB 2,000 (about \$ 300) in China and many of them are students and do not have any income at all. These people are the major consumers of the virtual swords and armours in online games in the Chinese online game market.

• Chinese online game player demand As ChH mentioned that,

68 per cent of game players are in the rural areas. Lack of sports, lack of social activities, lack of parks/opening places and low income are the roots that causes the people there choose Internet caf éas the only affordable way for them

<sup>&</sup>lt;sup>67</sup> The data is available from: http://uk.gamespot.com/news/6153903.html. Caldwell, P., July 12, 2006. Title: Report: Korean game market to surpass \$2 billion in 2007.

to get to know the outside. They can play days, even weeks. The fee for overnight stay is as low as to RMB 10-20 (around \$3 or less). (ChH in the interview)

• Broadband penetration difference

In 2007, South Korea led the cohort last year with a 90.8 per cent penetration rate, followed by Hong Kong and Taiwan at 83.8 per cent and 76.8 percent, respectively. China's percent penetration rate is only 14.5 percent.<sup>68</sup> The importance of getting localized for success was stressed by many western game developers or publishers who do try to enter the Chinese online game market. QX confirmed that,

Many foreign game companies recognize the importance of having a strong local partner, which can let western game developers or publishers to see the potential issues they had not considered before.(QX in the interview)

# Technical Competence 2: Lack of the Supply of Appropriate Products of High Quality

• Korean and Japanese games are over-complicated

Japanese games are well-known for their complex 3D graphics and plot design which a certain amount of Chinese game players find hard to learn, feel bored and then exit. Korean game players have the tendency to pursue the advanced technology application for the game design. LJS told the authors during the interview that,

Korean game developers are only keen to develop 3D games with the cost of over 4-5 million US dollars to approve they are in the top position of the global game industry.(LJS in the interview)

However, due to the lack of understanding of the Chinese online game players and their demand, the advanced foreign licensed games are not the appropriate products that the Chinese online gamer pool need. Low-education level game players think that the Japanese game operations are hard to learn. When they feel bored at the beginning, they will choose to exit this game and try another one.

• Computer configuration in China is lower for running advanced games

<sup>&</sup>lt;sup>68</sup>The data is available from: http://www.zdnetasia.com/news/communications/0,39044192,62043606,00.htm

Another reason is the low level of computer configuration in the rural internet caf és. Computers with low level of computer configuration imply that these computers can not run the advanced games smoothly.

On the contrary, domestic Giant Interactive Group Inc developed and operated its own item-based billing 2D game *ZT Online* which targeted gamers in middle or small cities and rural areas. The game was ranked as the most popular online game in China in 2006, helping Giant Interactive to raise US\$887 million in an initial public offering in November 2007.

### Technical Competence 3: Lack of the Adoption of Suitable Business Strategies

Van de Ven (2004) points out that "Change is produced through collective efforts in which no single actor has the power, authority, or legitimacy to produce changes alone." In contrast, lots of Chinese game development staff may be frustrated with low decision making of Japanese game developers and the tendency to try to use Japanese practices instead of adopting local management practices when operating the Japanese game in China.

8 out of 11 interviewees with work experience in joint ventures stressed two points when discussing the failure of joint ventures in the Chinese online game industry. WJ remarked:

Foreign managers are always confused by how to position themselves for growth in China. They feel it even harder to find good management people they can trust for their team in China and it is even complicated for the Internet business." He further concluded, "The main reason is that most Chinese founders come from technology background and their knowledge in marketing, company positioning and corporate culture is limited, which makes it difficult for them to understand each other.(WJ in the interview)

Another point was stressed by WB in the interview:

Lots of western and Korean executives liked to recruit people from Hong Kong and Taiwan into their management team. At last, they found that Ethnic Chinese management from Hong Kong and Taiwan did not work in the dynamics of the market in the mainland China. But when they found it, it was always very late. (WJ in the interview) All games will eventually become outdated to some extent. What once made you feel excited in the past maybe just dull repetition now. The challenge disappears and the sense of wonder in exploration and discovery is lost. The key is to make your game's life cycle last long enough to recover your costs and keep game players playing until you can issue an expansion pack to a newer version or your next big game release.

### Foreign Games' Decline and Chinese Government's Local Protection

- "Recognizing the rapid online game industry growth, the Chinese government commenced to protect its game industry through regulations, which the South Korean online game firms at a disadvantage," Daewoo Securities analyst Kim Chang-kwean said. Many foreign online game companies who established partnerships in China echoed Kim's opinions. They thought that Chinese government regulations forced them to establish partnerships to operate in China instead of to set up their own subsidiaries, which helped the Chinese online game firms to acquire technology easily but increased the management difficulties. Currently it becomes more difficult for Korean companies to perform better because of the rise of Chinese online game companies and the competitiveness of other foreign game companies.
- It takes substantially longer periods of time for foreign games to pass government censorship than domestic games. For instance, it took six months for NC-Sina's Lineage 2 to get government approval but only a couple of weeks for NetEase's Fantasy Westward Journey (Morgan Stanley 2005). Since 2005, only 10-20 foreignmade games have been allowed to enter the Chinese mainland market every year.
- China's Videogame Industry Regulatory Landscape stipulates that some 21 documents that need to be filed with three regulatory agencies and one additional association before a game can be launched in the region, which is sometimes called the "the biggest barrier to entry and the biggest cause of frustration for foreign game".
- The Chinese government policy decreases the enthusiasm of the Chinese online game companies to establish partnerships with foreign game companies actively.

- GAPP has been limiting the number of foreign game into the Chinese online game market. This lowers the interest of the domestic game companies to cooperate with foreign game companies.
- 2) According to Li, the founder of the top 10 Chinese online game company T2CN, fewer than three games from a foreign country can be successfully operated in China. This may explain why the Chinese online game companies hesitate in considering whether to establish a partnership with a foreign game company for operating its game in China, because they are not sure whether this foreign game can be popular in China or not.
- 3) High licensing fees and a larger share of revenues demanded by the foreign game companies push the Chinese online game companies to develop MMORPG with a Chinese cultural background.

## 7.5.3 Foreign Game Companies' Efforts

Gaps still exist between China and advanced countries, such as Japan, Korea, USA and certain European countries regarding the game design and operation skills. Facing the market decline in China, Korean and Japanese online game industry and related government officials have shown great concerns and are undertaking or have undertaken certain strategies for future global market share competition.

## **Reactions from Korea**

Korea's online games, as an example of a national project, developed rapidly with the support of Korean government since 1990s. Exploring the market share drop of Korean online games in China, the Korean embassy in China summarized three factors causing Korea's decline in November 2007: the failure to deal with piracy; the lack of good games; and the consideration of Chinese partners as subcontractors. In fact, Korean industries have made certain improvement for correcting the above three sources of their temporary failure. Details are as follows.

• Response to piracy issue

CDC Games, a pioneer of the item-based model for online game operation in China, announced in September 2007 that the company, together with several other

dominant online game developers, founded the Online Games Alliance against Piracy (OGAAP) to fight the piracy of online games in China.

It is estimated that piracy costs the global entertainment industry billions of dollars of lost revenues every year, and it is especially rampant in the Chinese market. Frequent piracy activities that occurred in China are usually defined by OGAAP as "operators who have set up private servers and macro programs that mimic some of the most popular online games". The goals of OGAAP are to provide a platform for industry participants and stakeholders to facilitate communication in marketing and R&D; propose industry-wide policies and conduct suggestions to relevant government bodies and lawmakers to enact anti-piracy legislation, actively promote public awareness of copyrighted online game usage, and pursue the continued shutdown of pirated online games.

Several Korean-based developers are active supporters for the fight against piracy. Besides, certain Korean game developers recognized that some games could offer game players qualified game content, while certain online games have numbers of bugs which do harm to the normal game running (Doole *et al*, 2005).

### • Response to game localization

Korean online game analysts stressed the importance of understanding the local culture and game players' changing tastes for their future survival. In fact, quality is measured by customers' own standards. Consequently, what one customer might consider being a quality product can be very different from what another segment or individual might want (Doole *et al*, 2005). Peter and Olson (2005) stated that "from a marketing strategy view, selection of the appropriate target market is paramount to developing successful marketing programmes. The first task is to analyze consumer-product relationships." They also added that marketing managers should consider customer differentiation and satisfaction. Currently, the Korean online game analysts and game developers recognized the need to diversify game contents into causal games instead of only providing multiplayer role playing products. However, when interviewing ChH , who worked in a Chinese-Korean online game joint ventures for 3 years, he thought it quite difficult for the Chinese game developers, even to say foreign game providers to fully understand the changing tastes of urban game

players who were born after 1990s and the numerous low-education and low-income rural game players.

• Attitude changes

Game Business Center of the Korea Game Industry Agency (KOGIA) is a Korean government agency aimed at promoting the country's games industry development abroad. The agency set up an office in Beijing in January in 2008 to promote cooperation between China and Korea. Its chief representative in China Park Yong Seok indicated that the market share drop did not mean the end of their involvement because "export and import levels are just one measure of involvement. We can also have other forms of cooperation in different areas<sup>69</sup>," Park said that "KOGIA will help to establish partnerships between Korean companies and Chinese universities to foster industry expertise."

## **Reactions from Japan**

In China, young people's online game addiction is attributed to some so-called unhealthy contents of foreign online games by the public. In fact, as a pioneer in the global modern game industry, Japan has fewer cases of game addiction because Japanese people are more likely to play home-bound console games than playing online games which progress in real time speed and take a long time to play. Some Japanese game companies, such as Capcom Co Ltd, expressed its desire to compete with Shanda and NetEase in China by "modifying some of bigname titles that were originally developed for consoles into online use, and launch them in big markets like South Korea and China" (Takenata, 2008).

Therefore, how to encourage the game industry to flourish and how to regulate and balance game contents and game genres is an issue which need mutual efforts from the Chinese game companies and their overseas operators and the Chinese government.

As to the GAPP's banning decision of different kinds of foreign investment into the Chinese online game industry, majority of the interviewees did not take it into serious. They are used to the constant changes of the governmental policies, as ChY stated,

China is open widely towards the whole world. GAPP's ridiculous policy cannot last long. They have to consider the pressures from our game players and from the

<sup>&</sup>lt;sup>69</sup> The data is available from: http://www.interfax.com/4/425325/news.aspx

international media. It is not the Tsing Dynasty any more. I feel so shamed to see our two governmental departments quarrel for the power control in public. I believe WoW will come back to the Chinese game players sooner or later....Foreign companies still have chances to go into the Chinese market. No reason to stop them. (ChY in the interview)

## 7.6 The Revised Conceptual Framework

With respect to the multiple case study findings, a revised conceptual framework will be presented in this section and the similarities and differences between the original framework (Figure 2.5) and the revised one (Figure 7.3) will be explained.

Comparing the revised and the original conceptual framework, a number of differences exist. Due to the limitation of previous research, the original conceptual framework failed to distinguish correlations between the internal factors. After the five cases analysis, the findings of this study demonstrate corresponding correlations explicitly in the revised conceptual framework. A dominant company's core capability lies in the internal factor of 'Product', which is under the influence of two external factors (i.e. 'Government regulations', 'Customer demand') and the influence of three internal factors (i.e. 'Organizational structure', 'Internal technology' and 'Financial capability'). Two sub-factors of the 'Organizational structure', namely, 'Strategic alliance management' and a company's change in its organizational structure (e.g. 'Spinoff, public list abroad and M&A') have a direct impact upon the product. No matter whether a company acts as a game licensee or licenses its game to another game provider, its 'Strategic alliance management capability' is quite influential in the related game product's operation.

In addition, 'Product' has established reciprocal relationships with three internal factors. They are: 'Financial capability', 'Pricing', and 'Organizational structure change' (such as, Spinoff, public list abroad and M&A).

The external factor of 'Market changes' has four sub-factors; and except for the sub-factor of 'Talent war', a company's pricing strategy is restrained by three of them (i.e. 'Customer demand', 'Domestic rivals' and 'Global rivals'), a company's pricing strategy which is restrained by three of them (i.e. 'Customer demand', 'Domestic rivals' and 'Global rivals').

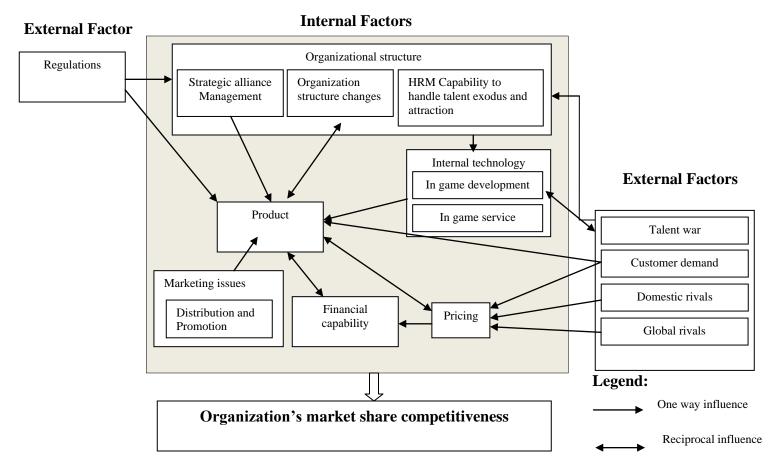


Figure 7.3 Revised Conceptual Framework –Impact of Internal and External Factors on a DCOG's Market Share Competition

By comparison, 'Product' is the factor which is affected by most internal factors and only one external factor of 'Governmental regulations'; while 'Pricing' is under the control by the internal factor of ' Product' and different external market factors.

It should be noted that some factors are added in the revised conceptual framework because they are found quite influential within dominant companies' market competitiveness. Namely, 'Talent war' is added in the external factor of 'Market changes' and 'Strategic alliance management', the organization's 'HRM Capacity to handle talent exodus and attraction' and 'Spinoff, public list abroad and M&A' are added as sub-factors of the internal factor of 'Organizational structure'.

As to the external technologies, their impact on the current dominant companies' market share competition is very weak, although the quick penetration of broadband has promoted the development of internet cafes and has brought huge revenues to the Chinese telecom industry. Shanda invested in mobile games via the acquisition of the mobile game developer Digital Red (mentioned in Case Shanda in Section 6.1), but its contribution has seldom been mentioned by Shanda since 2004. Other targeted companies have shown interest in trying to invest in mobile game development so as to enrich their pipelines, but none has expanded its market share by developing and launching a mobile hit product. In terms of the limited or irrelevant impacts of external technologies upon the dominant companies, the factor of 'External technology' presented in the original conceptual framework is deleted in the revised conceptual framework.

In addition, it is identified that, the correlations of certain pairs of factors are quite different in different cases. For example, the impact of 'Pricing innovation' upon the 'Financial capability' is most relevant in Case Shanda; while in the case of NetEase, the impact of 'Pricing innovation' on 'Financial capability' is very limited. In terms of the irregular nature of impact differences, the one-way arrow and two-way arrows are used to show the single influence and the reciprocal influences between different pairs of factors.

## 7.7 Summary

After the five-case comparison, four sets of impact differences from the other impact similarities (see Figure 7.4) were distinguished. Two themes of how to avoid talent exodus and how to enhance the strategic alliance management were discussed from the perspective of the Chinese online game companies. In the third section, besides presenting the revised conceptual

framework, the similarities and differences between the original and the revised conceptual frameworks were explained. Also, why some factors are added or deleted from the original framework were discussed. In the following chapter are the detailed recommendations to the Chinese government and the online game companies.

# **Chapter 8 Conclusions**

## 8.1 Introduction

This chapter summarizes the research outcomes firstly, and secondly evaluates the research findings of the study. The third section of this chapter discusses the theoretical contribution and practical contributions of this research. The fourth section deals with the limitations of the study and also makes some suggestions for future research, which is followed by the end words.

## 8.2 Overview of Findings

Whether dominant incumbents or non-dominant incumbents are more innovative is an important topic in management study. Some researchers (Henderson and Clark 1990, Christensen 1997) claim that dominant companies are less innovative than non-dominant ones due to the need to protect their existing business models. Other scholars argue against this assertion having produced conflicting evidence (Chandy and Tellis 2000; Sorescu, Chandy and Prabhu 2003). As regards the conflict in theory, Velu investigated the relationship between investment innovation and firm dominance in the context of a network market. The research focused on dealer banks in the US fixed income market (1995-2000). Finally, Velu concluded that dominant business firms are more innovative and that they commit to a particular investment in network markets within a competitive setting.

