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Game Design Based on Micro-Transactions in Online Games

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 - Integration of micro-transactions into an online game
- Conclusions

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Introduction

- Purpose
 - Insight into micro-transactions in online games
 - Exploration of techniques in incorporating micro-transactions into the economic design of online games
- Detailed description
 - Concept of two main payment models in online games
 - Surveys of micro-transaction based online games in Korea
 - Review of the design of several profitable micro-transaction games
 - Game design issues to efficiently accommodate micro-transactions in online games

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Payment Systems for Online Games

- Two main payment models
 - Subscription Model
 - Micro-transaction

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Subscription Model

- Description
 - Prepaid method for a limited term of service in exchange for a set payment
 - Commonly used by most MMORPGs



"Lineage" (Korea)
29,700 KRW



"World of Warcraft" (Korea)
19,800 KRW



"Final Fantasy 11" (Japan)
1,280 JPY



"Eve Online" (Worldwide)
14.95 USD

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Micro-transaction

- Description
 - Paying per items or game assets
 - Commonly used by casual-style online games
 - Examples: "KartRider", "Maple Story", "Special Force"
 - MMORPGs, recently.



"KartRider"
Free to play



"Maple Story"
Free to play



"Special Force"
Free to play

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Subscription Model : Drawbacks

- Drawbacks
 - Introducing of free to play casual-style online games has accelerated fee discounts.
 - Introducing free MMORGs accelerates the rate of fee discounts in subscription based games



"KartRider"
Free to play



"Maple Story"
Free to play



"CrazyArcade BnB"
Free to play



"World of Warcraft"
24,750KRW → 19,800KRW



"ROHAN"
19,800KRW



"RAPPELS"
Free of Charge



"Mabinogi online"
Free to play for
2 hours a day

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Micro-transaction : Purchasing Power

- Power of micro-transaction in Korean online games
 - "In the article of "The New Avatar In Town" on Mar. 26th, 2007:
 - "... The companies behind them have a novel way of making money, selling digital goods such as avatars and their outfits. The games themselves are free.... In 2005, Nexon had worldwide revenues of \$230 million, 85% of it from virtual items."

BusinessWeek

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The New Avatar In Town
Korea's Nexon and others are edging onto Second Life's turf, using simplified features

Cyndi Lester, 20, recalls her first meeting with future husband, Frank. "My avatar walked past his. He noticed me and typed: I like your hair." After their real-life wedding last year, Cyndi and Frank bought digital rings and staged a second, virtual-world wedding.

It all happened in MapleStory—a fantastical online game where players hunt carbon monsters and communicate in text. For Lester, a Huntington (N.Y.) homemaker who devotes three to six hours a day exploring this two-dimensional universe, the allure of MapleStory is more about show than shock-her-up. She spends up to \$100 a month buying new clothes (at 9 cents to \$7 apiece) and hairstyles (\$5.70) for her digital double.



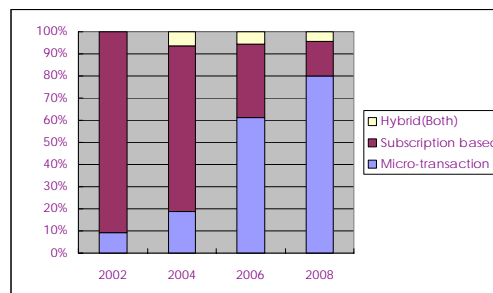
• In the article of the Business Week, "The new Avatar in Town" :
http://www.businessweek.com/magazine/content/07_13/b4027047.htm?chan=search

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Micro-transaction : Our Investigation

- Our Investigation

	Micro-transaction	Subscription based	Hybrid (Both)
2002	1	10	0
2004	6	24	2
2006	33	18	3
2008	56	11	3



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Micro-transaction : Recent Payment method

