

Emerging Trends in Games-as-a-Service

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www.GDCOnline.com

GDC¹¹
Online

Agenda

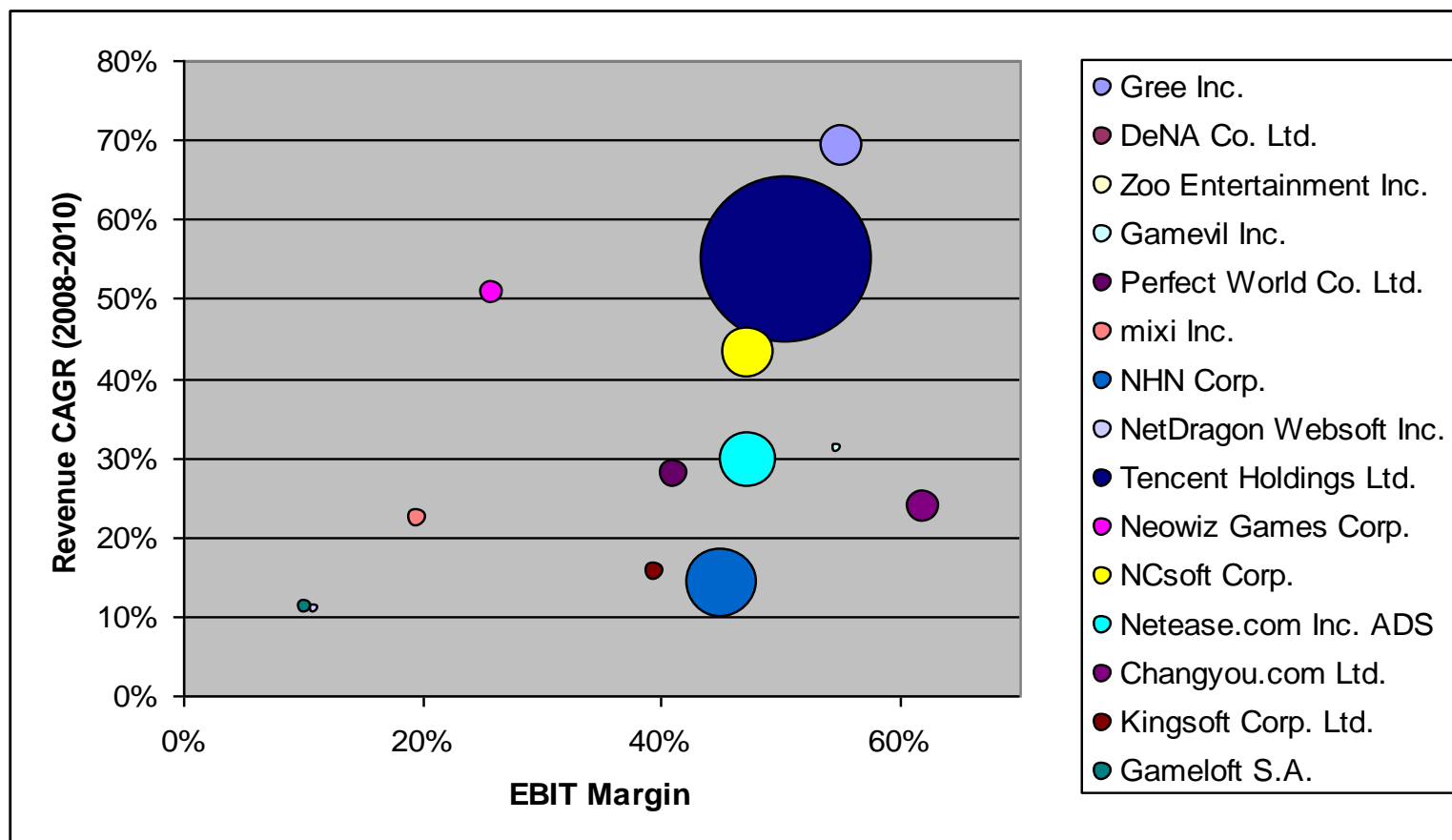
- Games-as-a-Service
 - Lines blurring between platforms; Tablets, Set-top boxes
 - Innovation by startups
- Virtual Goods
 - Perfect Price Discrimination
 - Enhance Community/Curb Piracy
 - Higher quality of earning (a) Predictability, (b) Lifetime Value
- Social Games
 - Vertical Games
 - Monetization (a) Conversion, (b) Advertising
 - Platforms dedicated for games
- Mobile Games
 - Rise of persistent games
 - Mobile an extension of other platforms
 - Dominated by a few?

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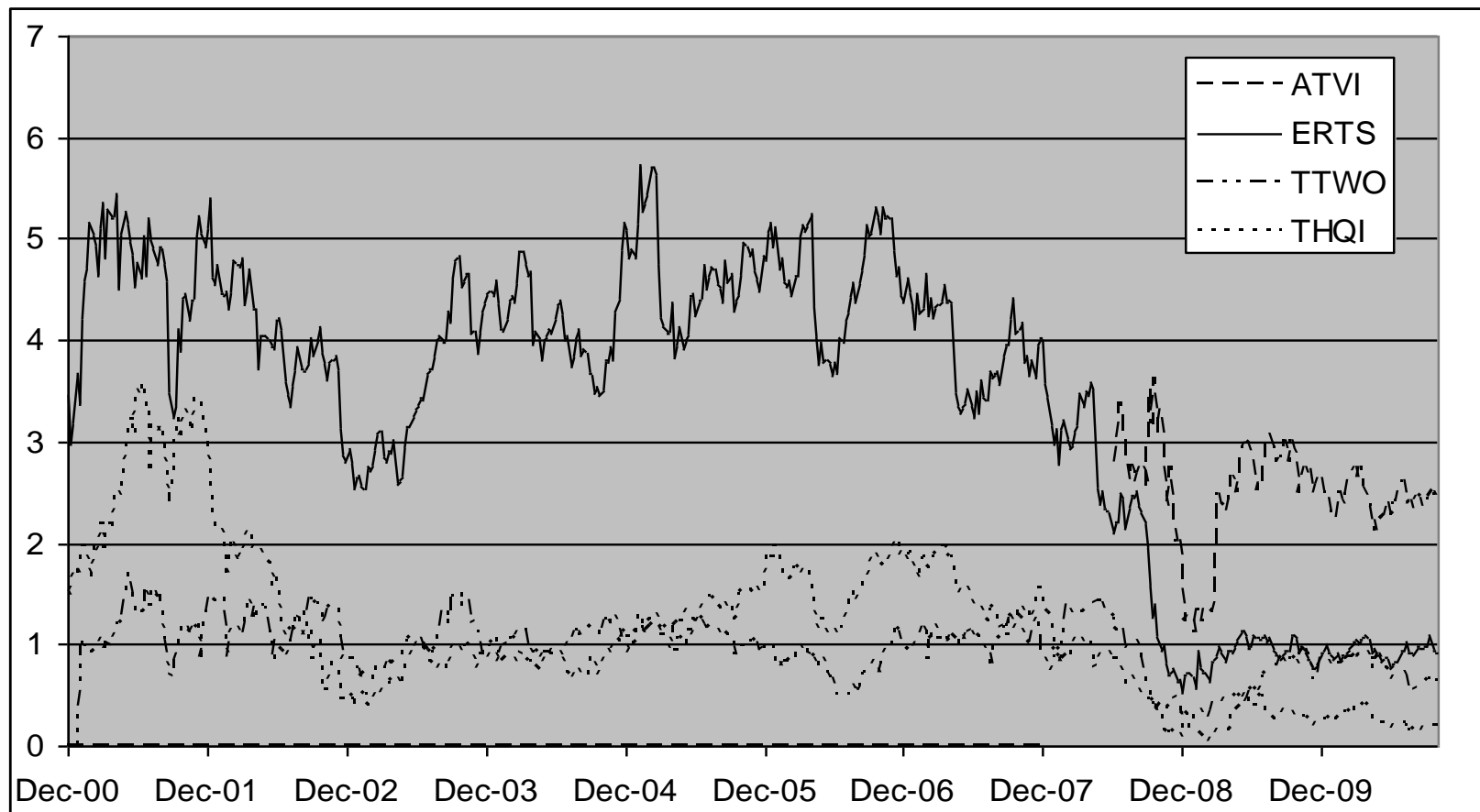
Top Companies By Revenue CAGR (2008-2010)

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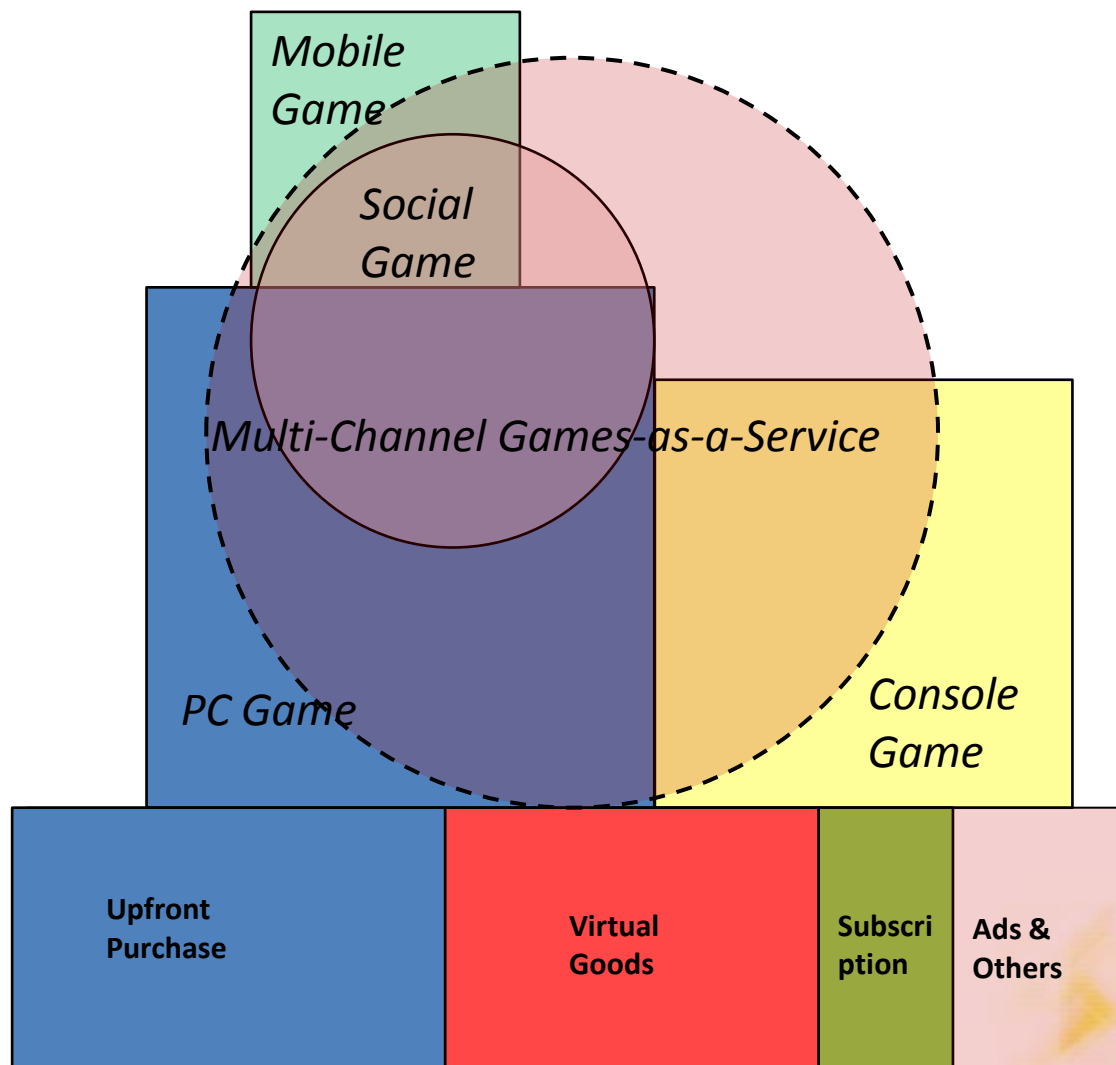
Source: FactSet