In connection with Velu's conclusion that "Dominant business firms are more innovative and they commit to a particular investment in network markets within a competitive setting", this thesis illustrates that the relationship between dominance and pricing innovation is irregular in the network market within a new competitive setting - the Chinese online game market in the years 2000-2009.

Instead of dealing with the pricing innovation study in isolation, this research integrates the study of the impact of internal and external factors on the companies' market share competition. The definition of external factors and internal factors is based on an understanding of a number of concepts put forward by various scholars. The empirical findings indicate that the internal factors of 'Product', 'Organizational structure' and the external factor of 'Government

regulations' have different and key impacts on each dominant company's market share competition.

With the application of five case studies, the implications of the findings suggest that the factors that restrain the development of the Chinese online game industry are:

- the unclear and overlapping Chinese government regulations as well as the uncertainties they have brought to the Chinese online game industry;
- the lack of understanding of alliance strategic management and human resource management from the perspective of the current online game incumbents.

The development of the Revised Conceptual Framework was discussed in Chapter 7. The evaluation of the research work is as below.

## **8.3 Critical Evaluation**

The revised conceptual framework provides an insight on the impacts of pricing and other factors upon a Chinese dominant online game company's market share competition. After the brief discussion of the derivation of the revised concept framework, this section will focus on the evaluation of qualitative data collection and related data analysis technique.

## 8.3.1 Derivation and Generalisability of the Revised Conceptual Framework

The theoretical study of online game pricing is fragmented in the literature and is still in its early stage. Contrary to the customers' interest, the specific needs or preferences of the online game companies for their market share maximization are seldom taken into account. The understanding of the limitations of current online game pricing have motivated this research to develop a holistic and integrated conceptual framework as a solution to the research problem. The revised framework illustrates the impacts generated by pricing and other factors on a dominant online game company's market share competition. It also depicts the relationships between factors. In the development of this revised conceptual framework, a number of theoretical concepts and themes, such as pricing application in the information economy, impact of government policies on the pricing application, strategic management in each company, leadership and organization behaviour have been carefully considered. The result of cross-case comparison and the emerged themes generated with the application of template analysis are the basis for the construction of the revised conceptual framework – *Impacts of Internal and external Factors on a DCGO's Market Share Competition*.

As to the framework's generalisability, the existing dominant online game companies have faced threats from new entrants, many of which have entered the industry with strong capabilities and an intention to gain market share. The framework has implications for the new entrants and existing Chinese online game incumbents to shape and adjust their strategies during market share competition.

Industries with network effects have a tendency to display 'winner-takes-all' outcomes, which implies that one firm will tend to dominate the market thereby 'locking out' other firms. This 'winner-takes-all' nature can not only be applied to the online game industry in China but to the online game industries in other countries as well, although there are lots of differences in culture, customer demands and the role of Government intervention. In terms of this, this framework can contribute to the pricing practice and management practice of online game companies out of China. It will especially apply to the online game markets in India, Vietnam and other countries in south-east Asia. One reason is that, as licensed games, many Chinese online games are very popular in these countries' online game markets due to successful localization. Another reason is that there are points of similarity between these countries and China, such as broadband penetration, the general economic situation and the incomes and tastes of online game players.

### **8.3.2 Justification for the Qualitative Data Collection**

Research based on case studies always makes credibility an issue since this approach is less quantitatively oriented and is therefore not as precise as quantitative studies. According to a widely held view, it is hard to guarantee validity in a qualitative study. However, the application of case studies is in harmony with Porter (2004, page xi) who states that, "the unique Harvard Business School challenges the use of case method to teach practitioners for revealing the gap between actual competition and the stylized models." As to the advantages of case studies over other methods in the study of industry competition, Porter confirmed that, "With rich industry and company knowledge from many case studies, I was able to offer a more sophisticated view of industry competition and bring some structure to the question of how a firm could outperform its rivals."

In light of the previous study, company staff members seldom participate in the study of online game pricing. However, it is evident that the study of pricing is in need of data collection from different levels of managers and R&D professionals in the online game companies. This study demonstrates that R&D staff, and management teams at different levels are critical in the process of customer value analysis, developing products catering to customer requirements,

making decisions in pricing innovations, marketing expanding and exploring different distribution, and cooperation channels.

Under the conditions of product uncertainty, policy uncertainty and different interest conflicts in the emerging online game industry, the significance of certain amounts of intangible resources cannot be easily identified and understood without the participation of the company staff in the pricing practice study. It can be concluded that the understanding of an organization's pricing setting, and changes and impacts, should be based on careful information collection which can span various function levels that closely interact in a company.

To establish a high level of validity, this research has been tried to utilise as many different sources as possible. The research targets the dominant companies in the Chinese online game market. The dominant position of these five public-listed companies (see Chapter 3) during the past 5-10 years gives credence to the validity of the sample collection. However, although 64 semi-constructed interviews were conducted, validity would have been greater if more interviews could have been carried within in the time available.

It should be noted that what qualitative research concerns most is the validity of interpretations, especially the evidence of interviews (King, 1994; Yin, 2003). In order to guarantee the verification of the transcripts, I kept scrutinizing the transcripts and tried not to miss important information. Since the majority of collected data are from the interviewees, they are the right people who can examine the credibility of results of this research. In terms of this, in order to ensure the accuracy of the interview transcripts, interview transcript drafts were shown to the interviewees for an accuracy assessment via Emails after the interviews. The positive feedback received from the interviewees supported the validity of the transcript content.

In addition, in order to increase the transparency of the data analysis, one interview transcript is given as an example in Appendix 6. Also, one code (Internal technology in game development) was retrieved from the transcript drafts and is used to show how the data was coded (see Appendix 7).

The combination of primary data collected via interviews with reliable secondary data contributes to the trustworthiness of this study.

# 8.3.3 Justification for the Application of Synchronous Online Audio and Video Interviewing

As Maylor and Blackmon (2005. p.46) point out, each research project has a certain degree of uncertainty, which can be called risk. The most serious risk is that the project will become untenable and the researcher will be prevented from achieving the stated objectives.

Considering that the risks cannot be ignored, the researcher tried to identify and estimate the risk associated with each risk element when deciding to adopt the qualitative approach at the beginning of this study. Then, mitigations came into action so as to avoid and reduce the effects of risks. Some risk elements, their possible effects and related mitigations for this study are discussed below.

## **Risk Threats**

• Risk threat from the venue setting

As mentioned in Chapter 5, online interviews enable big savings in costs because no travel budget is needed and interviews can be conducted at the interviewee's computer terminal, with no need to arrange a traditional venue. However, interview setting is still a possible risk element that cannot be ignored. For instance, if the interviewee is involved in the interview from a work-based computer, he or she may be unlikely to offer clear, deep or sharp answers for fear of being heard in public; but if the interviewee can sit in front of his own computer at home for the interview, such worries will be greatly reduced or eliminated totally. Apart from the venue setting priority, time arrangement priority was also given to the interviewees in order to maintain the primary data's reliability and credibility.

### Risk threat from the adoption of online type-based interview

Even though typing dominates the online interaction, the risk threats from online communication are well identified. The first threat is from the typing speed. Difficulties may arise for those with slower typing speeds, especially if the communication language is Chinese. Interviewees who devote too much time to typing will feel impatient or frustrated when they find that slow typing makes their expressions lag behind. A direct effect of this risk is the loss of valuable interview data. In order to keep the discussion moving on without unnecessary disruption, the researcher employed online face-to-face interviews for the data collection. In order to track the interview

content, the traditional tools of interviewing such as tapes and tape recorders were still applied during this research.

• Risk threat from the interviewee's distraction

Another identified risk threat of online type-based interview is the interviewee's distraction. Without distraction, interviewees usually can concentrate on the discussions in a traditional face-to-face interview. However, during the synchronous online type-based interview, the interviewees always fail to give their full attention because the interviewer cannot see what is happening to the interviewee, or what is showing on the interviewee's screen. When the interviewee keeps silent, the interviewer finds it difficult to judge whether the interviewee is thinking or is being distracted. In comparison, the adoption of synchronous online face-to face interview is the best way to mitigate this uncertainty, and enable the interviewee's silence. In addition, of different types of online interviews, synchronous online video and audio interviewing is the best way for interviewers to build rapport with the interviewees.

• Risk threat from the language translation of the original interview transcripts There were also some risks involved in the translation of the interview transcripts from Chinese into English, especially when the author was confused as to the exact translation of the interviewees' thoughts. When this tricky problem was encountered, other Chinese PhD students at Bournemouth University were informed and invited to participate during the transcript translation as 'gatekeepers'. Their fluency in Chinese and English helped to monitor the data translation. By listening to the taped record together and further discussion, transcribed notes with accurate translation and fewest misunderstandings were produced before the application of template analysis. In this respect, the risks associated with online face-to-face interviewing in Chinese.

### Contributions and Limitations to the Future Research

To date, little is known about the application of synchronous online audio and video interviewing in qualitative case studies. In terms of its contribution to the further development of online research method and practice and identifying the risk elements of online text-based interviews, this study has represented an effective trial. It has helped to develop online research methods in social science research by applying a mixed approach to data collection, i.e. a combination of synchronous online audio and video interviews with traditional methods of

taping. The significance of the application of this mixed approach is considerable since it increases the validity of data collection and provides a more complete understanding for future online interviewing practice in qualitative research.

In addition, this research revealed another significant advantage of synchronous online audio and video interviewing which has rarely been noticed by academic researchers. That is, by offering a choice of venue and time to the interviewees, it enables the interviewees to truly correspond to the real-world and so increases the validity of the data collected, even when the interviewer and the interviewee live in the same city. Further, both participants of the interviews can choose to observe the facial expressions of the other person very clearly by tuning the other's image in the computer to full screen size. The increasing availability of low-cost webcams and large digital computer screens should speed up the popularity of online interview application in the near future.

As to the limitations, it should be noted that the interview quality during this study was guaranteed because the interviewees are IT professionals or management staff working closely with IT professionals in a leading IT service industry - the online game industry. However, an online audio and video interview would be problematic or may even have to be aborted if the following points could not be satisfied:

- The chosen interviewees should have knowledge and skills in the free MSN software (or related software) installation and application.
- Both interview participants need to be able to access a high-speed and stable broadband internet connection; otherwise, the delay or block of the broadband internet traffic would weaken the quality of the online audio-video interview.

The development of the internet indicates that broadband has become responsible for the majority of internet connections in China and other countries during the past couple of years and according to the CNNIC (2009b), the price of a broadband connection is now affordable by the Chinese middle class. In terms of this, the use of audio-video interviews, group discussions and conferencing will continue to grow in technology-enhanced social science research.

### 8.3.4 Justification for Data Analysis Technique

As well as validity, reliability is emphasized in the study as reliability indicates the "applicability and trustworthiness of a research method's measurement." In this study,

reliability is ensured primarily by asking controlled questions to facilitate data comparison. To be more important, a number of key themes emerged with the use of template analysis approach for analyzing the qualitative data, which validates the viewpoint of King (2004) that "the greatest advantage of template analysis over other analytical approaches resides in its high flexibility which enables it can be modified for the needs of any study in a particular area".

## **8.4 Contributions for Practice**

"Being the lowest cost producer and being truly differentiated, commanding a price premium is rarely compatible. Becoming 'stuck' in the middle is a recipe for disaster (Porter 2004, p. XIV)." Therefore, local companies should formulate their own business strategies to ensure their business sustainability.

### 8.4.1 Implications for Policy Makers in the Chinese Government

Implications for the Chinese government are three-fold. Firstly, online game companies should be helped to attract talent; secondly, the industry should be helped to create a branded image with the public and dispel social fears; and thirdly, cooperation between firms should be facilitated to make significant contributions to different levels of innovation in the industry.

Some of the findings suggest that the rapid growth of the Korean online game industry can be attributed primarily to Korean government's policy of 'Adapted Military Service', which enhances their industrial image with the public and enables the Korean online game industry (even middle size companies) to retain talented staff for online game R&D.

Therefore, the Chinese government has suggested establishing a programme which would employ the policy of 'Adapted Military Service' and promote young Chinese talent. To achieve this end, it is important to understand what objectives young talented people want to pursue and what difficulties they may face.

Based on the findings, derived primarily from the five targeted online game companies ranging from a majority of high-tech companies, advanced R&D institutes, and renowned Chinese universities in Beijing and Shanghai, three problems are identified to confuse young R&D people usually and make them subject to stress in these two cities.

### **Problems Facing Well-educated Chinese Young People**

• Hukou discrimination

Hukou is a Chinese concept which was put forward in 1953 during the time of Chairman Mao. Since then, it has been adopted by the central government as a method of managing the urban population by imposing restrictions on ordinary Chinese citizens when they wish to change their permanent place of residence. In short, the Hukou system allows people to live, work and study in a specific city, but makes it difficult if they choose to live in another city.

China Youth Daily conducted a survey in April 2008 with a sample of 3000 new university graduates. The results show that 67.8 percent believe a Beijing Hukou or registered permanent residence is worth at least RMB 100,000 and 14.6 percent of them even thought a Beijing Hukou was worth RMB 200,000. <sup>70</sup>In addition, nearly 40 percent of the sample regarded the possession of a Beijing Hukou as providing a sense of security and belonging, and many social privileges. As MDC stated in the interview,

"With a Beijing Hukou, you have the right to buy affordable housing, apply for public funds for housing, and your child will have more opportunities to enter a good university with a relatively lower score." (MDC in the interview)

Many educational barriers have been created due to the existence of the discriminative Hukou policy. The Ministry of Education in China has been utilizing Hukou-based quotas to allocate available places for university admission which favour the residents of the big cities. According to Wang (2005, p.304), the quota allocated to Beijing is 25,000 (university places) with over 10 million permanent residents with Beijing Hukou; while the quota allocated to Shandong Province is 80,000 (university places) with over 10 million permanent residents with Shandong Hukou. Therefore, a Chinese student with a Beijing *Hukou* can be enrolled in the same university with a score nearly 150 points lower than a rural Chinese student in Shandong Province (on a test with a maximum score of 750).

## • Stress of home-buying

Many young Chinese have to struggle to buy affordable apartments in the big cities. According to government statistics, in 2009, the ratio of house price to income in Beijing is 27 to 1, five times the international average (*National Business Daily* 2009)<sup>71</sup>.

<sup>&</sup>lt;sup>70</sup> The data are available from: http://www.chinadaily.com.cn/china/2008-04/21/content\_6633125.htm. Title: Graduates prefer hukou over high salary, April 21, 2008.

<sup>&</sup>lt;sup>71</sup> The data is from: chinadaily.com.cn August 22, 2009, titled 27 Years' Income for a Home in Beijing.

The Chinese government launched a housing market innovation in the late 1990s, which ended the government allocation of homes to urban workers. As a result, strong demand and scarce land resources pushed up property prices, especially in big cities like Beijing and Shanghai.

According to Beijing Municipal Statistics Bureau, the average annual income for residents of the city in 2008 was RMB 44,715 (\$6,546), with urban apartments selling for an average of RMB 15,581 per square metre (Xinhua 2009)<sup>72</sup>. For a young couple, it can be very difficult to pay the deposit without parental help. Even if the deposit problem can be solved, an 80 square metre apartment (RMB 1.25 million excluding interest) would require half the salaries of two wage-earners for 30 years. "From mid-2004 to the start of 2006, land prices in the three or four first-tier cities and all of the second-tier cities went up from between 180% and 350%," said Anton Eilers, executive director at real estate group CBRE, China residential division (ibid). However, the idea of owning a home as a prerequisite for marriage is driving many young couples to separate when the dream becomes unattainable.

### • Unemployment problem

The number of Chinese college and university graduates per year has nearly tripled in the past five years; from 1.5 million in 2002 to 4.1 million in 2007; and 1.5 million graduates from 2008 are still out of work (Eimer 2009).

Suicide is now China's leading cause of death for those aged 20 to 35 (Clark 2008)<sup>73</sup>. The country now has to confront the fact that over 4 million graduates leave the universities (including colleges) annually, but only 1.6 million new college-level jobs are available.

### Pressure of looking after aging parents

In the 1970s, in order to control population growth, the Chinese government introduced the policy of limiting couples to one child. Young people who were born into one-child families have started to face the task of looking after two parents because the current pension system in China is still in its initial stage and over 70

<sup>&</sup>lt;sup>72</sup> The data is available from: http://www.chinadaily.com.cn/bizchina/2009-11/25/content\_9050756.htm, Home out of reach for many young Chinese .Xinhua, November, 25, 2009.