- Recent market share of online games in Korea

Rank	Title	Genre	Payment Method	Share
1	Sudden Attack	FPS	Micro-transaction based	15.74%
2	Starcraft: Brood war	Strategy	Package Sales	11.19%
3	Lineage	MMO RPG	Subscription based	9.12%
4	World of Warcraft	MMO RPG	Subscription based	6.46%
5	Special Force	FPS	Micro-transaction based	6.25%
6	Dungeon and Fighter	MMO RPG	Micro-transaction based	5.63%
7	Lineage 2	MMO RPG	Subscription based	5.29%
8	Warcraft 3	Strategy	Package Sales	5.15%
9	HellGate London	MMO RPG	Open Testing	4.29%
10	Maple Story	MMO RPG	Micro-transaction based	2.76%
11	Audition	Rhythm Action	Micro-transaction based	2.28%
12	MU Online	MMO RPG	Subscription based	2.11%
13	KartRider	Racing	Micro-transaction based	1.80%
14	Hangame Matgo	Gamble	Micro-transaction based	1.43%
15	DEKARON	MMORPG	Micro-transaction based	1.07%

Feb. 1, 2008, <http://www.gamechart.co.kr>
(information from 200,000 PCs in 5,000 internet cafes)

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Micro-transaction : Success Factors

- Low barrier to entry*
- Choice / low switching cost*
- Customization*
- Various online games of various genre
- Expanding game market

•In the article of the GAMSUTRA on Feb. 2007, "Q&A : Nexon America Talks *Maple Story*" :
http://www.gamasutra.com/php-bin/news_index.php?story=12928

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Micro-transaction : Success Factors

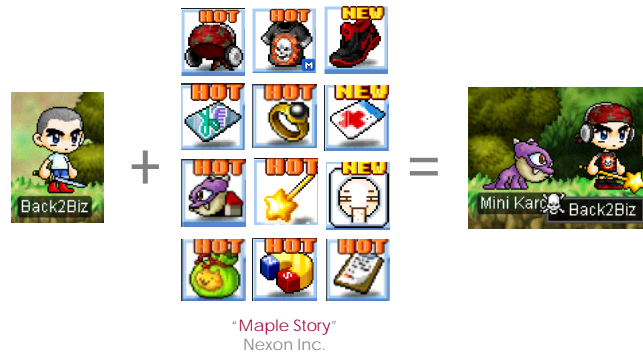
- Low barrier to entry*
 - Allowing gamers to enjoy rich online experiences without the financial and psychological burden of upfront fees.
- Choice / low switching cost*
 - Players do not have to choose between one subscription game over another.

•In the article of the GAMSUTRA, "Q&A : Nexon America Talks *Maple Story*" :
http://www.gamasutra.com/php-bin/news_index.php?story=12928

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Micro-transaction : Success Factors

- Customization*
 - Item selling games give a player an opportunity to be different and create avatars that better reflect themselves online.



• In the article of the GAMSUTRA, "Q&A : Nexon America Talks Maple Story" :
http://www.gamasutra.com/php-bin/news_index.php?story=12928

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Micro-transaction : Success Factors

- Various online games of various genre
 - Expanding genre from traditional MMORPG into casual-style online games
 - New motivation to developers who are sick and tired of developing MMORPGs



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Micro-transaction : Success Factors

- The weapon to fight against major game companies
 - Casual-style game + free to play and pay for in-game items.
 - Startup Companies



"Maple Story"
Wizet Corp.



"Audition"
T3 Entertainment



"Grand Chase"
KOG Studios



"GetAmped"
WindySoft

- Semi-established companies



"Free Style"
JC Entertainment



"MaguMagu"
AniPark



"Dungeon and Fighter"
Neople



"Sudden Attack"
GameHigh

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Game Survey : QuizQuiz(Qplay)



- The first micro-transaction based online game in Korea
 - Developer : Nexon (MPLAY)
 - The first graphical quiz solving online game
 - Game launching on Oct. 1999
 - Apr. 2001 : selling in-game items
 - Avatar sales revenue (accumulation)
 - 10 billion KRW (~ Oct. 2002), 40 billion KRW (~ Jan. 2007)
 - # of CCUs
 - 350,000 CCUs in Korea (Feb. 2002), 700,000 CCUs in China (Sep. 2004)
 - 80,000+ CCUs, now
 - 38 million active game accounts in Korea (Oct. 2007)