Enterprise Value/Sales Multiple U.S. Video Game Companies Shares



Source: FactSet

Emergence of Multi-Channel Games-as-a-Service

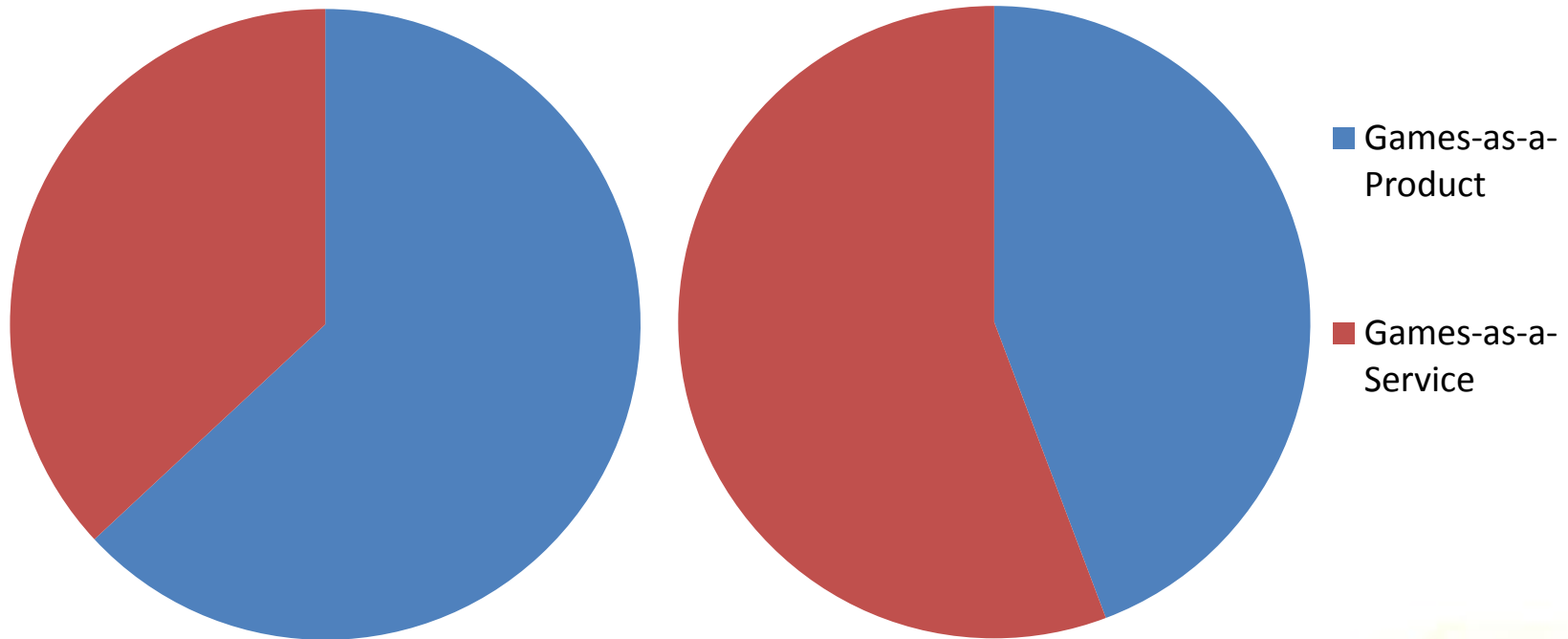


Source: LCM Research

Emergence of Games-as-a-Service

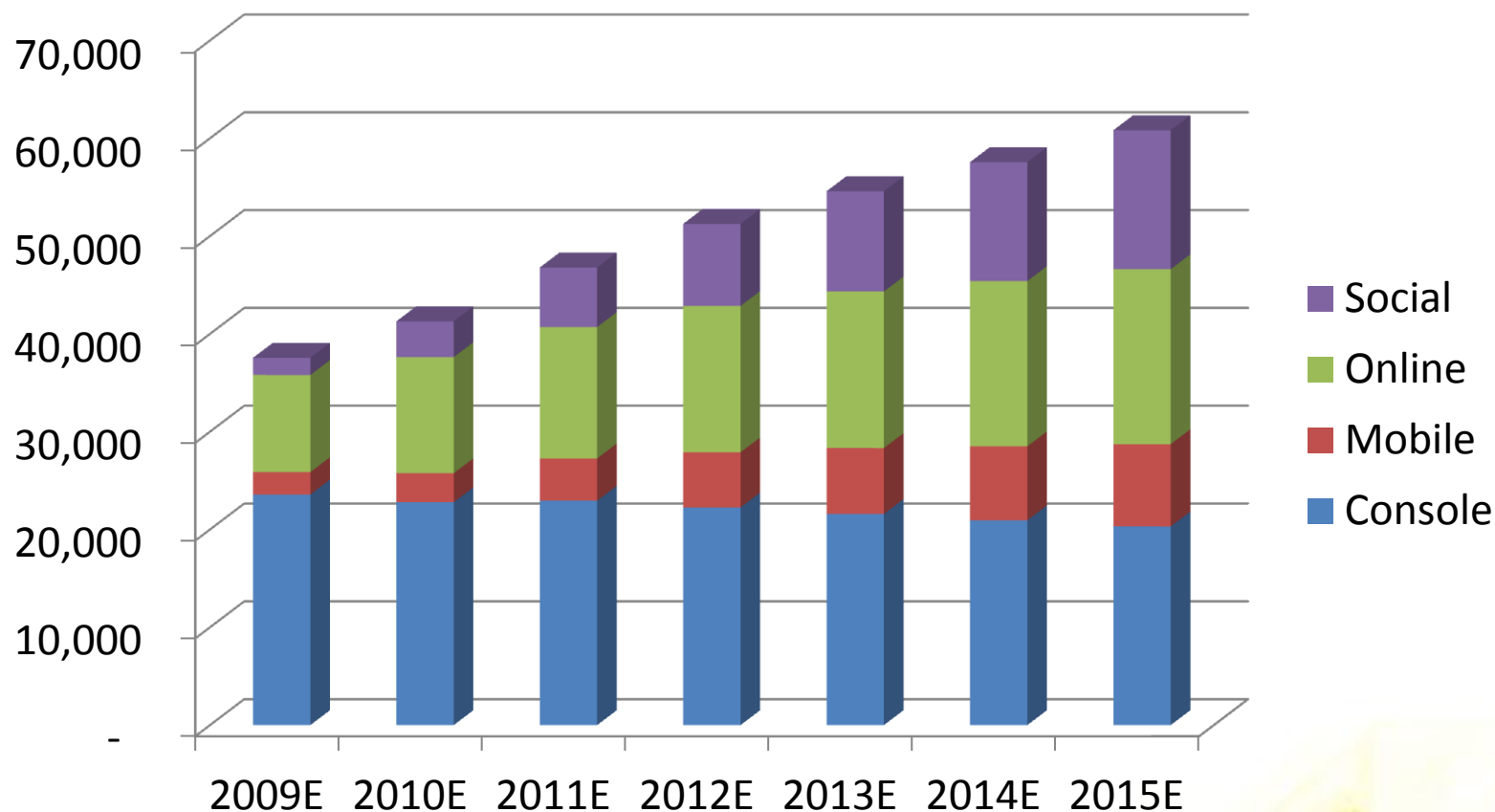
2010E

2015E



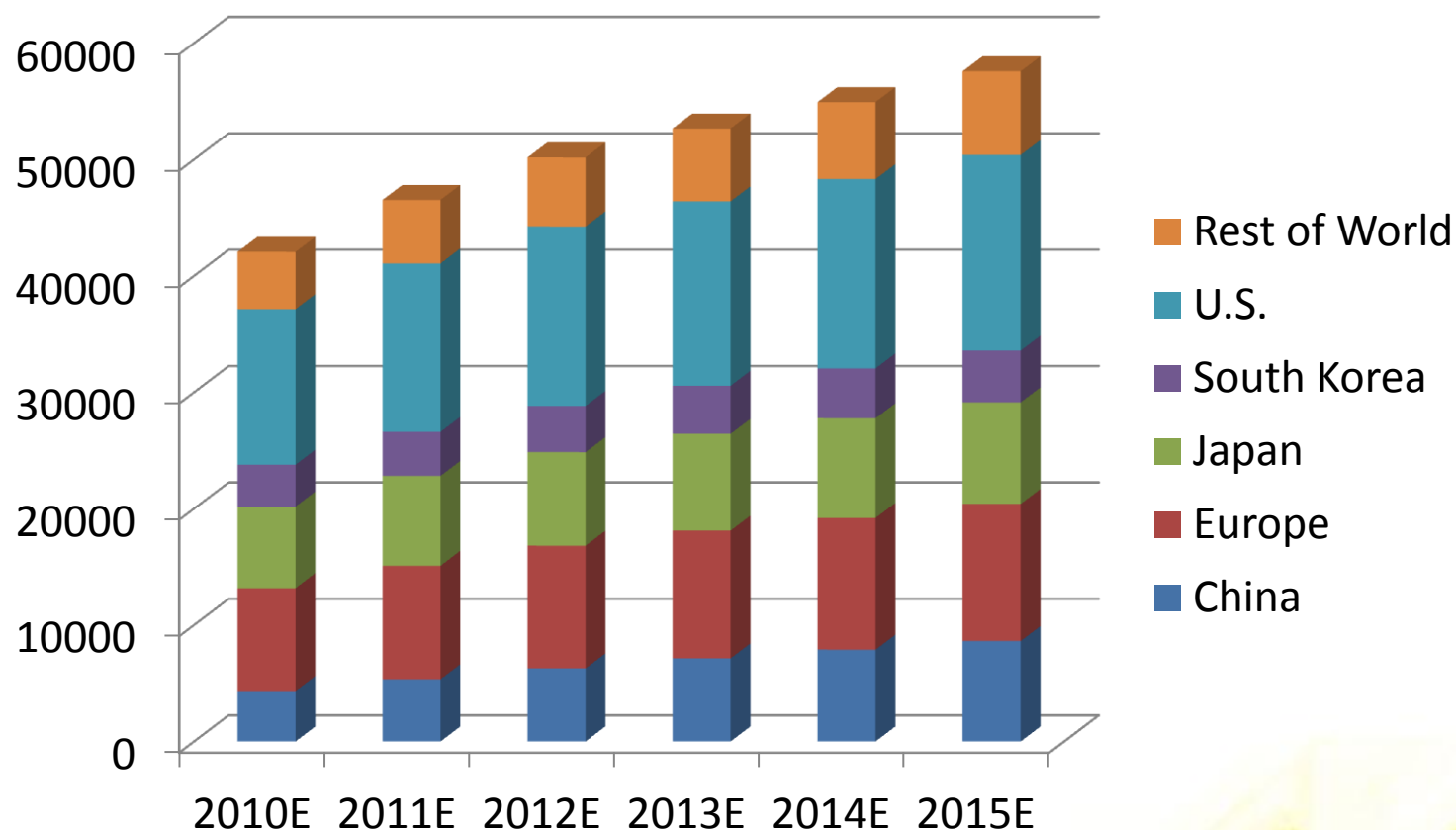
Source: LCM Research

Video Game Market Size Estimate (\$ Million)



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Price Discrimination



Sources: Unless otherwise noted, images on this and the following slides are courtesy of the respective companies' Websites.

Price Discrimination



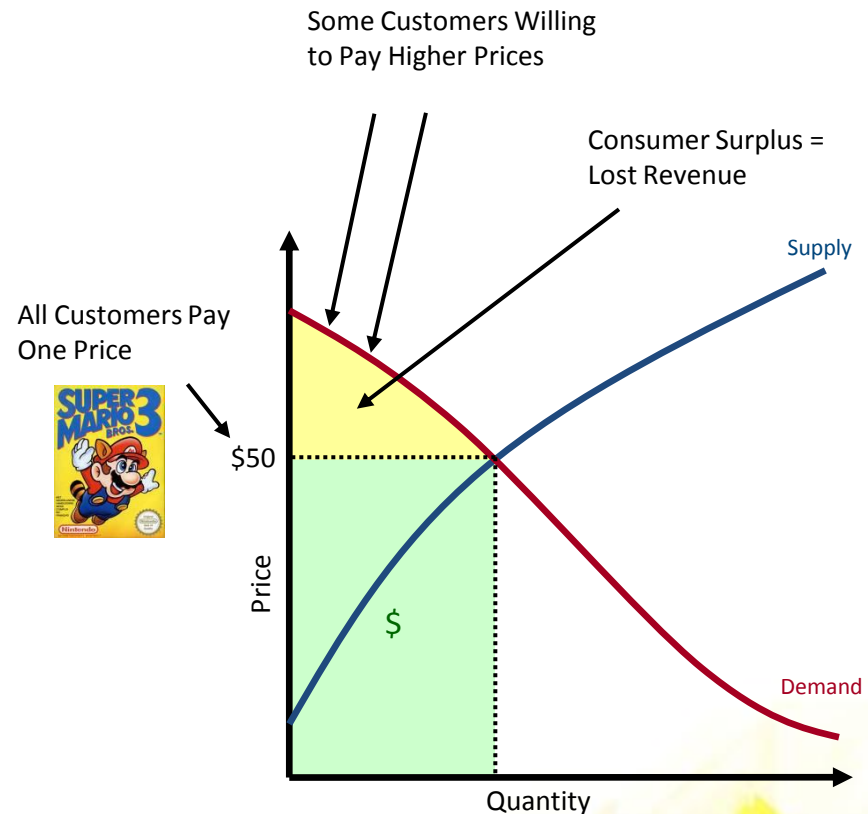
Source: Caroline Scott; <http://www.explorecrete.com/gallery/album19/donkey>
<http://www.smokymountainparkarabians.com/>

Price Discrimination



Traditional Models Represented Lost Economic Value

- Traditional gaming models didn't capitalize on the full spectrum of consumer demand
 - Game satisfaction and status were gained by beating levels with skill, not by personalization and purchased status symbols
 - Consumers who were willing to spend more on games weren't able to, outside of peripherals and merchandise