<sup>&</sup>lt;sup>73</sup> Clark, T., (2008), Plight of Little Emperors, The data is available from: http://www.psychologytoday.com/articles/200806/plight-the-little-emperors?page=2

percent of citizens are not covered (Tan 2009). The lack of public services for the elderly indicates that a large percent of the younger generation has to provide financial support and physical care to their elders.

In short, China is still a developing country with limited opportunities, leaving millions of young people, especially the well-educated ones, to face various sources of depression: the threat of unemployment, the problem of high property prices, and the pressure of looking after their elders.

### **Recommendations to the Chinese Government**

"Governments make employment and employee relation laws, set the standards of practices. They may also establish codes of practice and employment protection and encouragement policies (Pettinger 1999)." The Study from Beijing Suicide Research and Prevention Center shows that suicide among young people (aged 18-35) in China is a big social problem. "According to Guangdong Education Department survey 63 university students from 38 universities chose suicide as a way of escaping the fear in 2008 (He 2009)." Therefore, given the stress that Chinese youth has to deal with, the current status in the Chinese online game market, and lessons gained from the growth of the Korean online game industry, several recommendations to the Chinese government are suggested below. In order to guarantee the feasibility and efficiency of the recommendations, two points are fully considered. Firstly, the Chinese government should be encouraged to invest as little as possible or not at all. Secondly, the following recommendations for China should follow as closely as possible the 'Adapted Military Service' policy in Korea.

• Lift Hukou restrictions to attract talent to the game industry

The Chinese government should consider suspending the Hukou restrictions for "talented online game professionals" in Beijing, Shanghai or other big cities. Qualified online game professionals could get an exemption from Hukou restrictions if the online game professional can present a national or regional standard certificate which indicates that he or she has reached a sufficiently high level in online game R&D.

• Offer a favourable home-buying policy

"In October 2008, the Chinese government cut property deed-tax for first-time buyers from 1.5% to 1%; reduced first-time deposit from 30% to 20%; exempted

buyers and sellers from stamp duty; and decreased the lending rates for housing loans."<sup>74</sup> In view of this new policy, it is suggested that the Chinese government should allow game professionals to pay the relatively lower deposit and lift household registration requirements for non-local game professionals, with the aim of encouraging companies to employ more graduates in the Game industry.

### • Offer the low rate or zero rate of personal income tax

Understanding the pressure on Chinese youth and being aware of their hesitation to enter the game industry due to social fear, the Chinese government could consider offering the low or zero rate of personal income tax to game professionals as a way of attracting them.

• Regulate the industrial career and pay progression

A major challenge in HRM China is the need to change the ideology of reward, distribution and performance (Budhwar 2004). It is even more important in the new IT market in China. A big improvement in changing employees' behaviour patterns and motivating them at work will lead to a higher level of organizational congruence and creativity. The UK's NHS (National Health Service) pay system and its career and pay progression are recommended as a reference for HRM transformation in China.

The UK's NHS has several pay points within each pay band. Each employee's post is placed in the correct pay band as a result of job evaluation. Its pay system has been shown to have the following advantages: stimulating roles for NHS staff, fairer pay, and a more transparent system of rewards for staff that work extra hours and links that show a relationship between career and pay progression. The NHS has two new pay spines each with eight new pay bands. The NHS Knowledge and Skills Framework clearly express the knowledge and skills needed for each post and helps staff develop their skills to the full in a particular NHS post. It clarifies the links between education, development and career, and pay progression for all NHS staff. Two identified points, known as gateways, are available at each pay band. Each member of staff in the NHS Knowledge and Skills Framework will have a personal development plan which is designed to identify his or her development and how the plan will be supported.

<sup>&</sup>lt;sup>74</sup> The data is available from: http://www.whatsonxiamen.com/news\_msg.php?titleid=5046, titled Housing Supplies and Affordability in China's Major Cities, April 2009.

### • Create a good image of the industry in society

Eager to speed modernization, China's leaders have expressed a desire to see people increase their use of the Web to obtain knowledge and information. In 2007, President Hu Jintao emphasized, at a Politburo study session, that "the solution of the state-controlled press is not to deter development of the Web but to nurture a healthy online culture (Cody 2007)." Being the most beneficial internet service sector, Chinese online gaming should try to develop some online games to nurture a healthy online culture. In order to get support from the children's parents or older people, game developers could try to design some game content with contexts more familiar to mature people. The game should be easy to learn, be quick to operate and not time-consuming. In addition, it would be advantageous if some games could be connected with school teaching plans. In the UK, some primary school teachers encourage students to enhance their literacy and numeracy skills by playing certain games. For example, the site (http://www.ictgames.com/) provides educational ICT activities combined closely with the English National Curriculum, targeted at primary school teachers and parents of children aged 5-11. In addition, the Korean Government set a notable example with the establishment of the Game Rating Board whose main task is to monitor and rate games. With the power to decide whether games should be available in the market or not, the Korean Game Rating Board is trusted because it protects the public from such negative influences as illegal gambling, excessive violence and pornography.

In contrast, a proposed release of the online game rating classification has been delayed for a long time in China although a plan was scheduled a couple of years ago. It should be noted that China is a developing country and lots of industries, even the motion picture industry, still lack a ratings system or other industrial policy to regulate them. The first film rating system of China was expected to come out in 2005 as a part of the Motion Picture Industry Promotion Law (Zhu, 2004). However, it did not pass the censorship of National People's Congress. Therefore, it is suggested that policy makers in the Chinese government should establish a rating system similar to the rating policies issued by the Korean Game Rating Board and the ESRB rating policy. The ESRB's rating policy is assigned by the USA's Entertainment Software Rating Board, a self-regulatory industrial committee. It aims to help consumers in making decisions about a game's content and suitability and ensures responsible online privacy principles for video games and other

231

entertainment software in the United States and Canada (ESRB, 2009)<sup>75</sup>. In principle, the earlier the game rating system is released, the earlier social fears will disappear and the earlier the online game industry's positive image will be established.

#### • Face up to and not prohibit threats from foreign online game rivals

Although its legal system is still under development after China's WTO entry in 2001, there are a number of issues under the control of the government. GAPP's new policy in terms of banning any level of cooperation between foreign and Chinese game companies is a good example. This phenomenon can be explained by the statement of the OECD (2005, p.26), which stressed that, "The roles of the state, governing tools, relations between levels of government require further reform since the application of laws and regulations is not always systematic, sometimes bias by corrupt arrangements or reflecting local balance of interest."

Bias from the Chinese government revoked the principle of the WTO's cooperation principle. Even so, it is evident that the development of the Chinese online game industry was closely linked with different levels of cooperation between Chinese online game companies and foreign game companies, especially those from Korea and Japan in the early 2000s. Moreover, in order to maintain a harmonious and fair environment in global cooperation and competition, the recommendation to the Chinese government ministries is to regulate clear jurisdiction rights between different Chinese governmental ministries. Overlapping, vague and inconsistent regulations are some of the main restrictions on the growth of the Chinese online game industry. As many interviewees stressed, what they feel worried about are the uncertainties in the interpretation and implementation of online game regulations. What they call for is "clear rules which say what is allowed and what is not allowed." The simple fact is that no company wants to spend millions of dollars and a great deal of time in developing a game only to eventually discover that their newly-developed game is to be killed by unclear laws.

## 8.4.2 Implications for Chinese Online Game Companies

The9's lesson reminds other dominant firms that they should not feel complacent even when they have operated a game very successfully. Moreover, without capability in strategic alliance

<sup>&</sup>lt;sup>75</sup> The data is available from: http://www.esrb.org/ratings/faq.jsp

management, human resource management and game operation, dominant firms can very quickly lose their position as market leaders.

In addition, in order for the Chinese online game industry to have a successful future, it is very important for different levels of domestic online game companies to make an effort to create a fresh industry image so as to get recognition and support from society, especially the parents of teenagers. Related recommendations are as follows.

### Manage Employees More Effectively

In order to create and sustain a company's competitiveness, its management team should be able to manage employees more effectively. The following points clarify how to develop the leadership skills for effective employee management.

Advanced HRM strategies needed

Many domestic private Chinese online game firms are very young. They lack systematic and comprehensive HR strategies which can provide skill training and career structure. Many elements in their HR systems have become outmoded and incompatible with recent development in the modern economy. Therefore, an advanced and professional HRM system is greatly needed because their current HR system is the main restraint for most current Chinese online game firms to attract, retain talents and motivate existing employees.

### • Core value is the group not individual talent

Adir (1982) pointed out that working in groups has three requirements: the task has to be accomplished jointly; the social cohesion of the group has to be maintained; and the individual needs of the team members must be recognised. His methods have been adopted in a wide variety of organizations. Therefore, Chinese online game companies, especially the dominant ones, are recommended to check whether their tasks are shared with all group members. It should be emphasised that the core value of a company is not based on one talented person but on the group. In addition, if the individual is discontented, he or she will not give his or her best performance. Therefore, in order to function effectively, mutual trust, honesty, openness and understanding must be present in a company.

### • Understanding individual differences

A leader or manager of a team or an organization should try to understand individual differences, and discover something about the personality of the employees.

Therefore, different training plans may be offered to different people to try to ensure their needs for advancement and achievement. In addition, there are individual differences as regards what to learn and how to learn effectively. Hence, the organization's HR team should provide sufficient variety of learning packages to suit different employees. The more team leaders understand the employees' learning style, the more the employees can learn skills effectively.

### • Establishing effective reward regulations

The nature of the achievement and whether it is achieved by an individual or a group must be carefully considered so as to motivate each employee's contribution at work. Flexible reward policies are recommended so that people can work in the way that best suits them.

### Helping Staff to deal with stress

Many interviewees claim to be more stressed now than ever. The lack of control over what to do and how to do it appears to be a very stressful experience. More and more people feel it is hard to make clear distinctions between work and home. Although there are lots of ideas and suggestions about how to manage work-related stress, there is no firm evidence as to what is the best practice. As an HR staff or team leader, it is not helpful if you merely attempt to calm someone down by saying. "The stress will go away and it will no longer be a problem." Instead, what you are suggested to do is to help the stressed person to work out what he or she is worried about in a specific situation and to understand the underlying problem causing the stress. After that, you can help him or her to obtain personal or social support, and gradually reduce or deal with the pressure. This is better than merely saying: "Don't worry too much. You'll be fine."

Mentoring is a useful form of coaching which can help people to reduce stress. Unfortunately, it has not been taken seriously by many Chinese online game companies. Mentoring is particularly useful for encouraging new recruits and those with no previous employment experience, such as graduates, from junior level to senior level in companies.

In summary, the basic question for the Chinese online game labour market is to discuss whether a company should buy in skilled people from the external labour supply or develop its existing staff. No matter which approach is taken it is sensible to have an ongoing training policy if employees are to keep up to date and if they are to believe that the company is committed to them. In addition, the research by Dundon *et al.* (2004) on employee voice found that listening to employees could have a positive impact in three general ways: improve employee attitudes, loyalty, commitment and co-operative relations; enhance productivity and individual performance; lower absenteeism and strengthen the managerial systems.

#### Improve Online Game Content to Beat Private Servers

When local game developers are keen to be involved with their Chinese counterparts to work against illegal activities, such as private servers, they seldom think carefully of the factors that trigger the prevalence of private servers. In fact, at the beginning, private servers were born out of game player discontent with the boring and repetitive content of games. Unlike the current private servers, they had no intention of sharing the market with the official game servers and earning more money. In fact, the original private servers came into being through game players refusing to play on the websites and building their own virtual world. Although it is widely believed that the existence of the large number of private servers indicates the chaotic nature of the market and the lack of regulatory laws, it is more to do with the low quality of most domestic online games. Anyway, content is the King for future commercial competition. To game players, what they hope is to get is fun from online games.

#### **8.5 Research Contributions**

This research work has embarked on the challenge of existing and fragmented pricing theory and its application and proposed a revised framework which enables to show key factors affecting a Chinese dominant online game company's market share competition and the complex relationships between these factors. The research contributions can be summarized in following four major aspects:

#### **Focusing Attention on the Study of Internal and External Factors**

Porter criticized researchers who emphasize resources/competencies because he thought that ignorance of competitive positions would run the risk of being inward looking (Porter, 2004, page XVI). He stressed that, "The need to connect competitive ends (a company's position in the marketplace) and the means (what elements allow it to attain the position) is not just crucial but essential."

This study incorporates elements of internal factors and external factors when examining the relationship between pricing and market share competition. The literature review in the field of pricing is not balanced since many scholars, such as MacInnes *et al.*, explain and discuss pricing mainly from the customer-oriented or market-oriented perspective; while some researchers concentrate primarily on how the internal implications of a price decision affect an organization's revenues. What is novel about this thesis is that it makes an effort to evaluate and empirically test how the internal factors of pricing and other internal and external factors impact and work together to affect the dominant companies' market share competition. The use of interviews enables the exploration of important factors which are not easy to identify but are crucial in deciding a company's market dominance.

# Connecting the Pricing Study with HR Management and Strategic Management

After identifying the different types of pricing impact on different targeted companies' market share competition as well as irregularities, this research has further developed the theory of competitive strategy by confirming that the most important elements affecting a company's market dominance are: government regulations and companies' capabilities in strategic alliance management and in human resource management. This conclusion integrates concepts and theories which facilitate a better understanding of pricing strategy application. The merger of market share competitiveness with pricing discretion is a good illustration of the use of a unified theory to study pricing practice. This is in line with the opinion of Monroe and Mazumdar (1988, p.386) who point out that, "The development of pricing knowledge cannot rely on one research paradigm."

#### **Expanding the Scope of Network Market Theory**

In comparison with Velu's network market study which is rooted in the study of traditional economy, this study makes an important contribution by expanding the network market theory from the context of traditional economy to the network market within the context of a new or virtual economy.

Large pricing differences exist between traditional economies (i.e. economies associated with bricks-and-mortar industries) and virtual economies which have come into being due to the emergence of the Internet. In this sense, certain well-recognized approaches and models in real economies are not necessarily valid in virtual economies. The current state of infancy in the

virtual economies brings more opportunities and challenges to business researchers. It applies particularly to pricing studies in the massive multiplayer online game sector – the most advanced area of virtual economies. This research echoes the study requirements in the virtual economies; moreover, it provides valuable implications for the management of Chinese online game companies, and governmental policy makers. It also provides useful guidance for domestic and overseas capital investors.

# Expanding the Scope of the Research to Developing Countries outside the OECD

The investigation into pricing model innovation can provide valuable implications for the management of the Chinese online game industry. More importantly, the findings of this study can make insightful contributions to the advanced industry with network effects in developing countries as regards their strategy evaluation. As Schankerman (quoted in Kortum 2004, p. 361) advises, "We should go outside the OECD to developing countries or transition countries that have very different institutional settings. I do not think we are getting enough variance in the OECD experience."

#### 8.6 Limitations of the Research and Directions for Future Study

This study involved the current five dominant online game companies as samples for the multiple case studies. However, the nature of emerging industry means that the dominant firms must be prepared to find new ways to defend their position, such as technology innovation and obtaining unique products. In fact, the recent entry of other big Internet-based companies, such as Tencent and Sohu, during the past two years and especially in 2009, has been a big threat to the market dominance of the above-mentioned five companies. However, time constraints made it impossible to involve these two companies as samples for the multiple case studies in the present study.

Furthermore, any attempt to explore the relationship between pricing strategies and market share competition in the less dominant companies was prevented due to the difficulty of obtaining complete, accurate, and reliable records of these companies' financial reports which would be essential in measuring their market share position in the industry as a whole.

There are four possible ways in which the study could be extended. First, each dominant online game company in China expects to make a technological breakthrough in the development of

web page games and mobile games. Therefore, the future study could be extended to associate market share competition with the emergence of product substitute(s). Second, the Chinese online game industry is going through a transition from rapid growth to more modest growth and an important feature for these industries during the transition phase is greater competition for market share due to slowing growth. So, a further extension would be to investigate how the dominant companies re-orient their pricing strategies, services and promotional strategies to cope with the increased competition for market share. Third, the current Chinese online game market is marked by an increasing emphasis on international competition participation. Therefore, it needs to be considered how the Chinese online game companies and the Chinese government will react and adjust their strategies and regulations when facing WTO principles and conflicts with regard to IP rights, game content ratings and licensing issues. Finally, with growth in the industry becoming slower, and with more knowledgeable buyers appearing, a further extension would be to examine how companies apply their range of strategies to attract and retain highly-skilled personnel from the labour market and how they strengthen their short-term and long-term training systems to satisfy their own needs during the period of transition.