(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Casual-style action

	Maple Story	GetAmped	Grand Chase	Dungeon and Fighter	Record of Lunia War
					
Developer	Nexon Inc.	Windy Soft	KOG Studios	NeoPle	Allm
Publisher	Nexon Inc.	Windy Soft	Nexon Inc.	NHN Corp.	Nexon Inc.
Release date	Apr. 2003	May. 2003	Jul. 2003	Aug 2005	Jun. 2006
(Maximum) # of CCUs	240,000(on Dec. 2007)	50,000(on Mar. 2006)	25,000+(2005)	150,000(2007)	30,000(2006)
Payment Model	Micro-transaction	Micro-transaction	Micro-transaction	Micro-transaction	Micro-transaction
Item Prices	50KRW ~ 13,000KRW	600KRW ~ 3,800KRW	500KRW ~ 14,000KRW	200KRW ~ 19,900KRW	100KRW ~ 12,900KRW
Sales	17 million USD (on Feb. 2006)	20 billion KRW (2006)	Monthly 500 ~ 600 million KWR(2006)	Monthly average 200 million KWR	(unknown)
Visual					

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : "Maple Story"

- Game data
 - The first side-scrolling 2D online game(MMORPG)
 - First released in April, 2003 in Korea
 - Highly popular among teenagers in Korea (68% under age 15)
 - Over 60 million subscribers worldwide, reached 240,000 CCUs in Korea (Jan. 2008)
 - Global presence in 60 countries: Korea, Japan, China, Taiwan, Singapore, Malaysia, USA, Thailand, Europe
 - Feb. 2006 : Recording 16 billion KRW (approx. 17million USD) in monthly worldwide revenue

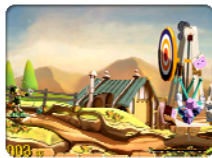


(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : "Grand Chase"

- Game data
 - The first original PvP based online fighting game in Korea.
 - Launching date : Jul. 2003
 - Global presence in 5 countries
- The Company, "KOG Studios"
 - Date of Establishment : May.13, 2000
 - Full-time staff : 80 persons
 - 2007 Total sales : 8 billion KRW (expected revenues)



(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Sports

	Magumagu	FIFA Online	FreeStyle	PangYa
				
Developer	AniPark	EA	JC Entertainment	NTREEV Soft
Publisher	CJ Internet	NeoWiz Games	JC Entertainment	Hanbit Soft
Release date	Mar. 2006(OBT)	May. 2006(OBT)	Nov. 2004(OBT)	Apr. 2004
(Maximum) # of CCUs	10,000(on Apr. 2007)	80,000(on Mar. 2006)	25,000+(2005)	150,000(2007)
Payment model	Micro-transaction	Micro-transaction	Micro-transaction	Micro-transaction
Item prices	400KRW ~ 29,000KRW	500KRW ~ 24,900KRW	500KRW ~ 3,700KRW	200KRW ~ 8,400KRW
Sales	1 billion KRW (on Apr. 2007)	3 billion KRW (on Oct. 2006)	28 billion KRW (2006, Worldwide)	30 billion KRW (for 30 months)
Visual				

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Vehicle-racing

	KartRider	Skid Rush	RayCity
			
Developer	Nexon Inc.	NHN Corp.	J2M Soft
Publisher	Nexon Inc.	NHN Corp.	NeoWiz Games
Release date	Jun. 2004(OBT)	Jan. 2007(OBT)	Nov. 2006(OBT)
(Maximum) # of CCUs	220,000(on Apr. 2005)	(unknown)	(unknown)
Payment model	Micro-transaction	Micro-transaction	Micro-transaction
Item prices	500KRW ~ 9,900KRW	700KRW ~ 14,000KRW	300KRW ~ 14,800KRW
Sales	100 billion KRW until May 2006	(unknown)	(unknown)
Visual			

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : "KartRider"






- Launching data
 - Mar. 2004 : Game Release
 - Jun. 1, 2004 : Open testing
 - Aug. 18, 2004 : Item-selling system launched
- Development data
 - Development periods : 19 months (Nov. 2002 ~ Jun. 2004)
 - Development cost : 4 billion KRW
- Game date
 - The most-played online game in Korea : 16 million subscribers (1/3 of population)
 - 130 million subscribers, reached 800,000 CCUs in China (Sep. 2006)
 - KRW 100 billion in sales until 2006