- Consumer surplus represented lost economic value for publishers



Source: LCM Research

Limited Editions and Map Packs Captured More Revenue

- “Limited” and “Collectors” Edition games made headway in price discrimination, capturing additional revenue
- While this price discrimination resulted in higher revenue, there were still relatively few options available for hardcore gamers
- Further, these options came at a higher cost for publishers:
 - Halo 3 “Legendary Edition” box included a large, physical plastic helmet
 - Map pack content has high production cost
- Yet the virtual model was proven: Map packs were only available digitally on XBOX Live, but 25% of players purchased them⁽²⁾
- Map packs had PR hype equal to that of the original Halo 3 release

Halo 3: Map Pack
Priced at \$15



Halo 3: “Limited Edition”
Price⁽¹⁾

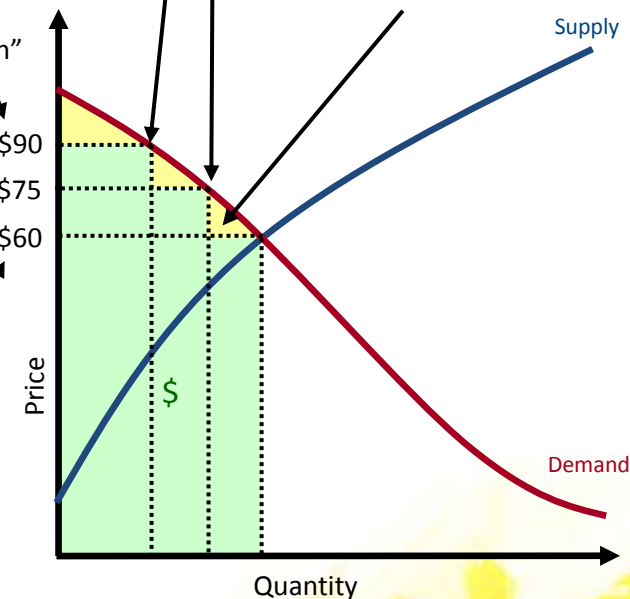


Halo 3:
Standard Pricing⁽¹⁾



Hardcore gamers could spend incrementally more, if desired

Yet Still, Lost Revenue

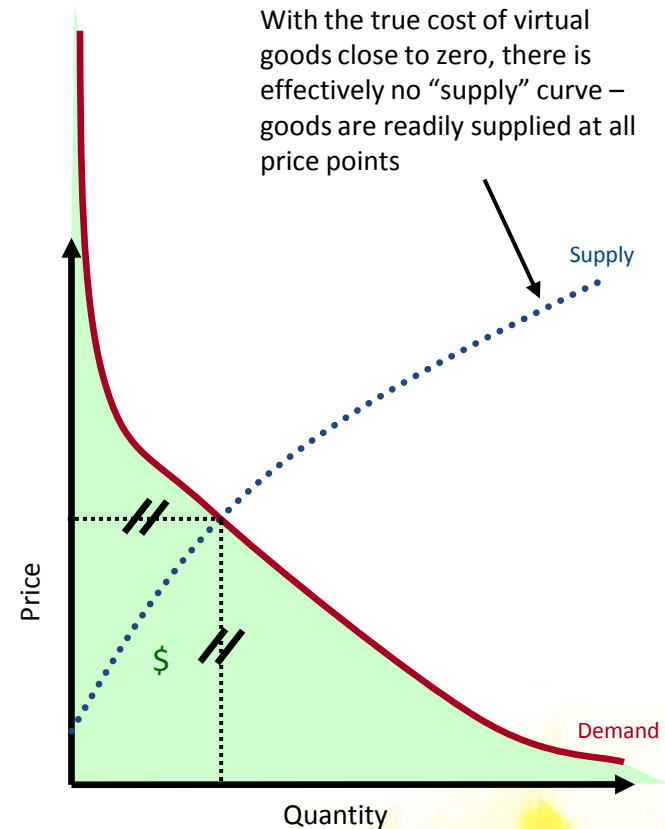


(1) Pricing is approximate.

(2) Source: Microsoft.