In conclusion, the study of the online game industry is a unique research area which has inspired this research to address issues of immense practical importance to the industrial incumbents and governmental policy makers whilst remaining at the forefront of service, HR management and marketing thought.

### REFERENCES

Adcock, D. and Bradfield, R. and Halborg, A. and Ross, C., 1998. *Marketing: Principles and Practice*, 3rd ed. Swanscombe: Pitman Publishing.

Adair, J., 1982. Action-centred Leaders. Gower.

Afuah, A. and Tucci, C., 2001. Internet Business Models and Strategies: text and cases. New York: McGraw-Hill/Irwin.

Ahmed, A., 2009. Case Study of Inteleon Rocessor 7300 and 5400 Series. Available from: http://www.intel.com/references/pdfs/AVITv2.pdf [Accessed March 15, 2009]

Andries, P. and K. Debackere, K., 2006. Adaptation in New Technology-based Ventures: Insights at the Company Level, *International Journal of Management Reviews*, 8 (2), 91-112.

APRP (Asia Pacific Research Positioning), 2007. *The Chinese Video Game Market: Market Entry for Canadian Firms*. Canada: APRP, Cat. No. CH24-24/2007E-PDF.

Armstrong, M., 1992. *Human Resource Management: Strategy and Action*. London: Kogan Page.

Armstrong, M., 2002. Employee Reward. London: CIPD.

Arthur, W. B. 1996. Increasing Returns and the New World of Business. *Harvard Business Review* (July/August), 100-109.

Atkinson, R.D., 2002. *The 2002 State New Economy Index-Benchmarking Economic Transformation in the States*. Available from: www.neweconomyindex.org/states/2002.

Avlonitis, G. and Indounas, K., 2005. Pricing Objectives and Pricing Methods in the Services Sector, *Journal of Services Marketing*, 19 (1), 47-57.

Babbie, E., 1998. The Practice of Social Research. Belmond, CA: Wadsworth.

Baker, M., 1993. Marketing strategy and Management, 2<sup>nd</sup> ed. London: Macmillan.

Bampton, R. and Cowton, C. J., 2002. The E-interview, *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 3, 2.* http://www.qualitative-research.net/fqs-texte/2-02/2-02bamptoncowton-e.htm [Accessed April 16 2008].

Besanko, D., Dranove, D., Shanley., M. and Schaefer.S., 2007. *Economics of strategy*, 4<sup>th</sup> ed . New York, NY: John Wiley & Sons.

Bonnemeier, S. and Burianek, F.and Reichwald, R., 2010. Revenue Models for Integrated Customer Solutions: Concept and Organizational Implementation. *Journal of Revenue & Pricing Management*, 9(3), 228-238.

Bonoma, T.V. Crittenden, V.L. and Dolan, R.J., 1988. Can We Have Rigor and Relevance in Pricing Research? *In*: Devinney, T.M., ed. *Issues in Pricing: Theory and Research*. Toronto: Lexington Books, 337-359.

Bouwman, H. and MacInnes, I., 2006. Dynamic Business Model Framework for Value Webs. *In: 39th Hawaii International Conference on Systems Science*, 4-7 January 2006. Kauai, HI, 43-52.

Bowey, A.M. and Thorpe. R. and Hellier. P., 1986. *Payment Systems and Productivity*, London: Macmillan.

Boyd, E. and Bllegan, I., 2003. Revenue Management and E Commerce, *Management Science*, *49*(*10*) 1363-1386.

Braddock, D., Employment outlook, 1998–2008: Occupational employment projects to 2008. *Monthly Labour Review*, 122 (11), 51–77.

Brammer, S. and Pavelin, S., 2006. Voluntary Environmental Disclosures by Large UK Companies. *Journal of Business Finance & Accounting*, 33(7–8), 1168–1188.

Brandenberger, A. M. and Nalebuff, B. J., 1996. *Competition: A Revolutionary Mindset That Combines Competition and Cooperation: A Game Theory Strategy That's Changing the Game of Business*. New York: Doubleday.

Bridel, P., 2001. The Foundations of Price Theory. London: Pickering& Chatto.

Bryman, A., and Bell, E., 2007. Business research methods, 2<sup>nd</sup> edition. New York: Oxford University Press Inc.

Budhwar, P.S., 2004. *Managing Human Resources in Asia-Pacific*. London and New York: Routledge.

Burgelman, R. A., 1983. A Process Model of Infernal Corporate Venturing in the Diversified Major Firm, *Administrative Science Quarterly*, 28(2), 223-244.

Busby, J. and Pitts, C., 1997. Real Options in Practice: An Exploratory Survey of How Decision Makers in Industry Think About Flexibility, *Management Accounting Research*, Vol. 8, 169-186.

Buzzell, R.D., Gale, B.T., and Sultan, R.G.M, 1975. Market Share- a Key to Profitability. Harvard Business Review, January-February, 97-106.

Buzzell, R.D., and Gale, B. T., 1987. The PIMS Principles. London: The Free Press.

Cao, Y. and Downing, J., 2007. *The Realities of Virtual Play: Understanding Video Games and the Industry in China*. Paper presented at the annual meeting of International Communication Association. TBA, San Fransco, May 23, 2007.

Capon, C., 2008. Understanding Strategic Management. Harlow: Pearson Education Ltd.

Carpenter, M. and Sanders, Wm., 2007. *Strategic management: A Dynamic Perspective Concept*. 2<sup>nd</sup> ed. London: Person/Prentice Hall.

Castronova, E., On Virtual Economies, 2002. In: CESifo Working Paper Series No. 752.

Available from: SSRN: http://ssrn.com/abstract=338500 [Accessed April 25, 2008]

Castronova, E., 2006. On the Research Value of Large Games: Natural Experiments in Norrath and Camelot. Games and Culture, 1(2), 163-186.

Cavusgil, S.T., Chan, K. and Zhang, C., 2003. Strategic Orientations in Export Pricing: a Clustering Approach to Create Firm Taxonomies. *Journal of International Marketing*, 11 (1), 47-72.

Chandy, R. and Tellis, G.T., 2000. The Incumbent's Curse? Incumbency, Size and Radical Product Innovation. *Journal of Marketing*, 64(3), 1-17.

Cheng, J. 1989. Toward a Contextual Approach to Cross National Organization Research. Advance *in International Comparative Management*. 4: 318.

Chesbrough, H. and Rosenbloom, R.S., 2000. *The Role of the Business Model in Capturing Value from Innovation: evidence from XEROX Corporation's Technology Spinoff Companies.* Boston: Harvard Business School.

Chia, J.A.L. and Noble, P.M., 1999. Industrial Pricing Strategies in Singapore and the US: Same or Different? *Asia Pacific Journal of Management*, 16, 293-303.

Chintagunta, P. C. and Desiraju, R., 2005. Strategic Pricing and Detailing Behavior in International Markets. *Marketing Science*, 24 (1), 67-80.

Chiu, C. and Choi, T. and Li, D., 2009. Price Wall or War: The Pricing Strategies for Retailers. *IEEE Transactions on Systems, Man & Cybernetics: Part A*, 39 (2), 331-343.

Coomber, R., 1997. Using the Internet for survey research. *Sociological Research Online*, 2(2). http://www.socresonline.org.uk/2/2/2.html [Accessed on January 10, .2009].

Christensen, C., 1997. Innovators Dilemma. Boston: Harvard Business School Press.

CNNIC, July 2004. *CNNIC* 14<sup>th</sup> Statistical Reports on the Internet Development in China. Available from: http://www.cnnic.net.cn/en/index/index.htm [Accessed March, 2007].

CNNIC, Feb 2006. *CNNIC* 17<sup>th</sup> Statistical Reports on the Internet Development in China. Available from: http://www.cnnic.net.cn/en/index/index.htm [Accessed April 25, 2008].

CNNIC, March 2008a. CNNIC 21<sup>st</sup> Statistical Reports on the Internet Development in China.

Available from: http://www.cnnic.net.cn/en/index/index.htm [Accessed May 16, 2008].

CNNIC, August 2008b. CNNIC 22<sup>nd</sup> Statistical Reports on the Internet Development in China.

Available from: http://www.cnnic.net.cn/en/index/index.htm [Accessed Oct 05, 2008].

CNNIC, March2009a. CNNIC 23<sup>rd</sup> Statistical Reports on the Internet Development in China.

Available from: http://www.cnnic.net.cn/en/index/index.htm [Accessed April 11, 2009].

CNNIC, October 2009b. CNNIC 24<sup>th</sup> Statistical Reports on the Internet Development in China.

Available from: http://www.cnnic.net.cn/en/index/index.htm [Accessed November 27, 2009].

Cody, E., 2007. Despite a Ban, Chinese Youth Navigate to Internet Cafés. *The Washington Post*, Feb 9, 16a.

Crabtree B. F.and Miller, W. L., 1999. Doing Qualitative Research, London:Sage.

Creswell, J.W., 1994. Research Design: Qualitative and Quantitative Approaches. London: Sage.

Cui, W., 2007. Item-based MMORPGs over 80 Percent, The9 and NetEase Are Stick to Subscription-based (in Chinese). *Beijing Commercial Newspaper*, 14 December, 15b.

CyberGuru, 2004. *Types of E-business Models and Markets*. Available from: http://forums.techarena.in/guides-tutorials/6051.htm [Accessed September 6 2009].

Daft, R.L., 2003. Management. 6th ed. Ohio, USA: Thomson Learning.

Day, G.S., 1994. The Capabilities of Market-driven Organizations. *Journal of Marketing*, Vol. 58(10), 37-52.

Denzin, N., and Lincoln, Y., 1994. *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.

Depken, C., 2005. Microeconomics. Demystified: McGraw Hill.

De Vaus, D.A., 2001. Research Design in Social Research. London: Sage.

Diamantopoulos, A., 1991. Pricing: theory and evidence – a literature review. *In:* Baker, M.J., ed. *Perspectives on Marketing Management*. Chichester: John Wiley and Sons, 63-192.

Dolan, R.J. and Simon, H., 1996. *Power Pricing: How Managing Price Transforms the Bottom Line*. New York, NY: The Free Press.

Doole, I., 2005. Understanding and Managing Customers. Harlow: Pearson Education.

Dorward, N., 1987. *The Pricing Decision: Economic Theory and Business Practice*. London: Harper &Row.

Dundon, T. and Wilkinson, A. and Marchington, M. and Ackers, P., 2004. The Meaning and Purpose of Employee Voice, *International Journal of Human Resource Management*, 15(6), 1149-1170.

Dutta, S. and Zabracki, M.J., and Bergen, M., 2003. Pricing Process as a Capability: a Resourcebased Perspective. *Strategic Management Journal*, 24 (7), 615-630.

Earl, M. J., 1999. Crafting Business Strategies in the Information Age. *In:* W. Currie and R.Galliers, eds. *Rethinking Management Information Systems: an Interdisciplinary Perspective*.Oxford: Oxford University Press, 161-174

Easton, G., 1992. Industrial Networks: a Review. *In*: Axelsson, B. and Easton, G. eds., *Industrial Networks: A New View of Reality*. London: Routledge, 3-27.

Eimer, D., 2009. *Waves of Suicide Sweeps China's Graduate Class*. Available from: http://www.echinacities.com/main/news/ShowNews.aspx?n=3374

Entertainment Software Association, 2006. Essential Facts about the Computer and

*Video Game Industry*.Available from: http://www.theesa.com/files/2005EssentialFacts.pdf [Accessed August 15, 2007]

Ernkvist, P.and Ström, P., 2008. Enmeshed in Games with the Government: Governmental Policies and the Development of the Chinese Online Game Industry. *Games and Culture*, 3 (1), 98-126.

Farley, J.U. Hulbert, J.M. and Weinstein, D., 1980. Price Setting and Volume Planning by Two European Industrial Companies: a Study and Comparison of Decision Processes. *Journal of Marketing*, 44(1), 46-54.

Fitkov-Norris, E.D., 2002. *Optimal Dynamic pricing Strategies for mobile communication networks*. Thesis (PhD).University College London.

Fletcher, T. and Russell-Jones, N., 1997. *Value Pricing - how to Maximise Profits through Effective Pricing Policies*. London: Kogan Page.

Forman, H. and Lancioni, R., 2002. The Determinants of Pricing Strategies for Industrial Products in International Markets, *Journal of Business-to-Business Marketing*, 9 (2), 29-61.

Freeman, R. E. Harrison, J. E. and Wicks, A. C., 2007. *Managing for Stakeholders: Survival, Reputation and Success*. New Haven: Yale University Press.

Gabor, A., 1988. *Pricing – Concepts and methods for effective marketing*, 2nd ed. Aldershot: Gower Publishing Company Ltd.

Gaiser, T. J., 2008. Online Focus Groups. In Fielding, N., Lee, R. M. and Blank, G. (Eds.), *The SAGE Handbook of Online Research Methods*. London. SAGE. 290-306.

Gammelgaard, B., 2004. Schools in logistics research? A Methodological Framework for Analysis of the Discipline. *International Journal of Physical Distribution and Logistics Management*, 134 (6), 479-491.

Gani, A. and Clemes, M.D., 2002. Services and Economic Growth in ASEAN economies, *ASIAN Economic Bulletin*. 19(2), 155–169.

Gao, Y., 2007. Current Situation of the Junior R&D Professionals in China (in Chinese). Available from: http://games.sina.com.cn/y/n/2007-01-09/1931182802.shtml.[Accessed in March 09, 2009.]

Gebauer, H. and Friedli, T., 2005. Behavioral Implications of the Transition Process from Products to Services, *Journal of Business and Industrial Marketing*, 20 (2), 70–78.

Gill, J., and Johnson, P., 2002. Research Methods for Managers, 3rd ed. London: Sage.

Gordijn, J., 2002. Value-based Requirements Engineering - Exploring Innovative e-Commerce Ideas. Thesis, (PhD). Vrije Universiteit, Amsterdam, NL.

Grewal, D. and Monroe, K.B. and Krishnan, R. 1998. The Effects of Price-comparison Advertising on Buyers' Perception of Acquisition Value, Transaction value, and Behavioral intentions. *Journal of Marketing*, 62(April), 46-59.

Guba, E., 1990. The Paradigm Dialog. London: Sage.

Haaker, T. Bouwman, H. and Faber, E., 2004. Customer and Network Value of Mobile Services: Balancing Requirements and Strategic Interests. *In: Twenty-Fifth International Conference on Information Systems*, December 9-12, 2004. Washington, D.C.AIS Electronic Library, 1-14

Harvard Law Review, 2001. Antitrust and the Information age: Monopolization Analyses in the New Economy. 114(2), 1623-1646.

He, N., 2009. China Daily. *Too Much Pressure*, May 26. Available from: http://www.chinadaily.com.cn/life/2009-05/26/content\_7943280.htm. [Accessed on July 19 2009].

Heerde, H. and Gijsbrechts, E. and Pauwels, K., 2008. Winners and Losers in a Major Price War. *Journal of Marketing Research*, 45 (5), 499-518.

Hefflinger, M., 2009. Shanda Pays \$46.2 Million for Majority Stake in China's Hurray. Digital Media Wire Daily. June 08, 2009.

Heil, O.P. and Helsen, K., 2001. Toward an Understanding of Price Wars: their Nature and How They Erupt. *International Journal of Research in Marketing*, 18 (1), 83-98.

Henderson, R. and Clark, K., 1990. Architectural Innovation: the Reconfiguration of Existing Product Technologies and the Failure of Established firms. *Administrative Science Quarterly*, 35(1), 9-30.

Hendry, C., 1994. Human Resource Strategies for International Growth. London: Routledge.

Hoffman, K.D. and Bateson, J.E.G., 1997. *Essentials of Services Marketing*. Orlando, FL: The Dryden Press.

Hofstede, G.H., 1980. *Culture Consequences: International Differences in Work-related Values*. London: Sage.

Holdren, D.P. and Hollingshead, C.A., 1999. Differential Pricing of Industrial Services: the Case of Inventory Financing. *Journal of Business & Industrial Marketing*, 14 (1), 7-16.

Hosfede, G., and Bond, M.H., 1988. The Confucius Connection: From Cultural Roots to Economic Growth. *Organizational Dynamics*.16 (4), 4-21.

Huang, C. and Kung, F., 2010. Drivers of Environmental Disclosure and Stakeholder Expectation: Evidence from Taiwan. *Journal of Business Ethics*, 96 (3), 435-451.

Hunt, S.D. and Morgan, R.M., 1995. The Comparative Advantage Theory of Competition. *Journal of Marketing*, 59 (4), 1-15.