(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Shooting

	Sudden Attack	Special Force	A.V.A	GUNZ Online
				
Developer	Game High	DragonFly	RedDuck	CJ Internet
Publisher	CJ Internet	NeoWiz Games	NeoWiz Games	NHN Corp.
Release date	Aug. 2005(OBT)	Jun. 2004(OBT)	Jul. 2007(OBT)	May 2005(OBT)
(Maximum) # of CCUs	210,000(on Feb. 2007)	130,000	(unknown)	50,000(on Mar. 2005)
Payment Model	Micro-transaction	Micro-transaction	Micro-transaction	Micro-transaction
Item Prices	1,000KRW ~ 17,500KRW	500KRW ~ 16,500KRW	900KRW ~ 14,500KRW	400KRW ~ 7,200KRW
Sales	4 billion KRW (on Feb. 2007)	10 billion KRW (to Jul. 2004)	(unknown)	(unknown)
Visual				

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Rhythm-action

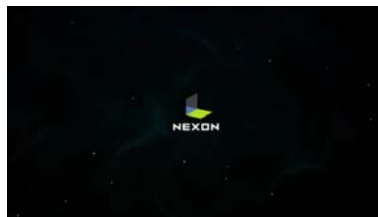
	Audition	R2Beat	O2Jam	AstroRanger	EZ2ON
					
Developer	T3 Ent.	Seed9 Ent.	O2Media	Biscuit Soft	RETRO Games
Publisher	yedang online	NeoWiz Games	O2Media	SamSung Elec.	RETRO Games
Release date	Oct. 2004(OBT)	Sep. 2005(OBT)	Nov. 2002(OBT)	Sep. 2007(OBT)	Nov. 2007(OBT)
(Maximum) # of CCUs	30,000+	(unknown)	28,000(on Dec. 2003)	(unknown)	5,000(on Dec. 2007)
Payment Model	Micro-transaction	Micro-transaction	Micro-transaction	(not fixed)	(not fixed)
Item Prices	300KRW ~ 9,900KRW	600KRW ~ 6,400KRW	300KRW ~ 3,300KRW	(not fixed)	(not fixed)
Sales	3 billion KRW (on Aug. 2006)	(unknown)	250 million KRW (on Jan. 2004)	(Free open, now)	(Free open, now)
Visual					

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Micro-transaction in MMORPG

- Changing payment policy into micro-transaction
 - Aug. 1, 2005, free play of 5 MMORPGs
 - 'The Kingdom of the Wind', "Legend of darkness", "Elancia", "Asgard", and " Tales Weaver"
 - Changing into micro-transaction (free to play and pay for in-game items) from subscription fee based model



"The Kingdom of Winds"
Open on Apr. 1996



"Legend of Darkness"
Open on Oct. 1997



"Elancia"
Open on Nov. 1998



"Asgard"
Open on Nov. 2001



"Tales Weaver"
Open on Nov. 2002

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Game Survey : Micro-transaction in MMORPG

- The Results
 - Aug. 4, 2005
 - Maximum # of CCUs is 180,000+
 - "The Kingdom of the Winds"
 - Maximum # of CCUs is 90,000+
 - "Asgard" and "Tales Weaver"
 - The # of CCUs are growing 100% - 200% from a month ago
 - Aug. 7, 2005
 - "Tales Weaver"
 - 40,000+ CCUs, growing 100% from a month ago
 - Aug. 16, 2005
 - "Asgard"
 - 27,000+ CCUs, growing 120% from a month ago
 - Aug. 19, 2005
 - "The Kingdom of the Winds"
 - Recording 110,000 Maximum # of CCUs .
 - Later,
 - "The Kingdom of the Winds"
 - Recording 130,000 Maximum # of CCUs .

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Game Survey : Micro-transaction in MMORPG

- MMORPGs in Other companies



"Priston Tale"
yedang online
Free play on Nov. 8, 2005
(Before, 25,000 KRW per a month)



"RF Online"
CCR Inc.
Free play on Sep. 27, 2006
(Before, 16,500 KRW per a month)



"Granado Espada"
Imc GAMES
Free play on Nov. 19, 2006
(Before, 19,800 KRW per a month)



"Legend of Mir 2, 3"
WeMade Entertainment Co.
Free play on Jun. 19, 2007
(Before, 27,500 KRW per a month)

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

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Game Survey : Micro-transaction in MMORPG

- Launching MMORPG with free of charge



"SUN Online"
WEBZEN Inc.
Open testing from Nov. 14, 2006
Sales in-game items from Nov. 19, 2006



"ZERA"
Nexon Inc.
Opening testing from Feb. 15, 2006
Sales in-game items from Aug. 25, 2006