Virtual Goods Enable Perfect Price Discrimination

- While virtual map packs and Limited Edition physical media enable partial price discrimination, virtual goods enable perfect price discrimination for social games and MMOs
- Some “hardcore casual” gamers willing to spend \$10k+/month on virtual goods
- There is no “price” for the game
- In complex virtual economies, virtual goods (e.g. a \$100k space station in Entropia Universe) can generate significant revenue for their owners, representing more of an asset than an expense
 - Justifies high end purchases

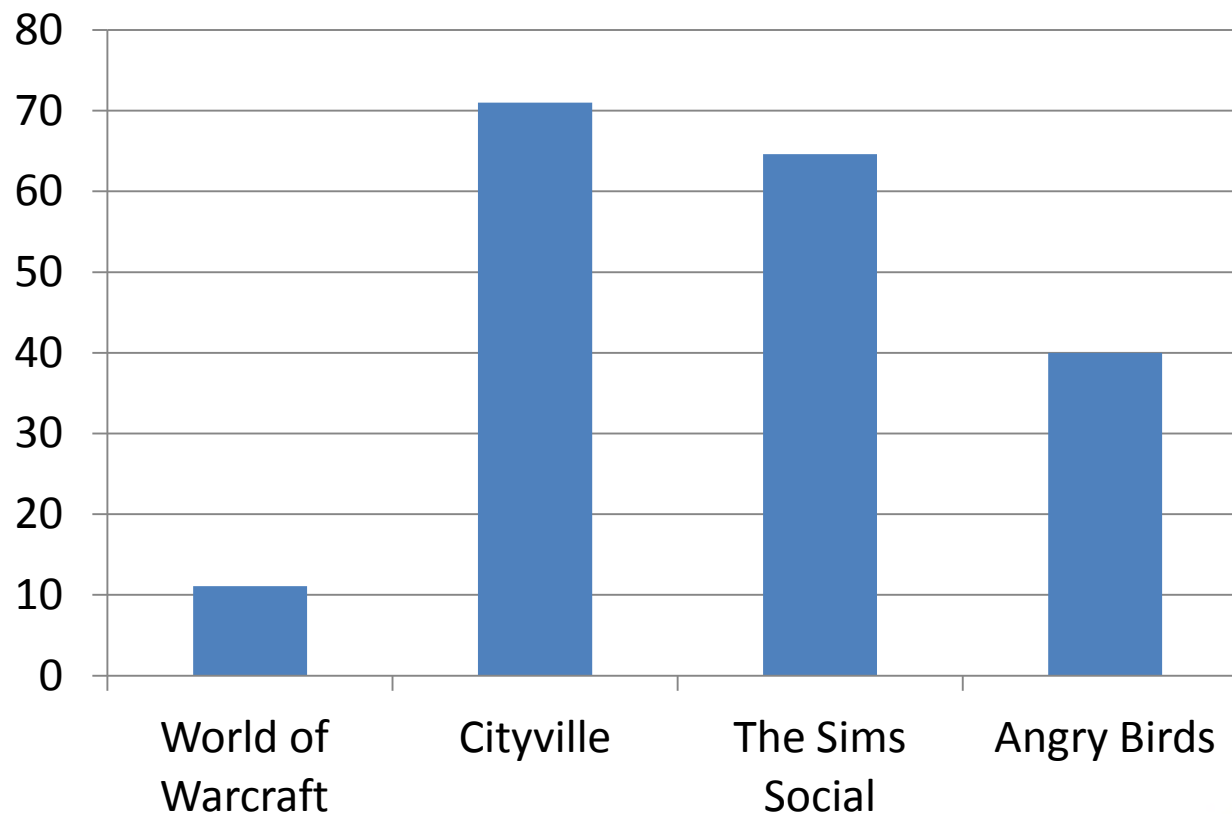




Source: <http://www.dealbreaker.com/images/entries/Pistol%20Pirate%20Bust.jpg>

<http://socialjusticenow.files.wordpress.com/2009/01/world-connect-people-community-international.jpg>

Build Community



Source: Company Reports, AppData, LCM Research

Everyone pays

PAY

1 X

10 X

Monetization
line

Big
spenders

Paying Users

Ads
Sponsors

Free Users

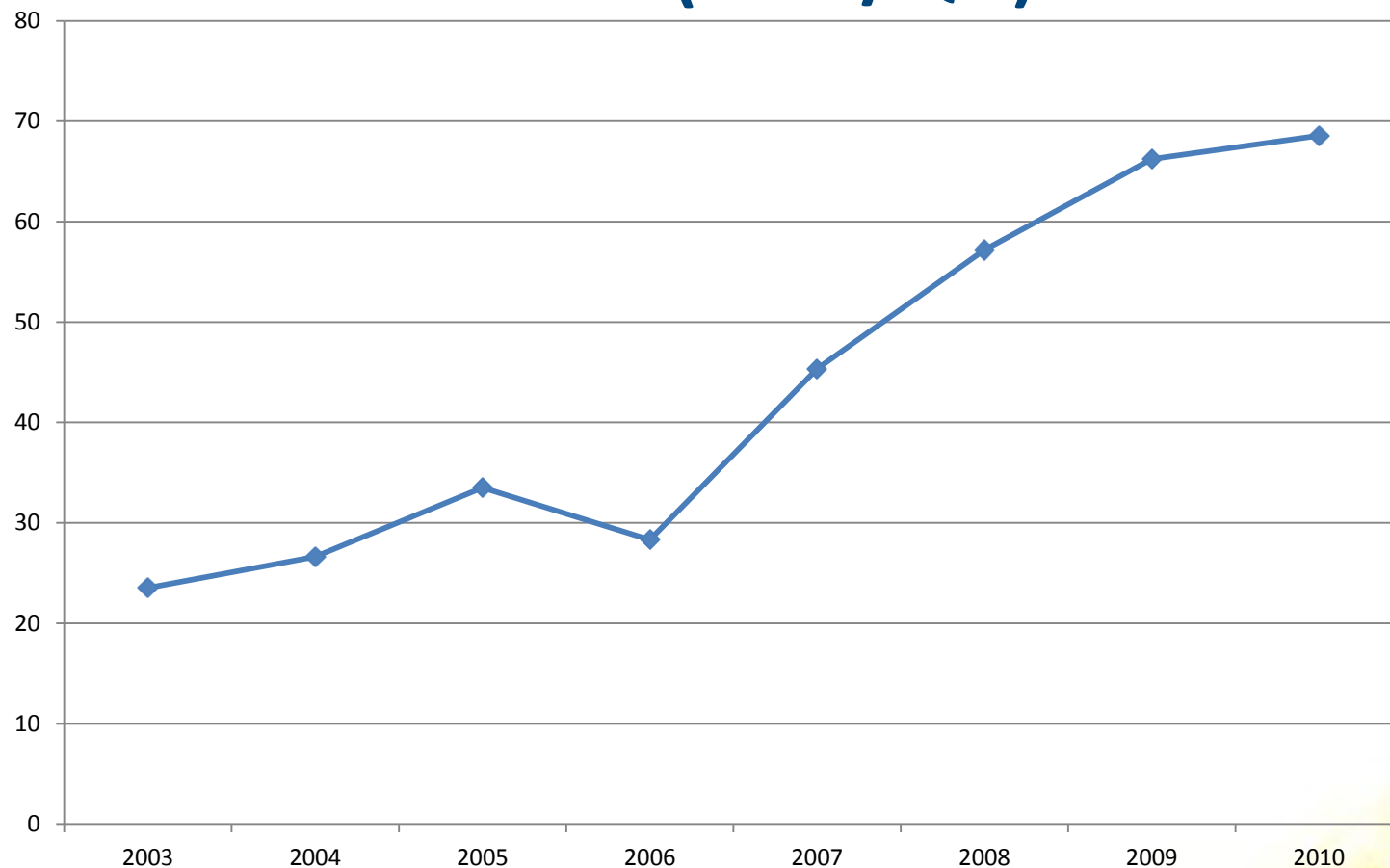
ARPU

\$100+

\$15

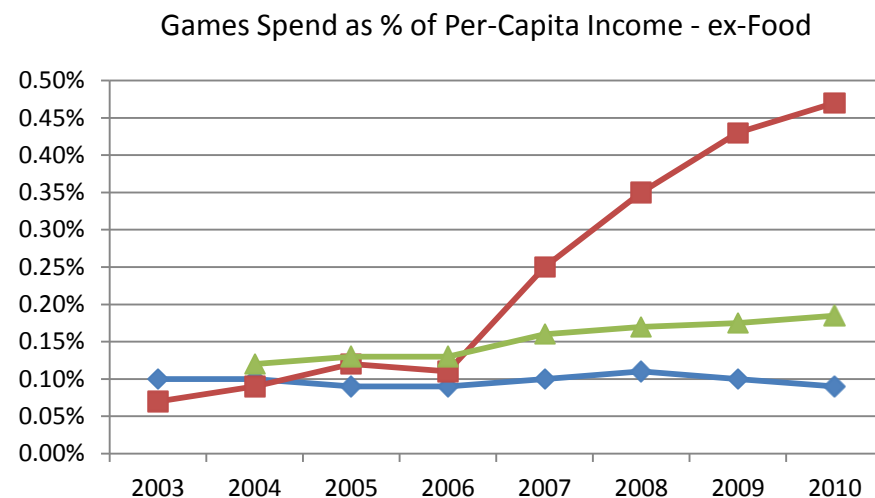
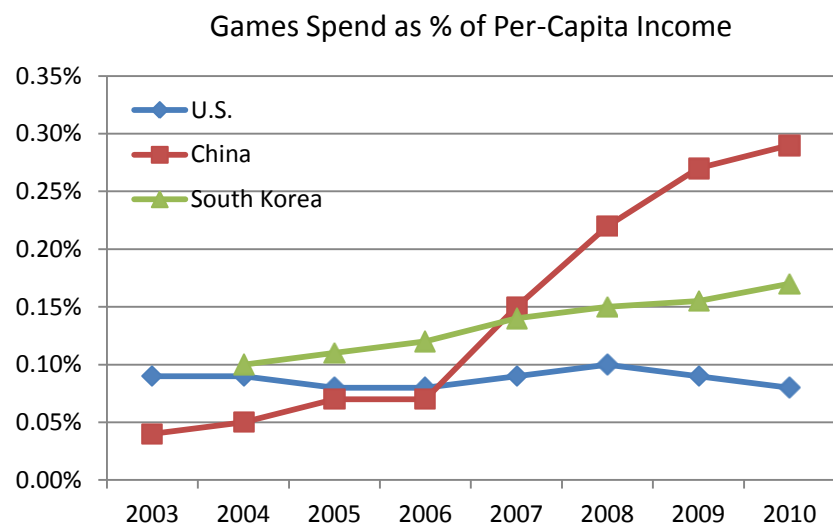
\$1

Longevity & Stickiness: Average Chinese Gamer ARPPU (RMB/Qtr)