Ingenbleek, P.T.M., 2002. *Money for Value: Pricing from a Resource-advantage Perspective*. Thesis (PhD), Tilburg University.

Ingenbleek, P.T.M., 2007. Value-informed Pricing in its Organizational Context: Literature Review, Conceptual Framework, and Directions for Future Research. *Journal of Product & Brand Management*, 16 (7) 441–458.

iResearch, 2008. 2007-2008 China Online Game Research Report. Beijing: iResearch Inc.

iResearch, 2009. *iResearch Chinese Online Game Industry Development Report 2007-2008*. Beijing: iResearch Inc.

Jaisingh, J. and See-To, E. and Tam, K., 2008. The Impact of Open Source Software on the Strategic Choices of Firms Developing Proprietary Software. *Journal of Management Information Systems*, 25 (3), 241-275.

James, N., 2007. The Use of Email Interviewing as a Qualitative Method of Inquiry in Educational Research. *British Educational Research Journal*, 33(6), 963-976.

Jiang, F., 2006. The Determinants of the Effectiveness of Foreign Direct Investment in China: An Empirical Study of Joint and Sole Ventures. *International Journal of Management*, 23 (4), 891-908.

Jenkins, D., 2005. *Report Disputes Influence of Video Game Influence*. Available from: http://www.gamasutra.com/php-bin/news\_index.php?story=6201.[Accessed November 13, 2007].

Kenney, J. and Reid, M. and Doney, E., 1 990. Manpower Training and Development Bulletin. *Industrial Relations Review and Report*, 31 July, No. 516, 2–7.

Kessler, I. and Purcell, J., 2003. Individualism and Collectivism, *In:* Edwards, P. (ed.) *Industrial Relations*, 2nd ed. Oxford: Blackwell.

Khun, T.S., 1970. The Structure of Scientific Revolution. Chicago: Chicago University Press.

King, A., 1991. Guanxi and Network Building: A Sociological Interpretation. *Daedalus*, (20) 2, 63-84.

Kim, W.C. and Mauborgne, R., 2009. How Strategy Shapes Structure. *Harvard Business Review*, 73-80.

King, N., 2004. Using Templates in the Thematic Analysis of Text. *In:* Cassell, C. and Symon, G. (eds), *Essential Guide to Qualitative Methods in Organizational Research*, London, Sage, 256-270.

Kivits, J., 2005. Online Interviewing and the Research Relationship. *In*:Hine, C. (Ed.) *Virtual Methods: Issues in Social Research on the Internet*. Oxford. Berg, 35-49.

Kogut, B. and Singh, H. 1988. The Effect of National Culture on the Choice of Entry Mode." Journal of International Business Studies. 19, (3): 411-32.

Kolo, C., and Baur, T., 2004. Living a Virtual Life: Social Dynamics of Online Gaming, *International Journal of Computer Game Research*, 4 (1), 2-4.

Kotler, P., 1994. Marketing Management. London: Prentice Hall.

Kotler, P., 1997. *Marketing Management: Analysis, Planning, Implementation and Control*, 9th ed., Englewood Cliffs, NJ: Prentice-Hall.

Kotler, P. and Armstrong, G., 2006. *Principles of Marketing*. 12<sup>th</sup> ed. New Jersey: Pearson Education Inc.

Kortum, S., 2004. An R&D Roundtable. *Economics of Innovation and New Technology*, 13(4), 349-363.

Kretch, D and Crutchfield, R. and Ballachey, E., 1962. *Individual in Society*. New York: McGraw-Hill.

Lambert, D. R., 1980. Price as a Quality Signal: the Tip of the Iceberg. *Economic Enquiry*, 18(1), 144-150.

Lancioni, R., 2005. A Strategic Approach to Industrial Product Pricing: The Pricing Plan. *Industrial Marketing Management*, 34(2), 177–183.

Lawler, E., 2000. *Rewarding Excellence: Pay Strategies for the New Economy*, San Francisco, California: Jossey Bass.

Lee, H. and Chan. S. and Oh, S., 2009. *China's ICT standards policy after the WTO accession: techno-national versus techno-globalism. Info*, 11(1), 9-18.

Lehdonvirta, V., 2006. Virtual economics: applying economics to the study of game worlds.

Available from: http://www.hiit.fi/~vlehdonv/documents/Lehdonvirta-2005-Virtual-

Economics.pdf

Lin, H. and Sun, C., 2007. Cash Trade within the Magic Circle: Free-to-Play Game Challenges and Massively Multiplayer Online Game Player Responses. *In:* Baba, A., ed. *DiGRA 2007 Situated Play.* 24-28 September 2007. Tokyo. 335-343.

Linder, J. and Cantrell, S., 2000. *Changing Business Models: Surveying the Landscape*. Accenture: Institute for Strategic Change.

Liu, W. and Zhang, H. and Ji, H., 2007. *Shanda's Big Creative Activities*. Available from: http://intl.ce.cn/specials/zxgjzh/200711/22/t20071122\_13684347.shtml

Luthans, F. and Hodgetts, R.M., 1996. Managing in America: Recreating a Competitive Culture. *Managing Across Cultures: Issues and perspectives*. Vol. 7, 105-123.

Lynch, R., 2006. Corporate Strategy. 4th ed. Harlow: Prentice Hall.

Macartney, J., 2008. China Watches Over Internet Café Customers in Web Crackdown. *The Times*. 17, Oct, 26c.

Marks, M. and Vansteenkiste, R., 2008. Preparing for organizational death: Proactive HR engagement in an organizational transition. *Human Resource Management*, 47 (4), 809-827.

Mathiassen, L. and Pourkomeylian, P., 2003. Managing Knowledge in a Software Organization. *Journal of Knowledge Management*, 7(2), 63-80.

Marchington, M. and Wilkinson, A., 2005. *Human Resource Management at Work: People Management and Development*. London: Chartered Institute of Personnel and Development.

McKenna, E. and Beech, N., 2002. Human Resource Management, Prentice Hall.

Mitra, K. and Capella, L.M., 1997. Strategic Pricing Differentiation in Services: a Re-Examination. *Journal of Services Marketing*, 11(5), 329-343.

Morris, M.H., Fuller, D.A., 1989. Pricing, An Industrial Service. *Industrial Marketing Management*, 18(2), 139-146.

McGoldrick, P.J., Betts, E.J. and Keeling, K.A., 2000. High-low Pricing: Audit Evidence and Consumer Preferences. *Journal of Product and Brand Management*, 9 (5), 316-331.

MacInnes, I. and Hu, L., 2005. Business Models for Online Communities: The Case of the Virtual Worlds Industry in China. *In: the 38<sup>th</sup> Hawaii Internatinal Conference on System Sciences*, 3-6 January 2005, Big Island, Hawaii, 191-20

Madan, V. and Suri, R., 2001. Quality Perception and Monetary Sacrifice: A Comparative Analysis of Discount and Fixed Prices. *Journal of Product and Brand Management*, 10 (3), 170-184.

Magretta. J., 2002. Why Business Models Matter. Harvard Business Review. 80(5), 86-92.

Mann, C. and Stewart, F., 2000. Internet Communication and Qualitative Research. London. Sage.

Mansfield, G. M. and L. C. H. Fourie., 2004. Strategy and Business Models-Strange Bed Fellows? A Case for Convergence and its Evolution into Strategic Architecture. *South African Journal of Business Management*, 33(1), 35-44.

Maslow, A., 1954. Motivation and Personality. New York: Harper.

Mason, H. and Rohner, T., 2002. *The Venture Imperative, a New Model for Corporate Innovation.* Boston: Harvard Business Press.

Maylor, H., and Blackmon, K., 2005. *Researching Business and Management*. Basingstoke: PalGrave MacMillan.

Maxwell, J.A., 1996. *Qualitative Research Design: an Interactive Approach. Thousand Oaks*, CA:Sage.

Maxwell, S., 1999. Biased Attributions of A Price Change Increase: Effects of Culture and Gender, *Journal of Consumer Marketing*, 16 (1), 9-23.

McClure, R.F. and Mears, F.G., 1986. Video Game Playing and Psychopathology. *Psychological Reports*, 59, 59-60.

McGee, J.S., 1988. Industrial Organization, New York, NY: Prentice-Hall.

Miles, M.B., and Huberman, A.M., 1994. *Qualitative Data Analysis*. 2<sup>nd</sup> ed. Thousand Oaks, CA: Sage.

Monroe, K.B., and Della Bitta, A.J., 1978. Models for Pricing Decisions. *Journal of Marketing Research*, 15(3), 413-428.

Monroe, K.B., 2003. *Pricing: Making Profitable Decisions*. New York, NY: McGraw-Hill Book.

Monroe, K.B., and Mazumdar, T., 1988. Pricing-Decision Models: Recent Developments and Research Opportunities. *In:* Devinney, T.M., (ed.) *Issues in Pricing: theory and research*, 361-388.Toronto: Lexington Books.

Morgan Stanley, 2004. *Industry Overview: China Internet Report*. Available from: http://www.morganstanley.com/techresearch [Accessed September 2004].

Morris, M.H. and Fuller, D.A., 1989. Pricing an Industrial Service, *Industrial Marketing Management*, 18 (2), 139-146.

Mulla, Z. and Premaraja, R., 2008. Strategic Human Resource Management in Indian IT Companies: Development and Validation of a Scale. *Vision- The Journal of Business Perspective*, 12 (2), 35-46.

Myers, M.B., 1997. The Pricing of Export Products: Why Aren't Managers Satisfied with the Results? *Journal of World Business*, 32, 277-289.

Nagle, T. and Holden, R., 2002. *The Strategy and Tactics of Pricing: a Guide to Profitable Decision Making*. 3<sup>rd</sup> ed. New Jersey: Prentice Hall.

Nagle, T. and Hogan, J., 2006. The Strategy and Tactics of Pricing – A Guide to Growing More Profitably, 4th ed. Upper Saddle River, NJ: Pearson Education.

Nardi, B. and Harris, J., 2006. Strangers and Friends: *Collaborative Play in World of Warcraft*, Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work. ACM Press, 149-158.

Nash, J. and Schneyer, E., 2004. Virtual Economies: An In-Depth Look at the Virtual World of Final Fantasy XI: Online. Available from: http://lgst.wharton.upenn.edu/hunterd/Virtual Economies.pdf [Accessed 13 August, 2008]

Naylor, G. and Frank K.E., 2001. The Effect of Price Bundling on Consumer Perceptions of Value. *Journal of Services Marketing*, 15(4), 270-281.

Negroponte, N.1995. *Being Digital*. Knopf. New York: Vintage Books.

Newstrom, J.W., and Davis, K., 1997. Organizational Behaviour: Human Behaviour at Work, 10<sup>th</sup> ed., USA: McGraw-Hill.

Ng, I.C.L. and Maull, R. and Yip, N., 2009. Outcome-based Contracts as a Driver for Systems Thinking and Service Dominant Logic in Service Science: Evidence from the Defense Industry. *European Management Journal*, 27(6), 377–387.

Niko Partners, 2008.In-Depth Report on China's Internet Cafés Shows Their ImportancetoChina'sOnlineGamesSector.Availablefrom:http://www.nikopartners.com/pdf/niko\_internet\_cafe\_study\_08182008.pdf.[AccessedDecember 15, 2008]/

Nimer, D., Does Your Pricing Pay? Marketing, April 1970, p.24.

Nojima, M., 2007.Pricing Models and Motivations for MMO Play. *In:* Baba, A., ed. *DiGRA* 2007 Situated Play. September 24-28, 2007, Tokyo. 672-681.

O'Connor, H., Madge, C., Shaw, R. and Wellens, J., 2008. Internet-based Interviewing, in Fielding, N., Lee, R. M. and Blank, G. (Eds.) *The SAGE Handbook of Online Research Methods*. London. Routledge, 271-289.

OECD, 1998. The Economic and Social Impact of Electronic Commerce. Paris: OECD, DSTI/ICCP (98)15/REV.

OECD, 2006. *Digital Broadband Content: Digital content strategies and policies*. Available from: http://www.oecd.org/dataoecd/19/5/3484414.pdf [Accessed on: Feb 2007].

Ofir, C., 2004. Re-examining Latitude of Price Acceptability and Price Thresholds: Predicting Basic Consumer Reaction to Price. *Journal of Consumer Research*, 30 (March), 612-621.

Oh, G., and Ryu, T., 2007. Game Design on Item-selling Based Payment Model in Korean Online Games. *In:* Baba, A., ed. *DiGRA 2007 Situated Play.* 24-28 September 2007, Tokyo. 650-657.

Osterwalder, A., 2004. *The Business Model Ontology - a Proposition in a Design Science Approach*. Thesis (PhD). University of Lausanne, Switzerland: 173.

Osterwalder, A. and Pigneur, Y., 2002. An E-Business Model Ontology for Modeling e-Business, In the Proceedings of the  $15^{th}$  Bled Electronic Commerce Conference – e-Reality: Constructing the e-Economy, June 17 – 19, 2002 Bled, Slovenia. 75-91.

Osterwalder, A. and Pigneur, Y. and Tucci, C. L., 2005. Clarifying Business Models: Origins, Present, and Future of the Concept. *The Communications of the Association for Information Systems*, 16(1), 1-25.

Oxenfeldt, A.R., 1973. A Decision-Making Structure for Price Decisions. *Journal of Marketing*, 37(1), 48-53.

Parkin, M., Powell, M. and Matthews, K., 2002. *Economics*. 6<sup>th</sup> ed. Harlow: Pearson Education Ltd.

Pateli, A. and Giaglis, G., 2003. A Framework for Understanding and Analysing e-Business Models. 16th e-Commerce Conference "e-Transformation, June 9 - 11, 2003. Bled, Slovenia. 329-348.

Peter, P. and Olson, J., 2005. *Consumer Behaviour & Marketing strategy*. 7<sup>th</sup> ed. UK: McGraw-Hill.

Petrovic, O. and Kittl, C., 2001. Developing Business Models for e-Business. *In:* Proceedings of the 3<sup>rd</sup> International Conference on Electronic Commerce, Oct 31-Nov 4, Vienna.

Pettinger, R., 1999. Effective Employee Relations: A Guide to Policy and Practice in the

Workplace.London: Kogan Page.

Piercy, N. F. and Cravens, D. W. and Lane, N., 2009. Thinking Strategically about Pricing Decisions. *Journal of Business Strategy*, 31 (5), 38-48.

Porter. M., 1985. Competitive Advantage. New York: The Free Press.

Porter, M. E., 1990. The competitive Advantage of Nations. New York: Free Press.

Porter, M., 1998. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: The Free Press.

Porter. M., 2004. *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.

Porter, M., 2008. The Five Competitive Forces that Shape strategy. *Harvard Business Review*. January 2008, 79-93.

Purcell, J. and Brown, D., 2000. Pay Per View: Reward Debate. *People Management*, 6 (3), 41–43.

Qiao, B. and Liu, K. and Guy, C., 2006. A Multi-Agent System for Building Control. *In:* IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'06), 653-659.

Rao, V.R., 1984. Pricing Research in Marketing: the State of the Art. *Journal of Business*, 57(2), 39-60.

Rappa, M., 2004. The Utility Business Model and the Future of Computing Services. *IBM Systems Journal*, 43(1), 32-43.

Ren, J.Q., and Hardwick, P., 2008. Revenue Model Innovation in the Chinese Online Game Market, *In:* Artur, L, *et al*, ed. 12<sup>th</sup> International MindTrek Conference: Entertainment and Media in the Ubiquitous Era, Oct 2008 Tampere, Finland. New York: Association for Computing Machinery, 44-48.

Ren, Q. and Hardwick, P., 2009. Analysis of the Talent Exodus in the Chinese Online Game Labour Market. International Journal of Chinese Culture and Management, 2 (2), 177 - 190.

Ren, Q. and Hardwick, P., 2009. Analysis of Strategic Alliance Management – Lessons from the Failure of Korean and Japanese Licensed Games in China. *International Journal of Chinese Culture and Management*, 2(1), 1-14.

Ren, Q., and Hardwick, P., 2010. Analysis of online game distribution in Internet Cafés in China. *In: Regional Innovation Systems and Sustainable Development: Emerging Technologies*. USA: IGI Global (in Press).

Reuver.M. and Bouwman, H.,and MacInnes, I., 2009. Business Model Dynamics: a Case Survey, *Journal of Theoretical and Applied Electronic Commerce Research*, 4(1), 1-11.