"Atlantica"
NDOORS Corp.
Free play from Jan. 9, 2008
Sales in-game items from Jan. 28, 2008

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Game Survey : Micro-transaction in MMORPG

- Monthly subscription fees in Korea

Game Title(Developer)	Subscription Fee (Monthly Fee)
Lineage(NCSoft)	29,700 KRW
Lineage 2(NCSoft)	29,700 KRW
Mu Online(WEBZEN)	27,500 KRW
Ragnarok Online(GRAVITY)	22,000 KRW
World of Warcraft(Blizzard Entertainment)	19,800 KRW
Uncharted Waters Online(KOEI)	19,800 KRW
Mabinogi Online(Nexon)	18,480 KRW
Guild War(NCSoft)	9,900 KRW

- "World of Warcraft" subscription fee change

WOW	1 month fee	3 months fee
Jan-2005	24,750 KRW	64,900 KRW
Apr-2006	24,750 KRW	59,400 KRW
Apr-2006	19,800 KRW	47,520 KRW

(Note : 940 KRW ≈ 1 USD, 1 Billion KRW ≈ 1.06 Million USD)

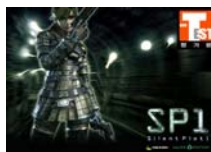
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Game Survey : Micro-transaction in MMORPG

- MMORPG on 2008(domestic)



"WarLord"
NEOWIZ Games
Open testing



"SP1"
SilverPortion Inc
Closed tested



"AION"
NCSoft Corp.



"ChangChun Online"
WeMade Entertainment
Open testing

- MMORPG on 2008(foreign)



"The Lord of the Rings
Online"
Turbine Inc.



"WarHammer Online"
Mythic Entertainment



"Dynasty Warriors Online"
KOEI CO.



"Dragon Ball Online"
BANDAI

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Game Design: Analysis of Micro-transaction

- How to buy items in a game?
 - Shop on Website: Players can buy items with cash.
 - Shop in Game: Players can buy items with cash and in-game money.



(Shop on the website of "Grand Chase")



(Shop in the game of "Grand Chase")

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Game Design: Analysis of Micro-transaction

- Premium elements in micro-transaction games
 - Items
 - Users purchase items and use it in the game
 - **Types:** Accessories, special items, characters, weapons, pets, etc
 - **Duration:** Consumable, fixed-term, or permanent
 - The durability of an item is determined by the item's function.
 - **example:** Items in "Maple Story"



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Game Design: Analysis of Micro-transactions

- Premium elements in micro-transaction games
 - Services
 - Various premium services can be offered.
 - Don't have direct effects on the balance of games.
 - **Types:** game modes, tools, mini games, quests etc
 - **Duration:** Fixed-term
 - **Example:** Special quests in "Grand Chase"



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Game Design: Analysis of Micro-transaction

- Pre-paid game points
 - Game players purchase game points through various vendors and consume the points by purchasing game elements online.
 - Features:
 - Pre-paid game point system allows game players to buy game elements of provider's entire online games. by purchasing and spending this ubiquitous currency.
 - Game points purchased online allow players to use diverse payment methods.



(Various payment methods in "GetAmped")

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Game Design: Case Studies <Casual Games>

- "KartRider"
 - **Efficient Micro-transaction policy**
 - **Nexon Cash**
 - **Definition**

All the items sold in KartRider can be purchased by using Nexon Cash which is pre-paid.
Users can purchase Nexon Cash through various vendors.
 - **Advantages**

KartRider is targeted at younger players. Payment by credit card has age restrictions.
Users can purchase Nexon Cash through various vendors.

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Game Design: Case Studies <Casual Games>

- "KartRider"
 - **Efficient Micro-transaction policy cont.**



(Various Nexon Cash Cards)

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Game Design: Case Studies <Casual Games>

- "KartRider"
 - Efficient Micro-transaction policy cont.
 - Lucci
 - Definition

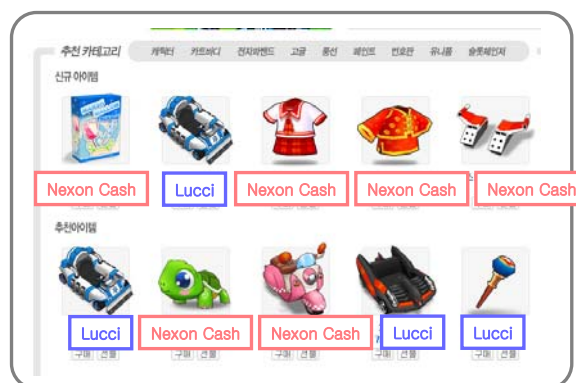
the game money earned in the game itself.
 - Separation of Nexon Cash items and Lucci items

The items that could be purchased with the Nexon Cash and Lucci are completely separate.