Source: IDC, LCM Research

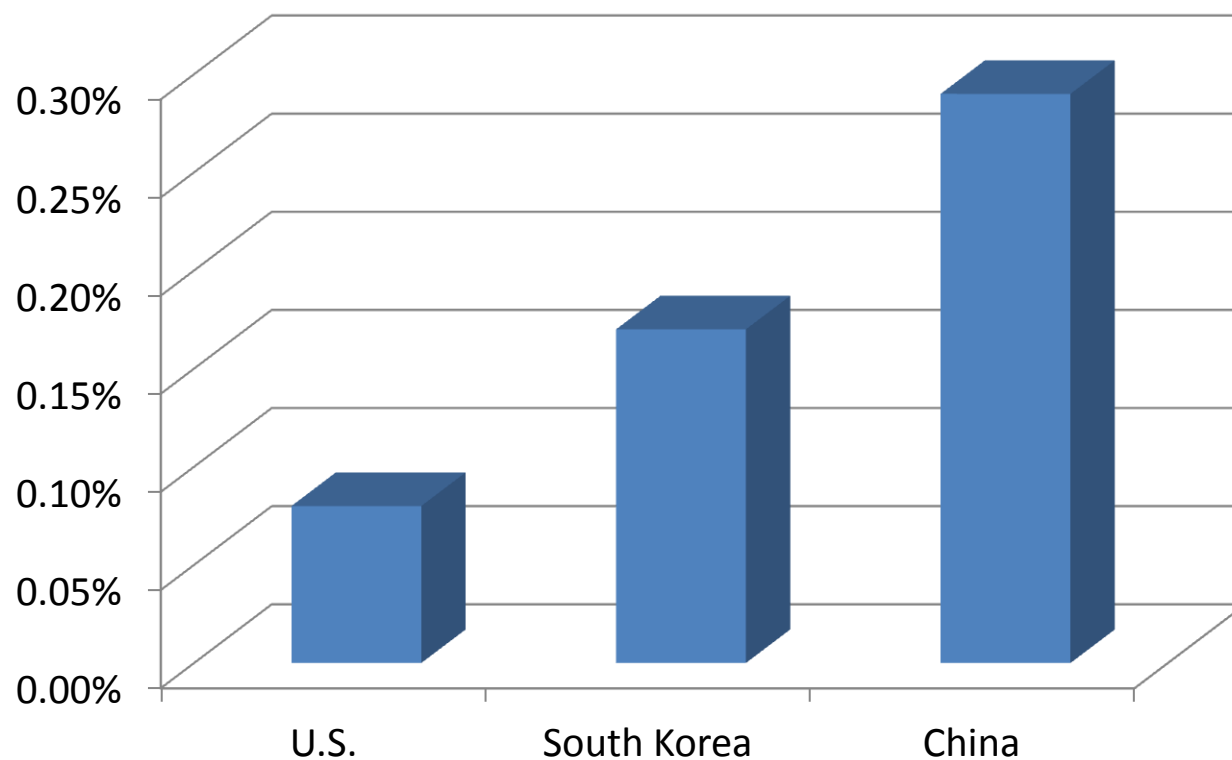
Game Spend As Percentage Of Per-Capita Income



Source: LCM Research

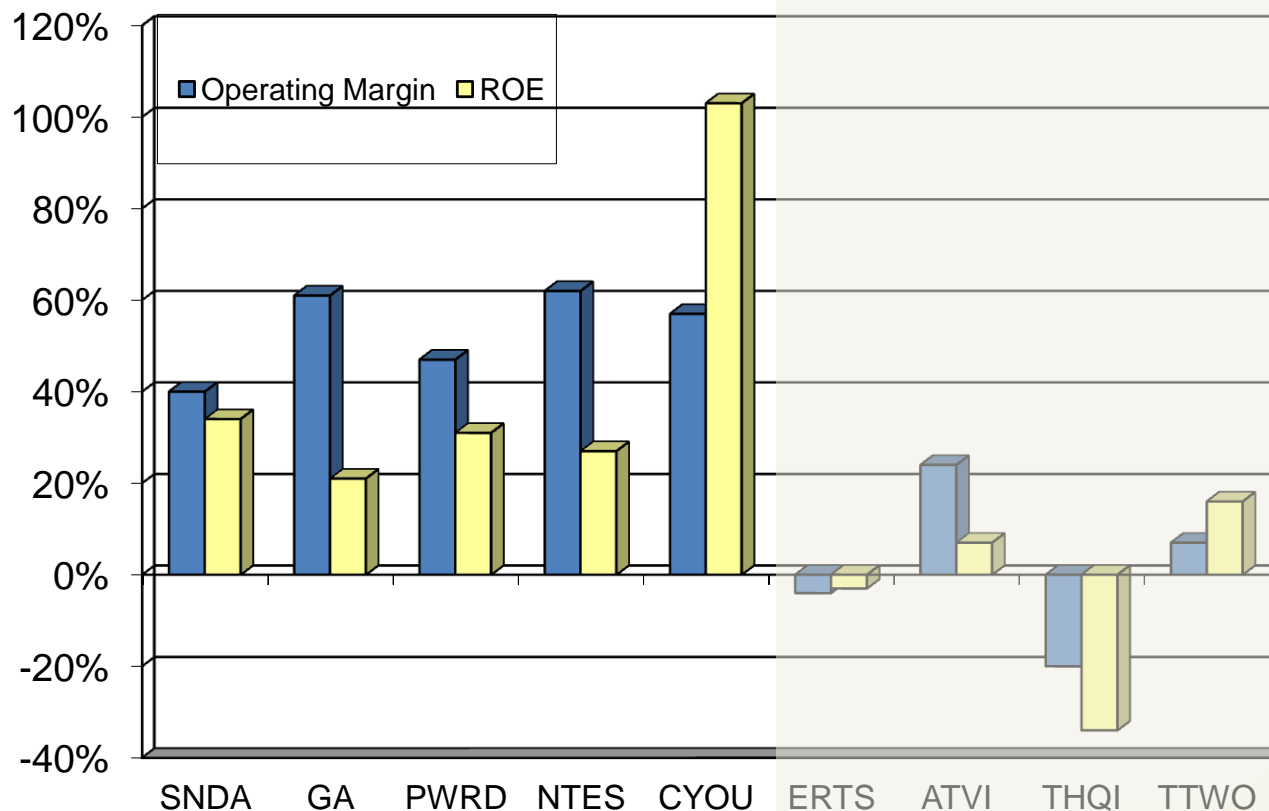
Players Willing To Spend More...

Games As % of Per Capita Income



Source: National Bureau of Statistics of China, Korea Game Development Institute, EuroMonitor International