Roberts, M., 2005. A Study of the Massively Multiplayer Online Business Model within the Interactive Entertainment Industry, San Francisco, California

Robinson, J., 1953. Imperfect Competition Revised. Economic Journal, 63 (251), 579-593.

Rosenzweig, P. and Singh, J. 1991. Organizational Environments and the Multinational Enterprise. *Academy of Management Review*. 16(3), 40-61.

Ross, E.B., 1984. Making Money with Proactive Pricing. *Harvard Business Review*, 62(6), 145-155.

Saunders, M. and Lewis, P. and Thornhill, A., 2003. *Research Methods for Business Students*. Harlow: Person Education.

Sawhney, M., 2006. Going beyond the Product: Defining, Designing, and Delivering Customer Solutions. *In:* R. Lusch and S. Vargo (eds.) *The Service-dominant Logic of Marketing. Dialog, Debate, and Directions. Armonk*, NY: M.E. Sharpe, 365–380.

Seaker, R.F. and Dunn, S.C., 1993. A Note on Research Methodology in Business Logistics. *Logistics and Transportation Review*, 29 (4), 383-387.

Seddon, P.B. and and Lewis, G. P., 2004. The Case for Viewing Business Models as Abstraction of Strategy. *Communications of the Association for Information Systems*, 13: 427-442.

Shankar, V. and Bayus, B., 2003. Network effects and competition: An empirical analysis of the home video game industry. *Strategic Management Journal*, 24(4), 375.

Shapiro, C. and Varian, R., 1999. *Information rules: a strategic guide to the network economy*. Boston, Mass: Harvard Business School.

Silberston, A., 1970. Survey of Applied Economics: Price Behaviour of Firms. *Economic Journal*, 80(319), 511-582.

Simon, H., 1982. Pricestat - an Applied Strategic Pricing Model for Nondurables. *In:* Zoltners, A.A., (ed.) *TIMS/Studies in the Management Sciences*. Amsterdam: North-Holland Publishing Company, 23-41.

Simon, H., 1992. Pricing Opportunities and How to Exploit Them. Sloan Management Review, 33(2), 55-65.

Simpson, Z. B., 1999. The In-game Economics of Ultima Online. *In:* Computer Game Developer's Conference, Mar 2000, San Jose, CA. Available at: http://www.minecontrol. com/zack/uoecon/uoecon.html [Accessed 11 July 2009].

Simon, H., 1997. Designing Organizations for an Information-rich World. *In:* Donald M. Lamberton, ed., the Economics of Communication and Information. Cheltenham, UK: Edward Elgar.

Skitmore, M. and Smyth, H., 2007. Pricing Construction Work: A Marketing Viewpoint. *Construction Management & Economics*, 25 (6), 619-630.

Skouras, T. and Avlonitis, G.F and Indounas, K., 2005. Journal of Product and Brand Management, 14(6), 362-374.

Slater, S.F. 1997. Developing a Customer Value-based Theory of the Firm. *Journal of the Academy of Marketing Science*, 25(2), 162-167.

Smith, G. E. and Thomas, N.T., 1995. Frames or Reference and Buyers' Perception of Price and Value. *California Management Review*, 38, (1), 98-116.

So, S., and Westland, C., 2009. *Red Wired: China's Internet Revolution*. London: Marshall Cavendish Ltd.

Soreseu, A.B. and Chandy, R.K. and Prabhu, J., 2003. Sources and Financial Consequences of Radical Product Innovation: Insights from Pharmaceuticals Industry. *Journal of Marketing*, 67(October), 82-102.

Spann, M., Skiera, B. and Schafers, B., 2004. Measuring Individual Friction Costs and Willingness to Pay via Name Your-own-price Mechanisms. *Journal of Interactive Marketing*, 18 (Autumn), 22-36.

Stähler, P., 2002. Business Models as a Unit of Analysis for Strategizing. *In:* International Workshop on Business Models, Lausanne, Switzerland.

Stake, R.E., 1994. Case Studies. *In:* Denzin, N.K., and LinColn, Y.S. (Eds.), *Handbook of Qualitative Research*. CA: Sage, 236-247.

Strategy Analytics, 2007. Online Games to Generate One-Third of Game Revenues by 2011

Available from: http://www.marketingcharts.com/interactive/online-games-to-generate-one-third-of-game-revenues-by-2011-1736/ [Accessed in April 2007]

Strauss, A. and Corbin, J., 1998. *Basics of Qualitative Research: techniques and procedures for developing grounded theory*. 2<sup>nd</sup> ed. London: Sage.

Sulake, 2004. Relevant Growth in Sulake's Revenuesss and Profit - Habbo Hotel online game will launch in the US in September. Press release 6, September 2004. Available at: http://www.sulake.com/pressroom\_releases\_06092004\_1.html.

Takenaka, K., 21 May, 2008. Capcom Aims to Enter Chinese Online Game Market. Tokyo: Reuters Global Technology. Available from:

http://www.reuters.com/article/idUST21406720080521 [Accessed 11 November 2008]

Tan,Y., China Daily, 2009. *Youth Feel Pressure of Looking After Aging Parents*. June 29. Available from: http://www.chinadaily.com.cn/china/2009-06/29/content\_8331505.html.

Tellis, G. and Yin, E. and Niraj, R., 2009. Does Quality Win? Network Effects versus Quality in High-Tech Markets. *Journal of Marketing Research*, 46 (2), 135-149.

Tesch, R., 1990. Qualitative Research: Analysis Types and Software Tools. New York: Falmer.

Thaler, R., 1985. Mental Accounting and Consumer Choice. Marketing Science, 4(3), 199-214.

Tidd, J. Bessant, and Pavitt, K., Managing Innovation. 2001. New York: Wiley.

Timmers, P., 1998. Business Models for Electronic Markets. *Journal on Electronic Markets*, 8(2): 3-8.

Tirole, J., 1989. The Theory of Industrial Organization, MIT Press, Cambridge, MA.

Tuli, K., Kohli, A. and Bharadwaj, S., 2007. Rethinking Customer Solutions: From Product Bundles to Relational Processes. *Journal of Marketing*, 71(3), 1–17.

Tung, R.L., 1995. International Organizational Behaviour. *In:* F. Luthans, ed. *Virtual O.B. Electronic Data Base*. New York: McGraw-Hill, 487-518.

Tung, R.L., 2002. Building Effective Networks. Journal of Management Inquiry, 11(2), 94-101.

Turner, C., 2000. *The Information Economy: Business Strategies for Competing in the Digital Age*. Dover: Kogan Page.

UK Department of Trade and Industry, 1999. *Measuring the Information Economy: an International Comparison, Spectrum Analysis. In:* Turner, C., 2000. *The Information Economy: Business Strategies for Competing in the Digital Age.* Dover: Kogan Page, 8-13.

US Department of Commerce, 1999. The Emerging Digital Economy II. Washington, D.C.

Van de Ven, 2004. The Context-specific Nature of Competence and Corporate Development. *Asia Pacific Journal of Management*, 21 (1-2), 123-147.

Velu, C. K., 2005. *Business Model Innovation in Network Markets*. Thesis, (PhD). University of Cambridge.

Vinod, B. and Narayan, C. P. and Ratliff, R.M., 2009. Pricing Decision Support: Optimizing Fares in Competitive Markets, *Journal of Revenue & Pricing Management*, 8 (4), p295-312.

Voss, G.B. and Voss, Z.G., 2008. Competitive Density and the Customer Acquisition – Retention Trade-Off . *Journal of Marketing*, 72 (6), 3-18.

Wang, F., 2005. Organizing Through Division and Exclusion: China's Hukou System, Standford University Press.

Waring, T. and Wainwright, D., 2008. Issues and Challenges in the Use of Template Analysis: Two Comparative Case Studies from the Field. *The Electronic Journal of Business Research Methods*, 6 (1), 85 – 94.

Wasson, C.R., 1974. *Dynamic Competitive Strategy and Product Life Cycles*. St. Charles, IL: Challenge Books.

Weber, L., 2007. *Marketing to the Social Web: How Digital Customer Communities Build Your Business*. Hoboken: Wiley.

Weill, P.and Vitale, M. R., 2001. *Place to Space: Migrating to e-business Models*. Boston: Harvard Business School Press.

Wertenbroch, K. and Skiera, B., 2002. Measuring Consumers' Willingness to Pay at the Point of Purchase. *Journal of Marketing Research*, 39 (May), 228-241.

Westrup, C. and Liu, W., 2008. Both global and local: ICTs and joint ventures in China. *Information Systems Journal*, 18 (4), 427-443.

Wheeler, D. and Sillanpaa, M., 1997. *The Stakeholder Corporation: Blueprint for Maximizing Stakeholder Value*. London: Pitman Publishing.

Whitener, E. M., 1998. Do High Commitment Human Resource Practices Affect Employee Commitment: A Cross-Level Analysis Using Hierarchial Linear Modeling. *Journal of Management*, 27 (5), 515-535.

Wi, J.H., 2009. *Innovation and Strategy of Online Games (Technology Management)*. London: Imperial College Press.

Willis, M., 2008. An Identification and Evaluation of the Various Types and Forms of Personal Relationships within a Sino Foreign University Strategic Alliance Context. *Journal of Teaching in International Business*, 19 (3), 222-245.

Winer, R.S., 2005. Pricing. Cambridge, MA: Marketing Science Institute.

Winkler, J., 1983. Pricing for Results. Oxford: Butterworth-Heinemann.

Wong, L.S. and Law, K.S., 1999. Managing Localization in the PRC: a Practical Model. Journal of World Business 34, 26-40

Yamaguchi, H., 2004. *An Analysis of Virtual Currencies in Online Games*. Available at: http://ssrn.com/abstract=544422. [Access in: March 2009].

Yeung, Irene Y.M. and Tung, R.L, 1996, Achieving Business Success in Confucian Societies: The Importance of Guanxi (Connections). *Organizational Dynamics*, 25(2), 54-65.

Yin, R.K., 1989. Case Study Research: Design and Methods. Beverly Hills and London: Sage.

Yin, R.K., 1993. Applications of Case Study Research. Beverly Hills and London: Sage.

Yu, E., 2008. Asia's Broadband Subscribers to Hit 170M, Available from: http://www.zdnetasia.com/news/communications/0,39044192,62043606,00.htm. [Accessed June 8<sup>th</sup> 2009].

Zaribaf, M., 2008. Pricing Challenges in Global Marketing: a Model for Export Pricing, International Journal of Management Perspectives, 1 (2), 18-31.

Zaugg, S. and Fetscherin, M., 2004. *Music Piracy on Peer-to-Peer Networks*, in: Yuan Soe-Tsyr and Liu Jiming (Ed.), Proceedings of the IEEE International Conference on e-Technology, e-Commerce, and e-Service (IEEE), Taipei: IEEE Computer Society Press, March 2004, P. 431-440.

Zeithaml, V.A. and Bitner, M.J., 2003. Service Marketing: Integrating Customer Focus across the Firm. New York: McGraw-Hill.

Zhu, L., 2004. First Film Rating Scheme in the Making. China Daily, Dec 17, p.20b.

# APPENDICES

## **Appendix 1 Interviewee details**

Interviewees (Surname,	R&D or	Relation with the targeted 5	Interview Duration
Family name)	Management staff	companies	
		(Existing/Previous/None)	
J, LS	R&D	Existing	34 min
Miao, DC	R&D	None	45 min
Yan, J	R&D	Existing	28 min
Lin, FC	Management	Existing	52 min
Miao, DC	R&D	None	65 min
Hu, J	Management	Previous	50 min
Wang, TT	R&D	Existing	39 min
Chen, Y	Management	Existing	27 min
Qin, X	R&D	Previous	44 min
He, H	R&D	Existing	50 min
Zhang, YR	Management	Existing	27 min
Li, C	R&D	Existing	32 min
Hu, J	R&D	Previous	27 min
Wang, B	Management	None	37 min
Gu, JY	Management	None	63 min
Chi, L	R&D	Previous	49 min
Ren, N	R&D	Previous	41 min
Lian, JS	R&D	Previous	33min
Liu, M	Management	Existing	55 min
Yan, J	R&D	Existing	33 min
Yang, HX	R&D	Previous	66 min
Miao, DC	R&D	None	44 min
Jiang, N	R&D	None	68 min
Feng, YC	Management	Previous	54 min
Hu, J	Management	Previous	39 min
Liu, M	R&D	Existing	28 min
Zhang, YR	Management	Existing	55min
Chen, ND	R&D	Previous	27 min
Song, DD	R&D	Previous	59 min
Yang, D	Management	Existing	50 min

Wang, F	Management	Previous	46 min
Wang, TT	R&D	Existing	63 min
Qin, X	R&D	Previous	33 min
Yang, Q	R&D	Previous	38 min
Yang, HX	R&D	Previous	47 min
Wei, W	Management	Existing	52min
Qiu, BJ	Management	Existing	58 min
Wang, F	Management	Previous	44 min
Tian, ZZ	Management	None	52 min
Huang, J	R&D	Previous	68 min
Yang, YW	R&D	Existing	31 min
Zhang, CM	R&D	Existing	44 min
Yang, YW	Management	Existing	50 min
Liu, ZM	Management	None	33 min
Tang, ZN	Management	Previous	46 min
Cheng, H	R&D	Existing	37 min
Feng, YC	Management	Previous	40 min
Zh, ZH	R&D	Existing	50 min
Song, DD	R&D	Previous	65 min
Miao, DC	Management	None	43 min
Li, X	R&D	None	52 min
Xiong, G	R&D	Previous	44 min
Wu, J	Management	Previous	39 min
Cheng, H	R&D	Existing	27 min
Meng, T	Management	Existing	46 min
Zhu, K	R&D	Existing	34 min
Chen, L	Management	Existing	25 min
Xiong, G	R&D	Previous	45 min
Wu, M	R&D	None	31 min
Cheng, H	R&D	Existing	48 min
Wu, J	Management	Previous	29 min
Gu, JY	Management	None	56 min
Wang, B	Management	None	49 min
Zhao, M	Management	Previous	53min

Note1: Existing= Existing staff; Previous= Previous staff; None = No work experience in the targeted five companies

Note 2: Interview Duration =Total minutes each interviewee contributed for his or her interview(s)

### **Appendix 2 Interview Guide 1**

(Interview guide for a management team member or R&D professional who is working or has work experience in one of the targeted 5 dominant companies)

#### **Organizational structures**

- Has you company had any big changes in the company's structure? If yes, how do you describe its impact on your company's market share competition?
- How important is your CEO's influence on the organizational structure change(s)?
- How do you describe the relationship to the foreign company whose game(s) was or is under your operation?
- Can you explain the reasons for the failure of lots of foreign game operation in China?

#### Products

- Can you introduce the revenues contribution of your current flagship game product(s)?
- How do you balance the risk of revenues loss of the current flagship games?
- How do you evaluate your current product pipeline and do you have any plan to enrich your product pipeline in the near future?

#### Pricing

- How did the company decide about whether and when to make the pricing innovations?
- How did your company try to take advantage of the pricing innovations?
- How did your market share dominance influence your decision of pricing innovation?
- How did your pricing innovation affect the decision taken by competitors?
- How did you secure that the current game-players can all be maintained after adopting the new pricing strategies for your existing games?
- What is the relationship of pricing innovations with your company's ranking in the market share competition?

#### **Distribution and Promotion in the market**

- How did you explore your potential in games' distribution in the Internet caf és?
- What are your primary promotion strategies in the market? How helpful are they in your company's market share competition?

#### Internal technology in game development and service efficiency

- How do you relate the internal technology in game development to the market share?
- How do you relate the internal technology in game service efficiency to the market share?

- What are your expectations on your company's technology in game development and service efficiency? Have they been met?
- Confronting the severe market share competition, which aspect you plan to devote more resources, game development or the service efficiency?

#### **Financial capacity**

- Are you satisfied with your current financial situation?
- How do you plan to explore your financial potential in the market share competition? For example, do you have any investment plan, such as some possible acquisition plan?

#### External technology trend

• How do you think of the impact of broadband penetration and the emergence of new technology on your company development?

#### Domestic rival competition-Talent war (External Market Issues)

- What is your attitude towards to talent war in the Chinese online game market?
- What kind of actions you have taken to attract the talented professional and prevent their attrition?
- What are the reasons you think cause the frequent talent exodus?

#### Impact of global competition (External Market Issues)

- Do you have any plan to export your games in one or two years?
- As of exporting games abroad, which you think will be more helpful for your company's market share competition, establishing the overseas subsidiaries to run the games yourself or licensing the games to local game operators?