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Game Design: Case Studies <Casual Games>

- "KartRider"
 - Efficient Micro-transaction policy cont.

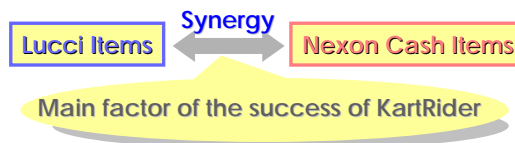


(Item shop of "KartRider")

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Game Design: Case Studies <Casual Games>

- "KartRider"
 - Efficient Micro-transaction policy cont.
 - Coexistence of Nexon Cash and Lucci
 - Games before "KartRider"
 - allowed players to purchase items with both types of moneys.
 - Side effect: Gap between the rich and poor
 - Solution of KartRider



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Game Design: Case Studies <Casual Games>

- "KartRider"
 - Balancing Nexon Cash and Lucci
 - Features of Nexon Cash Items
 - Ornaments for avatars
 - Provide a game advantage to the player.
 - Generally available for a limited period
 - Features of Lucci Items
 - Stylize the appearance of a kart
 - Special effects and enhancements
 - Objectives that players pursue

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Game Design: Case Studies <Casual Games>

- "KartRider"
 - Balancing Nexon Cash and Lucci cont.
 - Interaction between Cash items and Lucci items
 - Players purchase cash items to enhance their game abilities, in order to obtain Lucci and more easily raise their level.
 - Players buy more cash items because of the existence of Lucci items.



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Game Design: Case Studies <Casual Games>

- "KartRider"
 - Examples of items

Examples of Cash Items



(Plasma PT)

It has better capability than Lucci vehicles that lower level players can purchase, hence increasing the winning odds in the game.

It has an expiration date.



(Red Missile Balloon)

It is a decoration that can be mounted on the vehicle. Once this item is mounted it will automatically obtain Lucci when attacked by missiles.

It is consumable.

Examples of Lucci Items



(Lunar Rabbit)

It is an attractive vehicle which enhances the gaming capability of players and has a special function which deletes items that deter players during game.

It has a high price.

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Game Design: Case Studies <Casual Games>

- "Grand Chase"
 - Various currencies
 - Netmarble Cash
 - All the items sold in Grand Chase can be purchased by using Netmarble Cash which is pre-paid.
 - Users can purchase Netmarble Cash through various vendors.
 - GP
 - In-game currency
 - Point
 - Players can receive Points in proportion to the hours of continuous game play.
 - Point can be a motivation of continuous game play for players.

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Game Design: Case Studies <MMO RPGs>

- "Maple Story"
 - Optimal item design for micro-transactions
 - Nexon Cash Items
 - don't have direct effect on game play.
 - decorate player's avatar.
 - have various functions.
 - Messo Items
 - influence the balance of game play.
 - make player stronger.
 - hard to get.

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Game Design: Case Studies <MMO RPGs>

- "Maple Story"
 - Innovative item design
 - Accessories



- Pets and related items



- Permissions



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Game Design: Case Studies <FPSs>

- "Special Force"
 - Efficient Micro-transaction policy
 - Pmang Cash
 - Pre-paid game money used in "Special Force"
 - Players can buy items for many different games using Pmang Cash on the game portal site Pmang.com.
 - SP
 - In-game money earned during play

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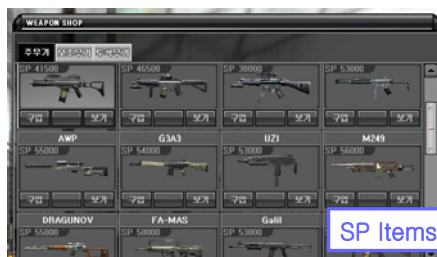
Game Design: Case Studies <FPSs>

- "Special Force"
 - Efficient Micro-transaction policy
 - Coexistence of Pmang Cash and SP
 - Relationship between Pmang Cash and SP
The relationship between Pmang Cash and SP is similar to that of Nexon Cash and Lucci.
 - Differences between Micro-transaction models of "KartRider" and "Special Force"
Pmang Cash items emphasize the capability to obtain SP.
An FPS game and a casual game have a different psychology.