...And The Vendors Are More Profitable



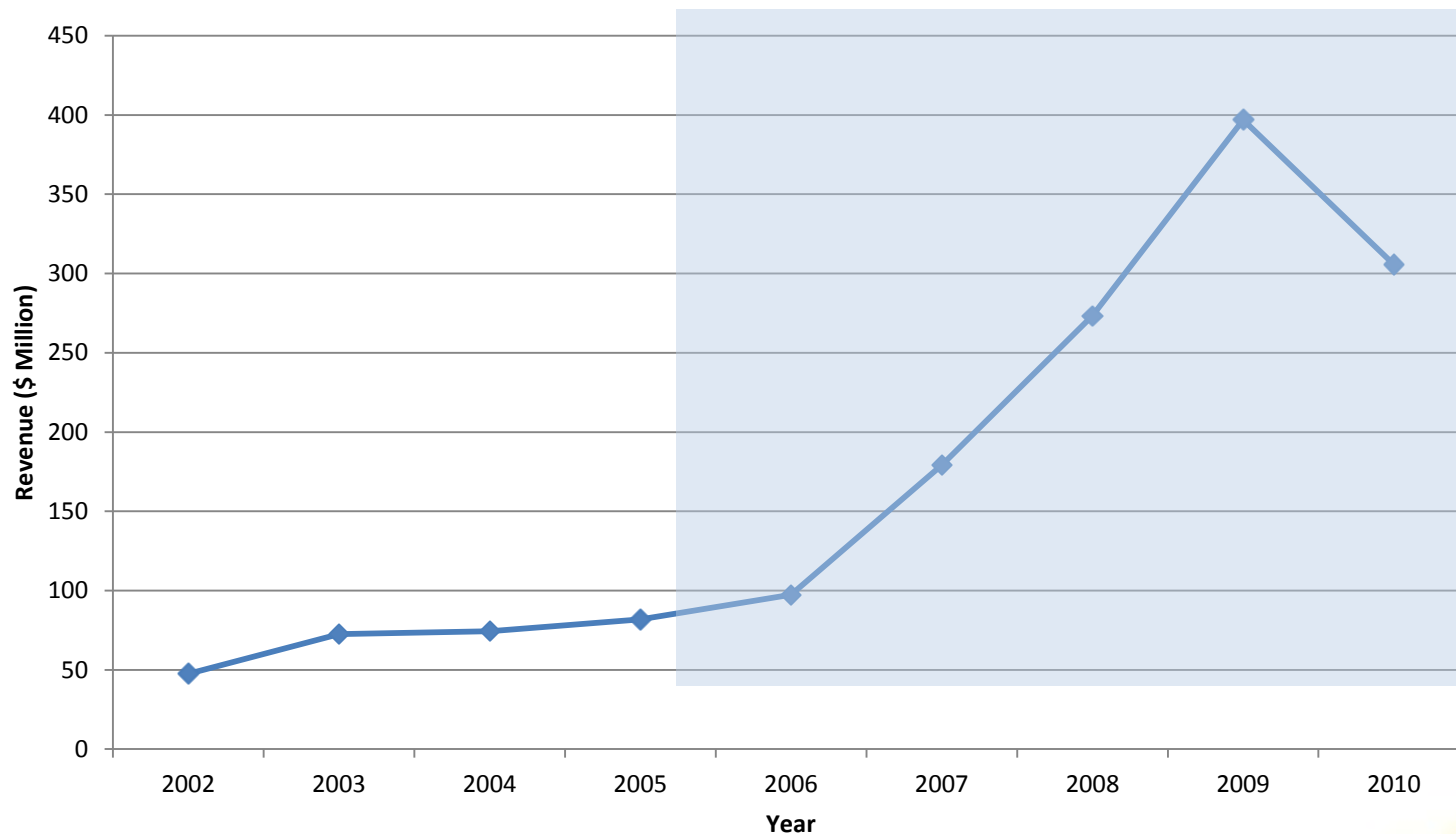
Source: Company Reports

Legend of Mir 2



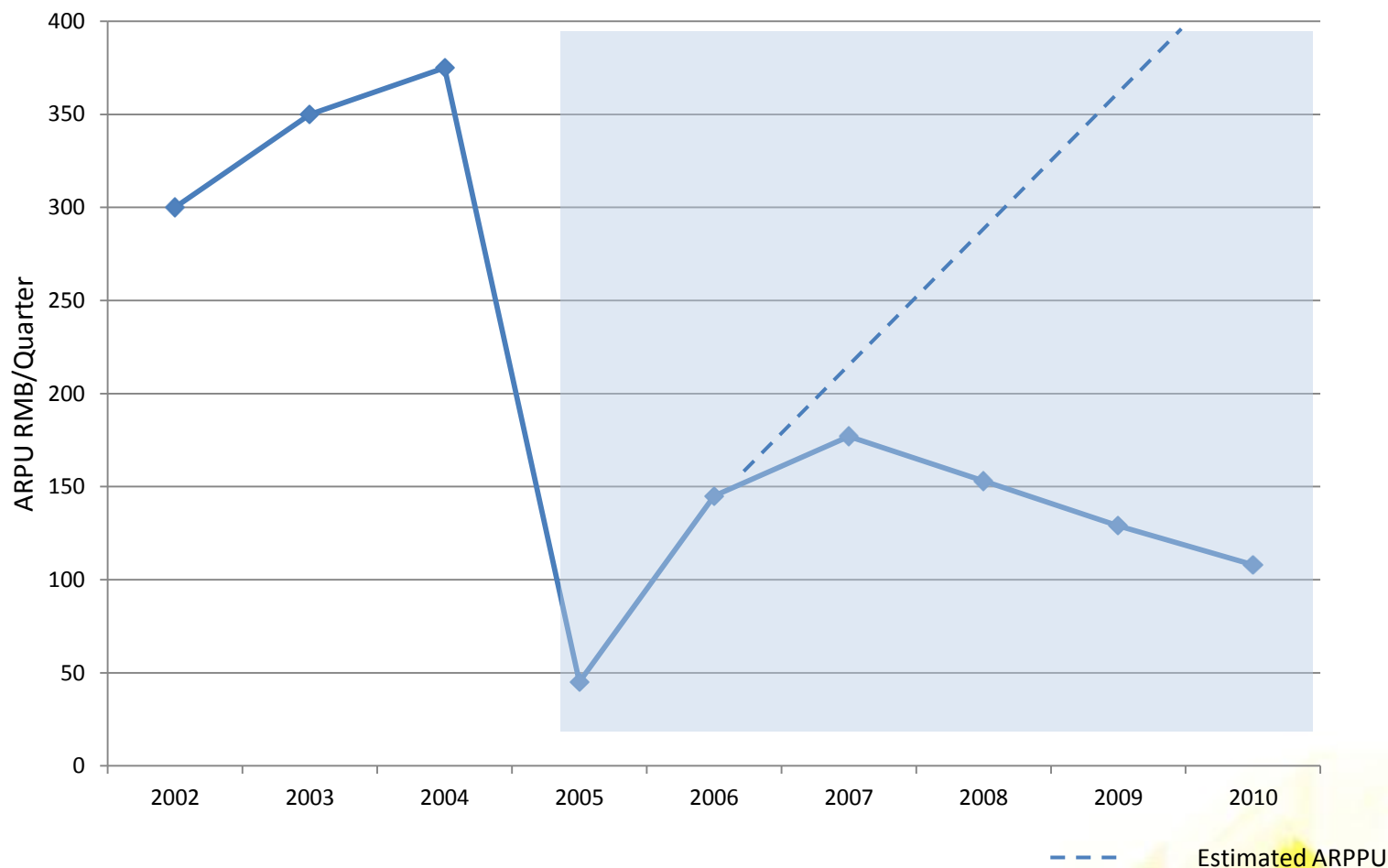
- 2D MMORPG, Martial Arts, Adventure
- Developed by Wemade, operated by Shanda
- Launched in China in 2001 under subscription based model
- Converted to free-to-play model in 2005
- PCU ~400-500K

Mir 2 Revenue's Growth After Model Change



Source: Company Reports

...And ARPPU Growth After Initial Kneejerk



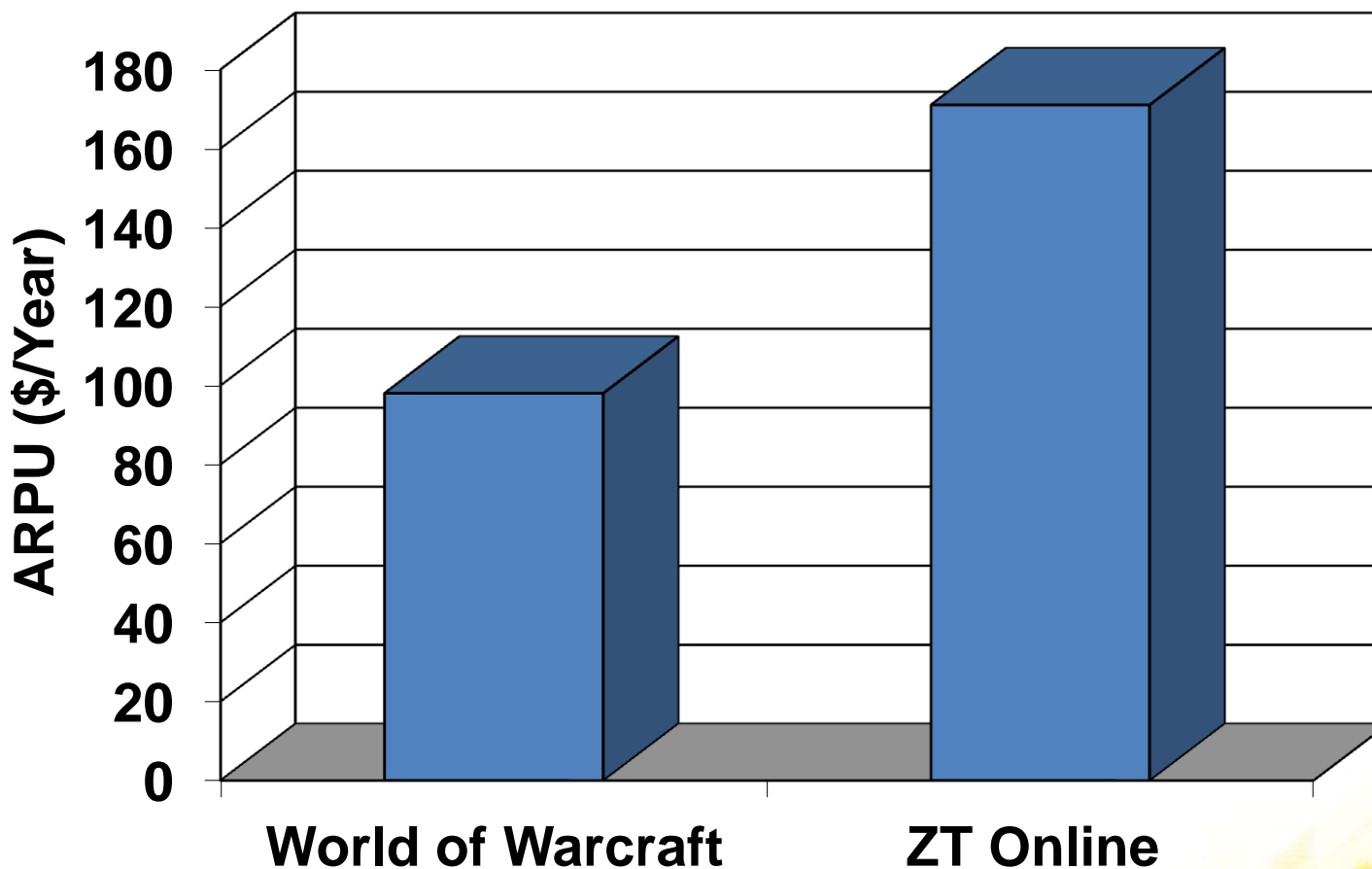
Source: Company Reports, LCM Research

ZT Online



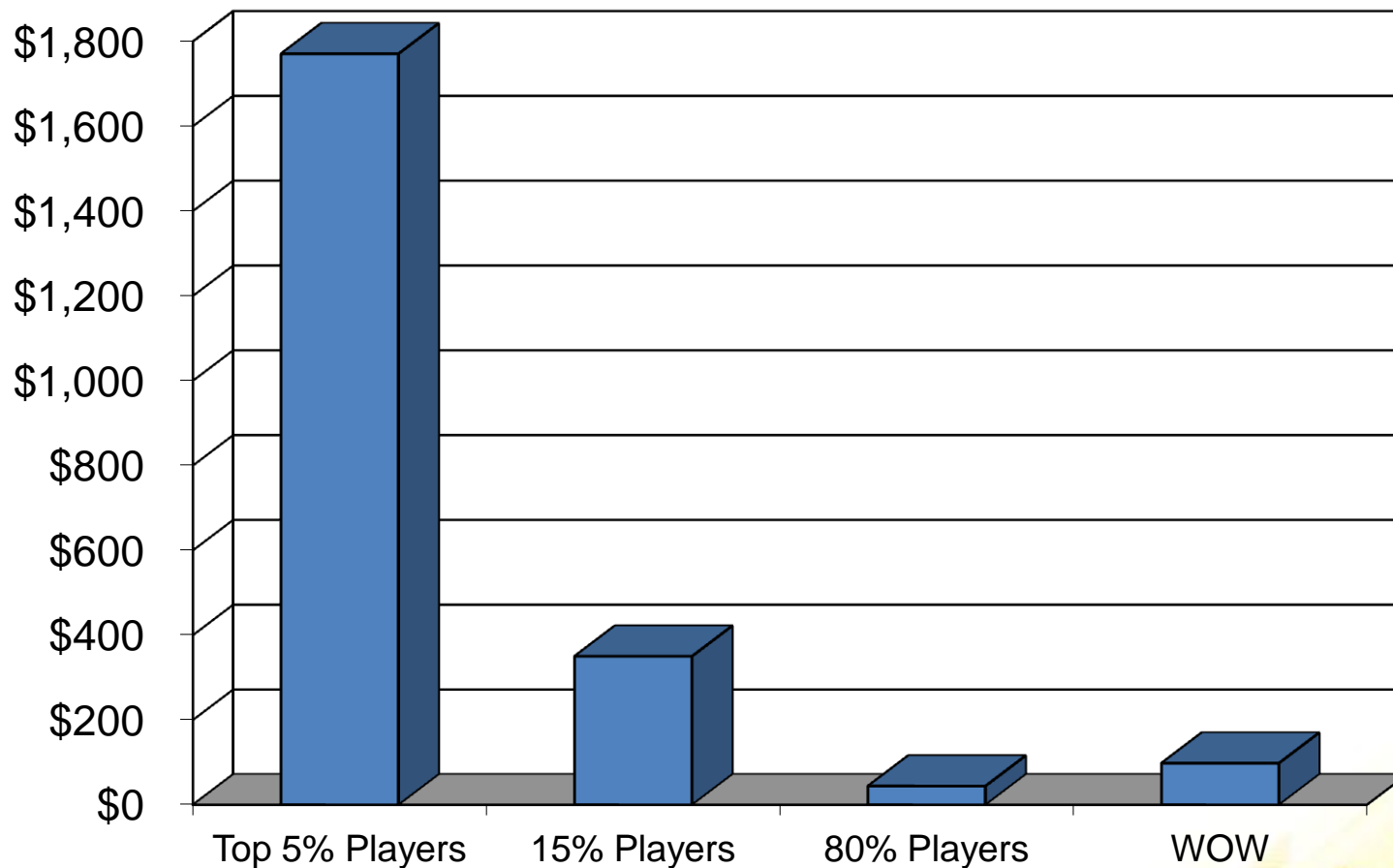
- 2D MMORPG, Martial Arts, Adventure
- Developed and Published by Giant Online
- Launched in 2007
- Free-to-play, pay for virtual goods model
- PCU: 1 million+