#### **Customer demand**

- According to your experience, what kind of customer demands are the most difficult to meet?
- What is your company's strength over your competitors to satisfy customer demands?

#### **Government Regulations**

- How do you evaluate the government's high involvement in the supervision of the Chinese online game industry?
- How do you think of the government policies that have been issued, such as anti-fatigue system, the banning of RMT, etc ?
- How do you think of the advantages of online game joint ventures for the growth of national online game growth?
- What will you suggest the government to do for the online game industry's growth?

#### **Talent Exodus**

- What are the main factors that cause the talent exodus in China?
- How do you think that a company can attract and retain the talents?
- Do you agree that monetary reward is the best way to attract the talents?
- Apart from monetary reward, what other factors are critical for attracting and retaining talents?
- What is your biggest stress at work?
- What opportunities you are keen to have in your companies to satisfy your growth needs?

#### **Strategic Alliance Management**

- What are the main factors that cause the failure of foreign licensed games in China?
- Could you analyze the above factors from the prospective of differences in natural culture and technology or other aspects?
- How about the comments of the Chinese game operators on the strategic alliance with foreign game developers?
- How do you think that foreign game developers should improve in the future for the better cooperation with the Chinese online game operators?

## Appendix 3 Interview Guide 2

(Interview guide for online game staffs who have no experience to work in the targeted 5 dominant companies)

#### Attitude to the impact of pricing innovation and other factors

- How do you evaluate the importance of pricing innovation in the development of the Chinese online game industry?
- What factors you think will be more important to decide on a company's market share competition?

#### Attitude to the Chinese government policy

- How do you think of significance of joint venture towards the growth of the Chinese online game industry?
- Can you explain the reasons for the failure of lots of foreign game operation in China?
- How do you think of the government's banning of foreign investment for online game cooperation?
- How do you think of the government policies that have been issued, such as anti-fatigue system, the banning of RMT etc ?
- What will you suggest the government to do for the online game industry's growth?

#### Talent Exodus (Mainly discussed in Chapter 8):

- What are the main factors that cause the talent exodus in China?
- How do you think that a company can attract and retain the talents?
- Do you agree that monetary reward is the best way to attract the talents?
- Apart from monetary reward, what other factors are critical for attracting and retaining talents?
- What is your biggest stress at work?
- What opportunities you are keen to have in your companies to satisfy your growth needs?

#### Strategic Alliance Management (Mainly discussed in Chapter 8):

- What are the main factors that cause the failure of foreign licensed games in China?
- Could you analyze the above factors from the prospective of differences in natural culture and technology or other aspects?
- How about the comments of the Chinese game operators on the strategic alliance with foreign game developers?

• How do you think that foreign game developers should improve in the future for the better cooperation with the Chinese online game operators?

#### **Appendix 4 Pre-interview Email**

Dear Mr / Mrs XXX,

I am Ren Qun, a PhD student at Bournemouth University (UK). I am pleased to be aware that that you showed your interest in being interviewed for my research. Thanks a lot for your support.

The aim of this research is to develop a better understanding of the nature and complexity of the pricing and other factors in the market share competition in the Chinese online game industry. As an expert in the online game field, I am sure that your unique experience can make a key contribution to my research and lead me to explore some unexpected themes.

Here, I would like to stress that I am fully aware the significance of integrity and confidentiality. Therefore, all the content you provide in the interview will be strictly kept as confidential and anonymous information. The project will be exclusively be carried out by myself and will be used only for my study.

In addition, if you agree, I would like record the interview content so as to facilitate the later data translation and analysis. If you have any problem or worry of being recorded, please do not hesitate to let me know. Moreover, after the interview, I can show you the interview transcript in Chinese and English via Email or Fax, so that you can help me to correct it.

Thank you in advance for your time and effort. In addition, the following information is the reminder of the time arrangement for the interview. Please let me know if you need a change, we then can rearrange another time which is convenient for you.

Date: \_\_\_\_\_ Time:

Thanks a lot for all your help. Yours sincerely,

Ren Qun PhD student Bournemouth University, UK

# **Appendix 5 List of Codes**

Short descriptive label for general categories and	Codes
individual codes	
Internal Factors	IF
IF: Organizational Structure	IF-OS
Pure licensee	IFPL-OS
Game developer and operator	IFDO-OS
Joint venture	IFJV-OS
Strategic alliance	IFSA-OS
Spin off	IFSO-OS
Public list abroad	IFPL-OS
Capability in handling talent attraction and	IFCHT-OS
exodus	
IF: Products	IF-PROD
Self-developed game	IFSE-PROD
Licensed games from domestic developers	IFLD-PROD
Licensed games from foreign developers	
Hit Product (Top 10 in ranking)	IFLF-PROD
IF: Pricing	IFH-PRPD
Time-based pricing	IF-PRIC
Item-based pricing	IFT-PRIC
Mixed pricing	IFI-PRIC
IF: Distribution and Promotion	IFM-PRIC
IF: Internal Technology	IF-DIS/PROM
in game development	IF-IT
in service efficiency	IFGD-IT
IF: Financial Capacity	IFSE-IT
	IF-FC
External Factors	EF
EF: External Technology Trend	EF-ETT
EF: External Market Issues	EF-EMC
Domestic talent war	EFTW-EMC
Global rival competition	EFGC-EMC
Customer demands	EFCD-EMC

Government regulations	GR
Critical events	CRI-GR
Problems of the Government regulations	PRO-GR
Recommendation	RE-GR
Transformations	TR
TR: Pricing Evolution	TR- EPRIC
TR: Pricing Revolution	TR-RPRIC
TR: Transformation motive	TR-MOT
TR: Organizational structure	TR-OS
TR: Critical Events	TR-CRI
TR: Government regulations	TR-GR
Effects on Market Share competition	EFF-MSC
Positive and negative	EFF-MSC/+, -
Emerging Casual Links	CL
Explanatory Cluster (researcher)	CL-EXPL
QUERIES	QU
QU: Surprises	QU-!
QU: Puzzles	QU-P
RELATIONS BETWEEN VARIABLES	RE
RE: Both are high, or both low at the same time	RE- A+, B+
RE:A is high while B is low, or vice versa	RE- A+, B-
RE: A has increase, and B has increased	RE- A↑, B↑
RE: A has increase, and B has decreased	RE- A↑, B↓
RE: A increased first, then B increased	RE- A $\uparrow$ , then B $\uparrow$

#### **Appendix 6 Example of the Interview Transcript**

Note: WF is a R&D professional who had three years' rich game development experience in one of the targeted 5 companies.

WF 27-05-09

(Interview period: 46 minutes)

Qun Ren: Hello, Mr W. I am so happy that my friend, Mr T, introduced me to you. Thanks very much for accepting my interview. It is really a big support to my study. Thanks.

WF: That is alright. T is my old friend and we have lots of happy cooperation. So, I feel please if give you a hand. Go ahead.

QR: You study at the U.S. for 6 years and got your PhD there. What drove you to go back to China?

WF: It was a coincidence. After getting my PhD degree in 2003, I got an academic offer in a university in the USA. Before starting my new job, I went back to China for a holiday. One of my relatives ran a very successful big company. After seeing him, I decided to give up the US offer and began to start my own thing with one of my alumni in the USA. We decided to start an Internet company with our programming knowledge. One year later, we focused on developing our own games.

QR: How big was your company in the initial period? And how did you get the funding?

WF: In the initial period, we needed people. In order to get the real talents, with the friends' help, we hired some part-time university students from the prestigious universities, such as Tsinghua University and Peking University. In order to facilitate the travel, we had to move our company to a building near Tsinghua University where the students could come to work and go back to their classes quite conveniently. As to the funding, 2004 is a tough year to get VC for our company. Honestly, we could not survive without our passion to the game development. The Turning point was in the late half of 2004, we got capital from two ventures companies after showing them our game products. We have only 6 people in our company in 2004, now nearly 60 people work for our company.

QR: Do you think your US education background is helpful for your business running?

266

WF: In China, Hai Gui refers to the people who has the western education background and come back China to work. I am one of them. US education background was more helpful five or ten years ago. Perhaps, it is because that Internet derived from western countries. However, right now, Internet shortens geographical distance and then it will be harder and harder to find any advantage of my US education background. In fact, local people are more appropriate for start ups because we know more about local than Hai Gui. Instead, they don't need to live, study, and work in the U.S. It is not necessary at all.

QR: Where does your company's revenuescome from?

WF: It comes from the operation our self-developed games. Firstly, we adopted the subscription model to operate the games, then we added Free-to-play model two years ago.

QR: What motivated this change? Is it due to the customers' interest loss to your games or due to the pressure of big company's pricing transformation?

WF: No, it is not due to the obsoleteness of our games. It is not from the pressure from Shanda or Pacific World, NetEase or whatever. We have no interest to go head-to-head with anybody, especially the big companies. What we concern is what we're most passionate about- the game players. In my opinion, it is all about a game player's choice. They have the absolute right to decide whether to play an item-based game or a subscription-based game. What we can do is to make sure they have what they want. All we're doing is expanding the market, adding item-based billing is only one of the useful tools. After adding the item-based pricing for some games, it is good to see thousands of players are transferring to membership plans, others are taking their time and playing for free.

QR: So, from an experienced insider's viewpoint, do you agree that the pricing strategy is the top determinant for big companies to consolidate their market rankings?

WF: No, I do not think so. Too many elements decide their rankings and too many challenges are ahead of them, such as relationship with the Chinese government, copyright issues and how to reduce the bandwidth cost. If you cannot control that huge bandwidth cost, you're dead. Of course, pricing model is another challenge and it is closed tied to the game content. Without the differentiated game product, an excellent game operator will feel helpless. Oh, let me think of one proverb: If you have no hand you can't make a fist (巧妇难为无米之炊).

QR: And how did you cope with the reduction of broadband cost?

WF: We tried several ways, such as enhancing our own P2P technology, sign a commission deal with our powerful telecom partners. It involves the server renting fee and Government policies.... It is too complicated to explain. Sorry about that.

QR: OK, never mind. By the way, I have strong interest in understanding how you manage your relations with the Chinese government.

WF: In China, government management of media websites is as horrible as you imagine. You just try to avoid some sensitive topics that are related to pornography and politics. That's the only regulation from the government. In short, the content displayed in your game must be generally in line with what the Chinese government requires.

If you are not sure of the government policies, then try to foster a guanxi in the local government. He or she can know and understand the government and then tell you what you can and cannot do. It will be stupid if you have devoted millions of dollars to develop a game and your game is shot because the game content provokes the government censorship rules. We all know "Better to ask the way than go astray (问路总比迷路好)".

QR: As to the game quality, Shanda and other big companies have issued some plans to attract the talents or co-operations with small or medium size companies. Do you have the intention to work with them?

WF: Honestly, No. Comparing with establishing the partnership with the domestic game companies, I would rather to have a good U.S. partner, who knows how to operate online games, and have them as my game licensees and help me to operate my self-developed game abroad.

It would be very tricky to join Shanda's 18 Fund. If my understanding is correct, they need to charge firstly the distribution cost, marketing cost and IT service cost out of the gross revenuess. You can only get 28 percent from the remaining net revenuess. Do not forget, you have to deal with other operation issues, such as paying for your call center and Game Masters. So, what you can get is too limited. Giant put forward some similar plans. I have no interest to think of that because I do not believe them. I would rather to spend time in develop my own games than thinking of the low-margin co-publishing.

QR: Can I know some of your future plan?

WF:I always inspire my colleagues to chasing the vision and not the money although we have an idea to go for IPO, but it will depend when the recession is over. We are still dreaming of exporting our own game in the near future. So you have one rule in our game design. That is: Try not to make Chinese-only content games, but try to make universal games which can be played everywhere.

QR: Do you think the management of your R&D team a big problem?

WF: Young people suffer high pressure in China. The young professionals in Beijing and Shanghai seem to have more living pressure. Everybody wants to be a successful businessman, a second Chen Tianqiao. However, the possibility is too tiny. When realizing the gap between their dreams and the reality, lots of them learn to treasure the work opportunities at hand. Most of the young people in my company work very hard. What they concern is to enrich their experience in game development. We will try to create as many opportunities as we can to satisfy them. Every company has to face kinds of problems. However, I don't think the HR management a big problem in my company.

QR: What is your advice to someone who wants to start up an IT business today?

WF: Running a business is hard. You have to ask your motivation before your entry. The success is only occasionally but not always. By comparison, you always have to confront much more unexpected hard times. In tough times, maybe your passion to online gaming is the only power to help you defeat all difficulties. Remember: do not go into this field if you just want make quick fortune. Over 70 percent IT companies are at loss.

## Appendix 7 Examples of Coding: Internal Technology in Game Development

## General Category: Internal technology in game development Code: IFGD-IT

Text: JLS/ IFGD-IT

Code: IFGD-IT

R: What does the market share ranking of a company tell you about? Is its capability in the game development?

J: Kind of, but not correct in the Chinese online game market. Shanda and The9 entrenched themselves in the No.1 and No.3 for a couple of years. However, either of them got the high quality game development. Till now, Shanda has no a real in-house hit product.

Text: MDC/ IFGD-IT

Code: IFGD-IT

R: Lots of people emphasize that Chinese people only like to play the games with the similar culture. We all know that WoW is developed from totally different culture but it can push The9 to the No.3 in the market share ranking?

M: Good question. That is why WoW is the top one in the world and we have no capability to develop it. We have to admit the gap. Instead of emphasizing on individual heroism, it underscores the team work and collaboration. Majority of the guild activities within the online games are at night, so lots game players who always know each other show up late in the Internet caf é They enjoy exchanging ideas and playing together.

"WoW does not demand full concentration at all times, that is why some friends can play for a period of time and then go out to the nearest restaurant for dinner and or a chat. Its activities involved are so varied and some are violent and some are peaceful, which can meet the demands of different customers. Its unique content excellence is widely imitated by Chinese online game developers. Do you believe it or not? No games surpass its significance in the global game industry."

Text: YJ IFGD-IT

Code: IFGD-IT

R: Would you relate your company's game development to the market share ranking?

Y: Yes, kind of. In the initial period, the worries are from the lack of experience in online game operation and related services. At the first two years, we had only around 100 staff. When we went to law against Korean's Actoz, we feel the threat of death since Mir II was the only resource of our revenuesss and Korean company were holding the source code of the game development, but we didn't have them.

#### Text: LFC/ IFGD-IT

#### Code: IFGD-IT

R: Would you relate the market share ranking to a company's internal technology in the game development?

L: I hope so. But how you evaluate a company's internal strength in game development? Some companies always emphasize on the number of its R&D staffs. But it doesn't make sense. In order to attract the VC, some companies always boast itself with some feigned company information. I understand the cruelty of the competitions. 70 percent of the Chinese online game companies are at loss. However...well, related cheating behaviours will deter the whole industry development.

#### Text: HJ/ IFGD-IT

## Code: IFGD-IT

R: You said the internal technology development is the most related factor to a company's market share ranking, right? Can you give more explanations about it?

H: Sure. Yes, the high qualified game developers and designers are too rare in China, even in the top companies. That is why you will hear somebody left Company A and joined Company B due to the higher salary offer. There is one common drawback among companies, too much reliance on the individual high-level gaming professionals. The direct result is that a company will be badly ruined if they fail to retain their core gaming talents.

#### Text: WTT/ IFGD-IT

#### Code: IFGD-IT

R: How do you think of the impact of a company's internal technology in the game development upon its market share ranking?

W: The higher level the internal game development capability, the more important its impact on the market share will be. However, the impact is very unstable because the core of the internal game development is the talents. If the talents are gone, the impact will become zero. How to attract the talented people is not easy. How to retain the talent people is more difficult. So, can I say talent management is a more important topic to all the Chinese online game companies? However, companies seldom take it seriously.

#### Text: ChY/IFGD-IT

#### Code: IFGD-IT

R: You are excited when talking your R&D team. Would you relate your R&D capability with the market share ranking?

Ch: Of course, I am so proud of them, especially at the initial period. At the beginning of developing the game Perfect World, we met lots of problems. R&D team set up their aim as making classic native online game. During the 3-year period of development, it is strong spiritual support that guided all team members to conquer various difficulties before the launch of Perfect World. In 2006, we had more than 160 staff at that moment and 17% of whom got the degrees of Master or PhD. Each member possessed successful 3D online game development experience, especially several of them have participated in two native 3D computer games — Freedom and Glory, Brave General of Qin Dynasty. So we have confidence to say that our Perfect World can arrive at the top level of in-house3D games.