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Game Design: Case Studies <FPSs>

- "Special Force"
 - Efficient Micro-transaction policy cont.
 - Coexistence of Pmang Cash and SP



(Weapon shop)



(Item shop on the web site)

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Game Design: Case Studies <FPSs>

- "Special Force"
 - Examples of items

Examples of Pmang Cash Items



(Double Up)

Once this item is purchased, SP earned will be doubled during game. Thus allowing players to earn SP more easily and buy better weapons.

It has an expiration date.



(Cross Hair)

It allows players to modify the form and color of aiming points.

It has an expiration date.

Example of an SP Items



(AN 94)

It is a main weapon during the game.

It has a high price.

Game Design: Case Studies <FPS>

- "TakeDown – The First Mission"
 - Completely separated item categories
 - Players can purchase weapons with in-game money.
 - Players can purchase special items with cash.







(Web page of the game)



(Screen of the game)

Game Design: Case Studies <FPSs>

- "TakeDown – The First Mission"
 - Examples of items

Special items	
	Special item to remove the player's record of runaways. If a player has the high rate of runaways, there will be no room to welcome him or her. So, this item can serve as a kind of passport to game rooms.
	Special item to shorten the time of respawning. With this item, players have the opportunity to gain more experience points and in-game money, because this item increases the in-play time.
	Special item to disguise the player's ranking. In General, MOFPS players tend to isolate low ranked players. Like the item that removes the player's record of runaway, this item can be a passport to game rooms.
	Special item to increase the experience point the player get when he or she wins a game.

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Game Design: Effective game design

- Relationship between cash items and in-game money items
 - Separate the two categories of items.
 - Cash Items and in-game money items are designed to facilitate sales of Cash item.
- **** Design priority: Sell Pre-paid Items**
 - Players buy Pre-paid Items to enhance their abilities, making it easier for them to earn Game Money and improve their levels. Their ultimate objective is to obtain Game Money Items. (In KartRider)



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Game Design: Effective game design

- Introduction to various systems for selling items
 - **Limited duration**
 - 1 day, 3 day, a week, a month, or a year depending on the price paid.
 - **Limited number of uses**
 - Single, 10 times, 30 times, or 100 times depending on the price paid.
 - **Bundle of items**



(Fantasy life club)



(Extra storage service)



(Support service)

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Game Design: Effective game design

- Sell items specialized in the game play of a game
 - designers should consider
 - Genre
 - Target audience
 - Customizability



(Items in "Pangya")



(License plate in "KartRider")



(Various items in "Maple story")

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Game Design: Effective game design

- Sell special cash items during corresponding events



(FIFA World Cup items in "KartRider")



(Christmas items in "Maple Story")

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Game Design: Effective game design

- Sell real money items that enhance the community
 - Item for community competitions
 - Emblems of a group
 - Equipment for a group



(Community items in "Sudden Attack")

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Game Design: Effective game design

- Game design specialized in Internet Cafes
 - Additional in-game money and Experience Points
 - Exclusive items for an internet café
 - Special game modes playable only at internet cafes



(Special character and kart in "KartRider")



(Additional experience points in "FIFA Online")

Conclusions: Micro-transactions in USA

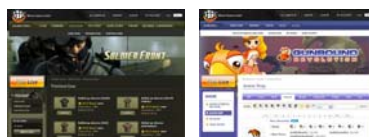
- KartRider & Maple Story & Audition



- Free Style



- Soldier Front & Gunbound



Conclusions: Outlook on Revenue Models

- The expansion of micro-transactions in online games is expected to change aspects of games development, such as game design, sales, distribution etc.
- Xbox 360, PlayStation 3, and Wii are all expected to use micro-transactions in distributing a variety of content and software online.
 - Marketplace "Xbox 360 -Xbox LIVE"
 - E-Distribution Initiative "PlayStation 3"



(Map Pack of "Call of Duty 3")



(Speed Pack of "PGR 3")

Thank you.

Q & A Session