70%+ Higher ARPPU Compared to WOW



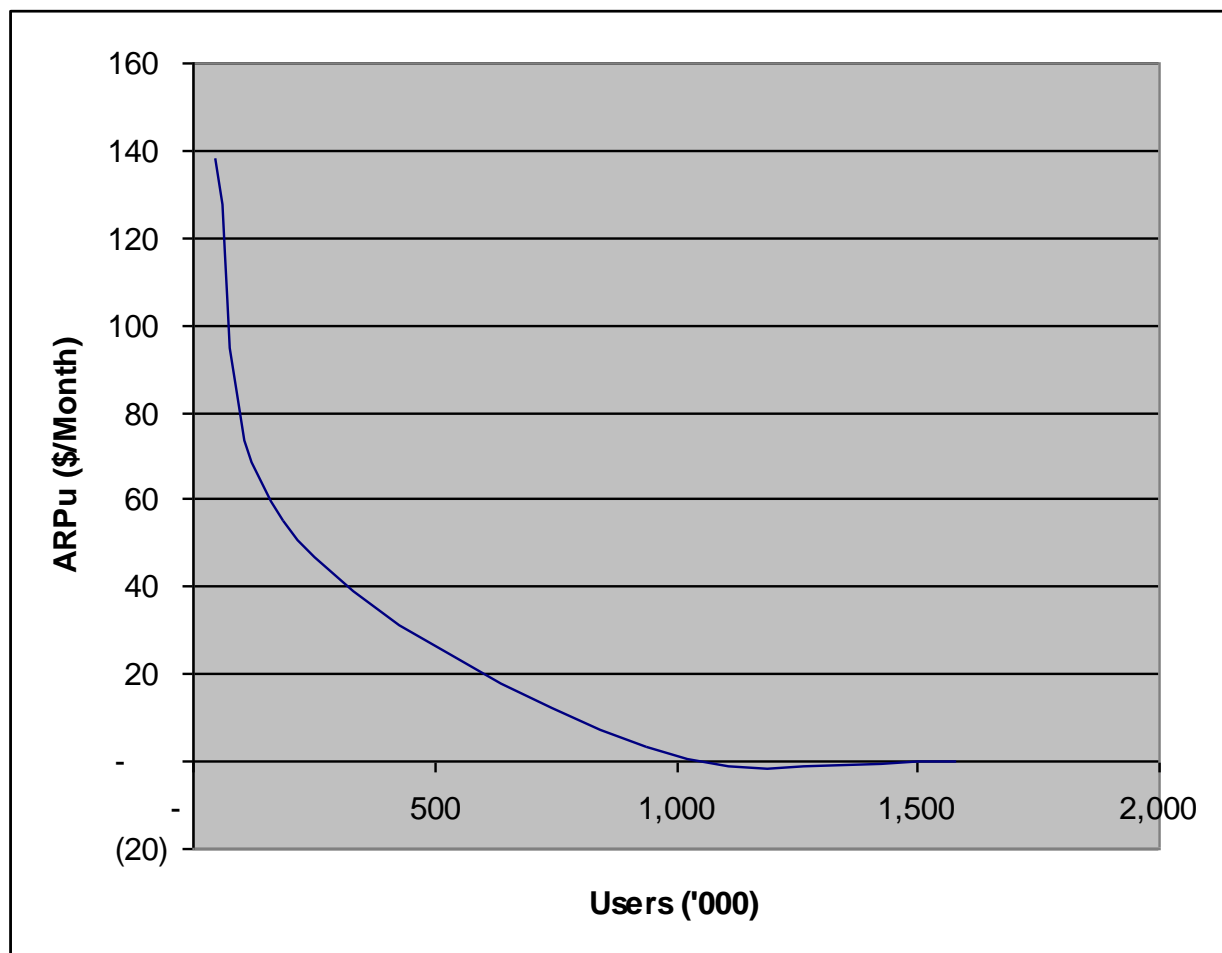
Source: Company Reports, LCM Research

Top Players Pay 20x of WOW ARPU



Source: Company Reports, LCM Research

ARPPU Distribution Curve of ZT Online

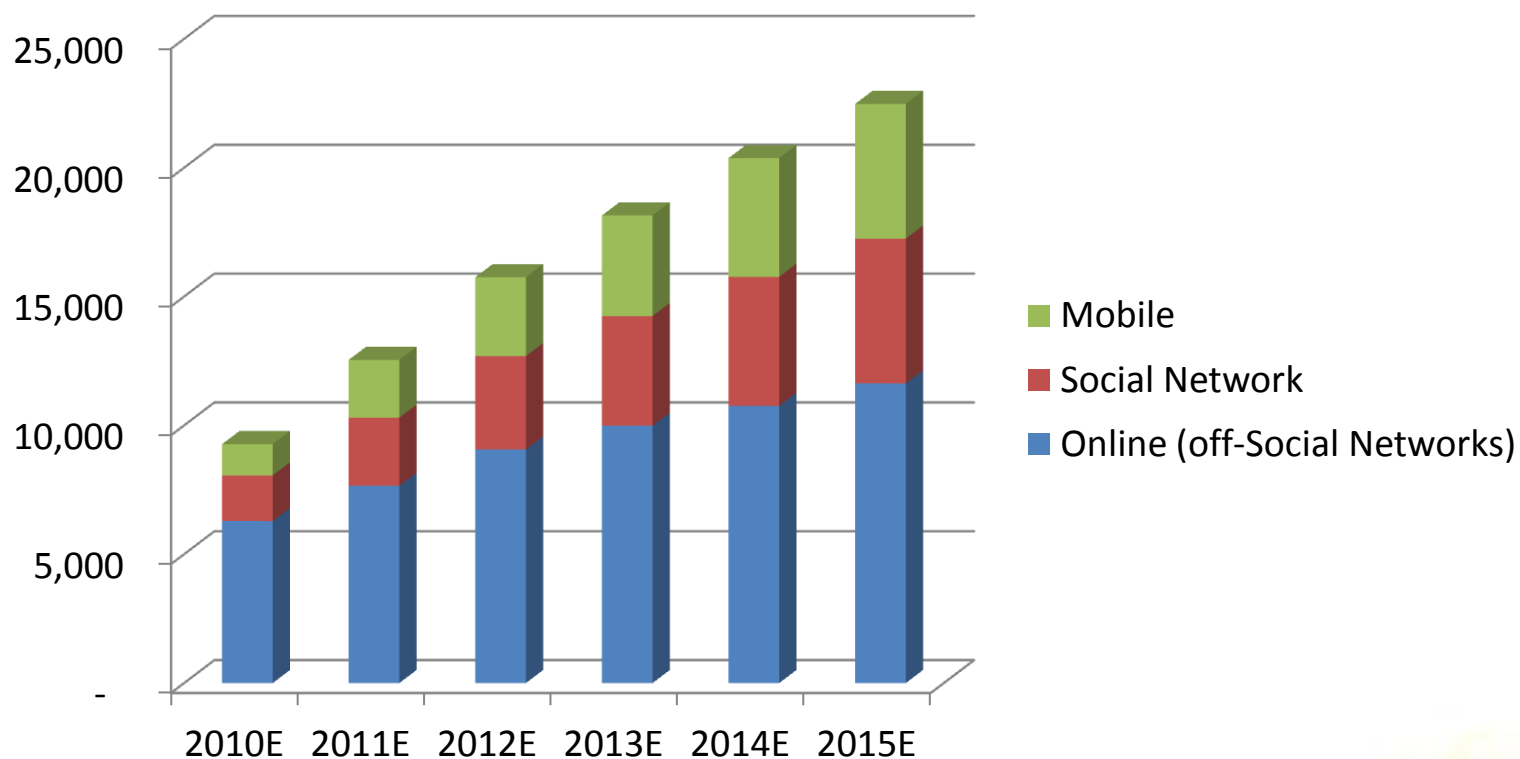


Source: Company Reports

Examples of Monetization

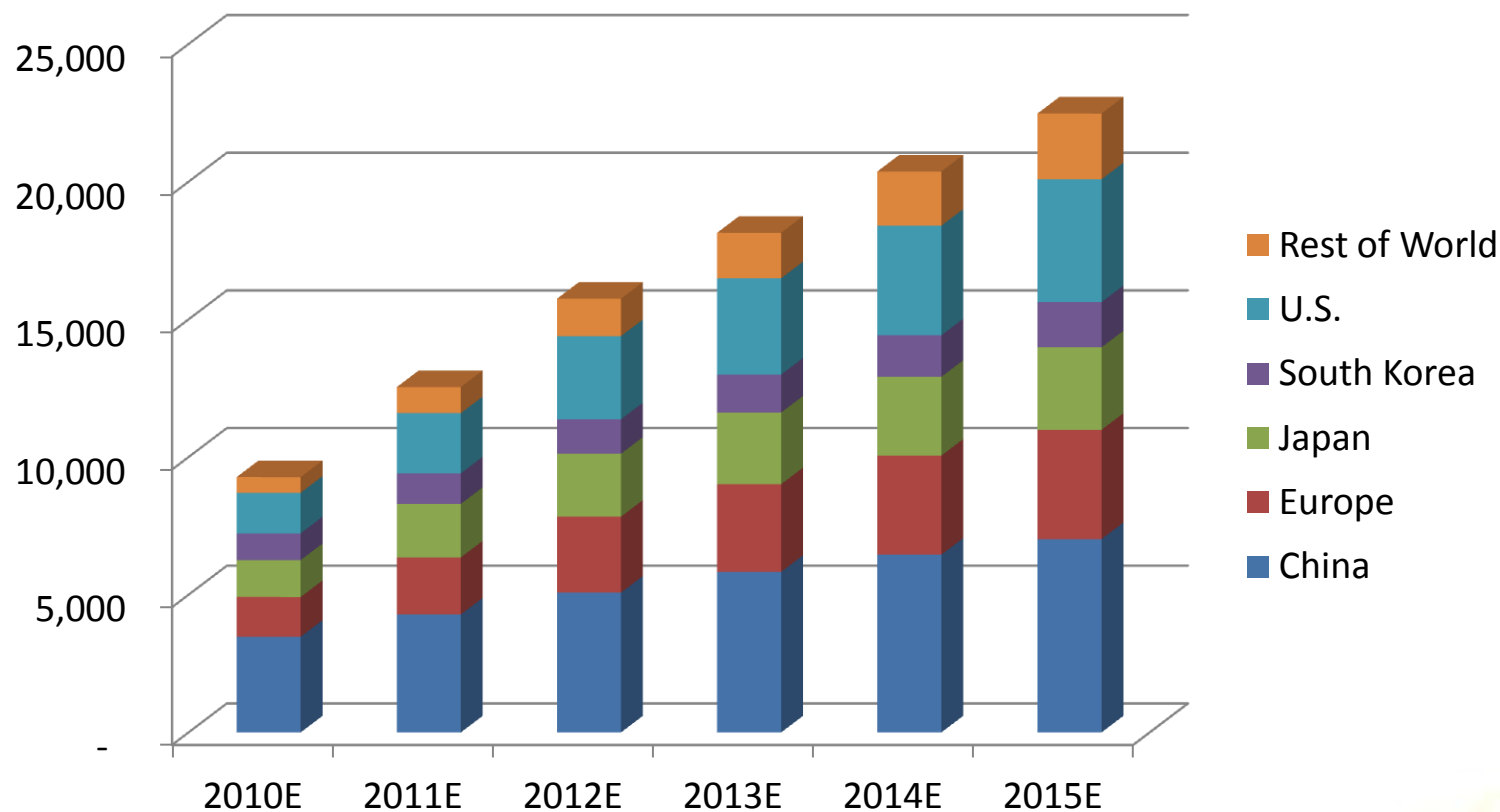
- Game Design (System for marriage, breeding, parenting, balance between males/females)
- Special In-game Events (Valentine's day, New Year's day, Sports)