#### Text: QX/ IFGD-IT

#### Code: IFGD-IT

R: Would you relate a company's game development to the market share ranking?

Q: It is related, but you cannot ignore the role of a company's human resource management team. Shanda can make a second level of Korean game be the most popular game in China. What is Shanda's secret weapon? [Is its] internal Technology? Of course, it is not. Shanda has its unique HR management team. I never think Shanda's game development technology is No.1. Unfortunately, it cannot beat PWRD, NetEase or even Giant. However, Shanda knows how to attract the most powerful HR managers, the most efficient CEO to its team. They know how to recognize the R&D people how to attract them and how to retain them.

## Text: HH/ IFGD-IT

#### Code: IFGD-IT

R: Can you talk about your opinion regarding the impact of internal technology in the game development upon a company's market share ranking?

H: I personal think that the impact of internal technology will be more and more important upon the market share ranking. Everybody knows Shi Yuzhu's national marketing battle. However, its power keeps on weakening because it is too easy to be copied and other companies can adopt it into their own practice. Shanda taught other companies how to use M&A to get the quick resource. Other companies followed Shanda as well. So, if a company want to keep or enhance its market share ranking, what it should have? Yes, nothing else, but the true internal game development technology.

#### Text: ZhYR/ IFGD-IT

Code: IFGD-IT

R: What does The9's market share ranking tell you about? No focus on its internal game technology development?

Zh: It is not that they do not want to focus on it. In fact, The9 has dreamed of owning the internal game development capabilities for developing its own MMORPG. It kept making effort, but the result is not good. Oh, The9 released its first self-made MMORPG titled "Joyful Journey West" ("JJW") in September 2006. Unfortunately, little success was met.

## Text: LC/ IFGD-IT

Code: IFGD-IT

R: Would you relate the market share ranking to a company's internal technology in the game development?

L: Yes, sort of. In fact, we all know that the internal technology in game development is still very week in China. Our history is too short. In comparison, USA and Japan all have a perfect system of game design, game development and game operation. However, in China, you have to admit, each department seems only interested in its own task. They lack the understanding, coordination and support. That is why lots of game companies are struggling for survival at the moment. They do not have internal R&D, do not have management capability. What they have is the dream to have a quick fortune. Lots of them are gamblers.

## Text: WB/IFGD-IT

Code: IFGD-IT

R: Would you relate the market share ranking to a company's internal technology in the game development?

W: I can only say, half yes and half no. Who will pay for the games? [It is] the game players. From this sense, my conclusion is that the high level of internal game development technology is not enough and you have to know who your customers are and what your customers like. I dare to say, a game developed by an experienced game developer from the USA's EA will have a big probability to fail in China. Why, their games maybe have too many complex 3D graphics and too many plot designs. All these indicate their advanced R&D technology. However, Chinese game players won't like them, too difficult to learn. They will feel bored and then exit.

#### Text: GZY/ IFGD-IT

## Code: IFGD-IT

R: As a CEO of a medium size online game company, how do you try to enhance your market share ranking by exploring your game development potential?

G: We a small company. What we have is our R&D team. We have three games under the development and two of them are expecting for the open beta tests next year. We decide to work with Shanda together to run our game on their platform.

R: I heard that they will charge a big sum buy using their distribution channel, is it right?

G: Yes. However, money is only one aspect. They can help us to save money. What we concern is to try to get the investment back as quick as possible. Time maybe is more important for us. Using their platform can save our lots of time and enable our game to be shown to the game players quicker. It is too early to mention the market share ranking. It depends on the customer reflects. If they like them, we then are qualified to think of the market share. If not, we have to keep on spending money on the revision. Hopefully, no big correction needed.

#### Text: ChL / IFGD-IT

Code: IFGD-IT

R: Some medium size companies, namely, game developers with game development capability, hope to have their own recognized market share quicker and easier and expect to join Shanda's Feng Yun plan or 18 plan or Giant's win@Giant. How do you think of that?

Ch: I have no interest in it. Some of my friends had the enthusiasm to have a try and they all failed to make any cooperation with the big companies. Some complained that big companies' standard are too harsh to be satisfied; while some thought the big companies are too greedy and would extract too much from the possible revenues. So, I do not want to show any expectations to big companies. I only want to run our own game with our own effort. Slower but stable.

Text: RN/ IFGD-IT

Code: IFGD-IT

RQ: Do you think your US education background is helpful for enhancing your capability in game development?

RN: Not really. The advantage of Hai Gui (i.e. the people who has the western education background and come back China to work) is not obvious. Lots of them have higher

expectations to the incomes than the local graduates. I can understand them....Anyway, they spent a huge sum of money to study abroad and hope to get the investment back. However, if he (or: she) has the courage to go back China, he should have to face the severe competition. We will be equal to treat every applicant. I do not mind where he or she is from. I only have one rule – "Select the superior and eliminate the inferior". That's it.

## Text: LM/ IFGD-IT

#### Code: IFGD-IT

R: You mentioned reputation. Is there any the relationship between your company's R&D reputation and the market share ranking? If so, how did you do that?

L: Close relationship indeed. In order to cater to the game players' appeal, we changed the chief game designer, added more features and altered a lot so as to please the game players. You know, as a 3D game, the process of altering needs lots of cost.

## Text: YHX/ IFGD-IT

Code: IFGD-IT

R: Would you relate the market share ranking to a company's internal technology in the game development?

Y: Definitely. I f you have your own strong game development team; you then can have your own source code. It is easier for game updating. The failure of The9 is a good lesson. However, how to get such a strong team? Some people say, go to the University to find them. I tried but no result. Why? There are some Game Departments in China. What disappointed me and other game companies are the teachers and the teaching quality. I heard their speeches in one university. I did not understand what they were talking and did not understand how the teachers could associate his so-called "knowledge" with our game development. I then conclude that I can never use graduates from this university.

#### Text: JN/ IFGD-IT

Code: IFGD-IT

R: Would you relate the market share ranking to a company's internal technology in the game development?

J: Yes. However, how to enhance the game development capability is a big problem. It usually takes three to five years to finish the development of an excellent game. From this sense, you can understand why dominant companies only have one or two flagship games because it was always under more than 3 years' handwork. Why they cannot continue to release more games

with the same quality? I attributed it to two reasons. One is no previous passion. Before releasing the first game, lots of companies were always in debt. The pressure motivated them to work day and night with full devotion. However, when their hit product got the recognition, they got the ample payment, began to indulge in their new life and felt difficult to work hard as usual. The other reason is, they began to pursue the profit blindly instead of working steadily. Just like a manufacturer, one and game after another were released very quickly. However, they are all rubbish.

## Text: FYC/ IFGD-IT

Code: IFGD-IT

R: Would you relate the market share ranking to a company's internal technology in the game development?

F: In my own opinion, the online game industry in China is under the transition, from an emerging industry to a mature one. Currently, it is very confusing what elements are the most influential one to drive the market. However, I believe, the importance of internal game development will outperform other elements in the end.

## Text: ChND/ IFGD-IT

Code: IFGD-IT

R: How important do you think the internal game development technology is towards a company's market share ranking?

Ch: Internal game development technology should directly affect a company's market share ranking. Nobody should say No to that, especially in the western countries. However, in China, everything will be complicated. Online game industry is a new industry, the lack of standards make its development in chaos.

## Text: SDD/IFGD-IT

## Code: IFGD-IT

R: Would you relate Giant's ranking to its internal game development technology?

S: I can not evaluate the level of Giant's whole R&D team. However, I contribute Giant's top ranking to Shi Yuzhu, an experienced game player. Shi understands the game player's demand very well. Can you imagine that he has always spent more than 10 hours, sometimes 15 hours each day in playing online games that different operators offered? While playing, he usually attended two MSN chat groups. One is the community for players and the other for Giant's developers.

Text: YD/IFGD-IT

Code: IFGD-IT

R: Would you relate a company's market share ranking to its internal game development technology?

Y: I would if without the intervention of some Chinese government's policies. Some policies are very confusing; especially what contents should be classified as the so-called unhealthy content. Therefore, if you are only immersed in your game development with even the world top skills, please stop immediately.

#### Text: WF/ IFGD-IT

Code: IFGD-IT

R: As to the game quality, Shanda and other big companies have issued some plans to attract the talents or co-operations with small or medium size companies. Do you have the intention to work with them?

W: It would be very tricky to join Shanda's 18 Fund. If my understanding is correct, they need to charge firstly the distribution cost, marketing cost and IT service cost out of the gross revenuess. You can only get 28 percent from the remaining net revenuess. Do not forget, you have to deal with other operation issues, such as paying for your call center and Game Masters. So, what you can get is too limited. Giant put forward some similar plans. I have no interest to think of that because I do not believe them. I would rather to spend time in develop my own games than thinking of the low-margin co-publishing.

## Text: YQ/IFGD-IT

Code: IFGD-IT

R: Do you think that the Chinese government policy will restrain the exploration of a company's game development technology and also will bring negative effect on its market share ranking?

Y: Unfortunately, yes. In China, the game policy makers do not understand the games. So, some games, like *WoW*, can be played by all other games peacefully for many years but they could not be played in China. I just want to ask them what your standards are based on. Have they made any investigation from the police criminal record? .... I do not think so. These policy makers have no knowledge in law and games, but they can easily kill a game that you devoted to millions of dollars and three or more years. With one word of "unhealthy", they can kill you. If killed, where do you ask for your market share? It is daydream!!!

Text: WW/IFGD-IT

Code: IFGD-IT

R: How do you relate the market share ranking to a company's internal technology in the game development?

W: Market share ranking? Leave the market share competition to the dominant companies... We have no interest in it. We have been running for four years. I am satisfied in our revenuesss. According to our conservative estimation, we should be located in the between No.15 and No.20 in the national market share ranking list. We are satisfied in our ranking and especially the behaviour of our R&D team. Three top dominant companies show us their interest in acquiring our company because our two games received good comments from the game players. However, we still want to run our own company and enjoy fun of being a medium size company.

## Text: QBJ/ IFGD-IT

Code: IFGD-IT

R: How do you evaluate the impact of internal game development on the market share ranking? Q: We have 4 branches of Internet-based services. Since two years ago, we enhanced our internal game development strength by purchasing two online game studios. Our MMORPG development capability is increasingly stronger. However, our market share ranking has not changed too much. Too many online portals turned their attentions into this gold mine. We are satisfied with our current situation.

Text: HJ/ IFGD-IT

Code: IFGD-IT

R: How do you apply your internal game development technology to consolidate or enhance the market share ranking?

H: We have discussed and analyzed a lot in how enable our internal game development technology serve for our market share ranking effectively. Too many MMORPGs and too many casual games are in the market. It is very difficult to make any innovations. So, we decided to turn our attention into the web-page game development one and half year ago. The fact confirmed the correction of our decision. Our first web-page will be released in three months. We are busy with the preparation.

Text: TZZ/ IFGD-IT

## Code: IFGD-IT

R: You mentioned that your company concerned the market share ranking. What do you associate with the ranking mainly? You mean the internal technology development?

T: Yes, but how to the internal technology from scratch? In 2004 and 2005, stiff competition may arrive quicker than anticipated. Even so, Chen Tianqiao and his management team still thought the barriers to the game industry entry quite low. So they focused on expanding the market size via investment and acquisitions for outperforming the competitors.

#### Text: YYW/ IFGD-IT

Code: IFGD-IT

R: Would you relate the market share ranking to the internal technology development? How close are they?

Y: Right, they are quite close and the strength of internal technology development is changeable. NetEase made efforts to introduce new versions or substantive upgrades of its MMORPG games to maintain their popularity regularly and frequently. However, due to the limited history of the online games market in China, limited experience of game designers, changes in users' tastes or in the overall market for online games in China sometimes cannot be caught by the game designers and operators accurately. That is why the operation of Fantasy Westward Journey is more successful than Westward Journey Online II.

#### Text: LM/ IFGD-IT

Code: IFGD-IT

R: What are your expectations on your company's technology in game development? Have they been met?

L: Yes. It is wonderfully met. [NetEase's] *FWWJ* based on one of the four most popular the Chinese classic fictions of "Westward Journey". Our technology in game development is explored fully in this game design. Players enjoy its cartoon style and the artistic style was fresh and dialogues are humorous. However, how to make the game always fresh? The constant release of expansion packs, just like NetEase to *FWWJ*.

Text: LZM/ IFGD-IT

Code: IFGD-IT

R: What are your expectations on your company's technology in game development? Have they been met?

L: For companies' CEOs, in order to keep the staff engaged with their work, the essential ways to provide for career satisfaction are simply listening to your staff, providing recognition for jobs well done and creating opportunities for people to grow within their current position.

## Text: MT/IFGD-IT

## Code: IFGD-IT

R: Would you relate the company's internal technology in game development to the market sharer ranking?

M: ZT Online is designed as a 2D game and it has very low requirement to the computer's connection speed. That is to say, it can be played not only in major metropolitan areas but it can also be played in the medium and smaller sized cities in China as well. So, different a lot from the other online game publishers and operators, who primarily do their marketing through much online advertising and industry events like conferences, Shi Yuzhu established a huge distribution network on medium and smaller sized cities in China. Our marketing share was No.3 throughout China in 2007, so attractive and admiring.

#### Text: MT/IFGD-IT

#### Code: IFGD-IT

R: Could you please tell me how you kept your R&D strength in your company's hard time?M: During the hardest time, the company could not provide employees with sufficient material profit, but we can feel Shi's hearty sincerity and we believe in the significance of the company's prospects. In one word, we are confident for the company's future.

## Text: ZhK/IFGD-IT

Code: IFGD-IT

R: Could you relate the internal technology of game development to your company's market share ranking?

Zh: China's game development technology is still quite lower in comparison with the advanced game technology in the USA, some EU countries, Japan or even Korea. That is why China lacks the differentiated game products. I have made a bold decision recently that I would like to sell my company to a big company and then go the USA for two or three years' game development study myself. Then, I will come back to establish a new company. I know what the Chinese game player want, know the Chinese online game market. What I do not know is how big the gap between the Chinese games and the USA games. So, that is why I am trying to make it clear in the USA. And also, I will try to understand how to fill the gap.

Text: XG/IFGD-IT

Code: IFGD-IT

R: Could you relate the internal technology of game development to your company's market share ranking?

X: NetEase has been proud of its game developing for many years. However, the absolute advantage seems waning. It failed to release a real hit game product during the past few years. Under the pressure of the game player attrition and no new hit products, licensing a world-level game is its most efficient way to enhance its user-base. Everybody can understand Ding Lei's motivation. That is why he was happy to establish a partnership with Blizzard, the world-famous game developer. Do you know how lucrative their cooperation plan to NetEase? NetEase would operate Blizzard's three MMORPGs (i.e. Warcraft III, StarCraft II, and Battle.net) in China.

## **Appendix 8**

# **List of Publications**

- Ren, Q., and Hardwick, P., 2010. Analysis of online game distribution in Internet Caf és in China, *In: Regional Innovation Systems and Sustainable Development: Emerging Technologies*. USA: IGI Global (in Press).
- Ren, Q., and Hardwick, P., 2010. Pricing model dynamics in the Chinese online game market, *In: Electronic globalized business and sustainable development through management*. USA: IGI Global (in Press).
- Ren, Q., and Hardwick, P., 2009. Analysis of strategic alliance management lessons from the failure of Korean and Japanese licensed games in China. *International Journal of Chinese Culture and Management*, 2(1), 1-14. Publisher: Inderscience Enterprises Ltd.
- Ren, Q., and Hardwick, P., 2009. Analysis of the talent exodus in the Chinese online game labour market, *International Journal of Chinese Culture and Management*, 2 (2), 179-190.
   Publisher: Inderscience Enterprises Ltd.
- Ren, J.Q., and Hardwick, P., 2008. Revenue Model Innovation in the Chinese Online Game Market, *In:* Artur, L, et al, ed. 12<sup>th</sup> *International MindTrek Conference: Entertainment and Media in the Ubiquitous Era*, 44-48. Tampere, Finland. New York: Association for Computing Machinery,
- Tsang, D and Ren, Q., 2006. Chinese Management and the Growth of Indigenous Online Game Firms in China. "Modernization, Modernity and Media in China "Conference, June 15-16, University of Westminster, UK.
- Ren, Q and Yang, X., 2004. Analysis of the Development of Chinese Online Game Industry, *Europrix Scholars Conference*, Nov 11-12, Tampere, Finland, which is available online at: http://www.mindtrek.org/sc/papers/.