- In-game Promotions
- Treasure Chest
 - Special Bonus for Opening Most Chests
- Chat & Response

Virtual Goods: Global Market Size Estimate (\$ Million)



Source: LCM Research

Virtual Goods: Global Market Size Estimate (\$ Million)

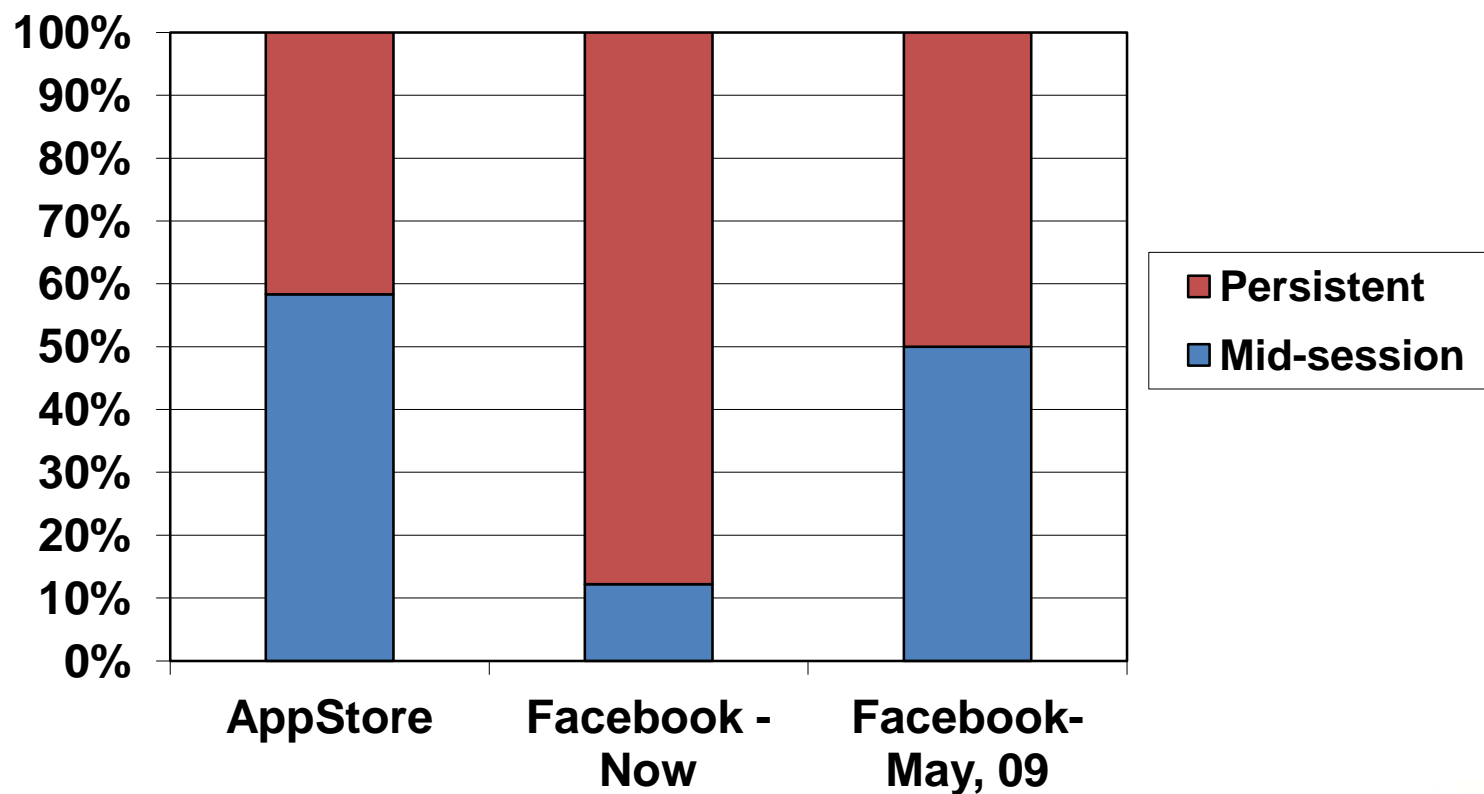


Source: LCM Research

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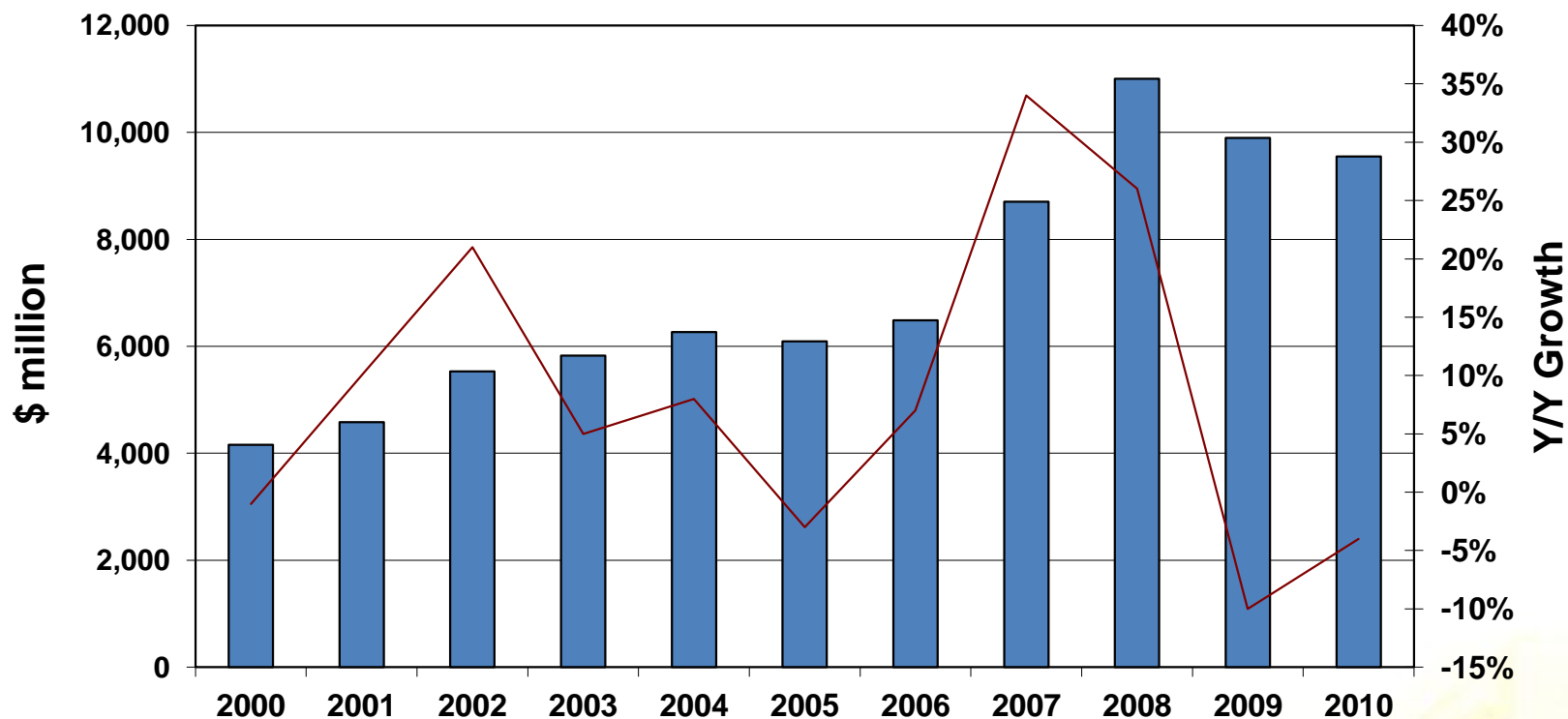
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Mid-session vs. Persistent Games



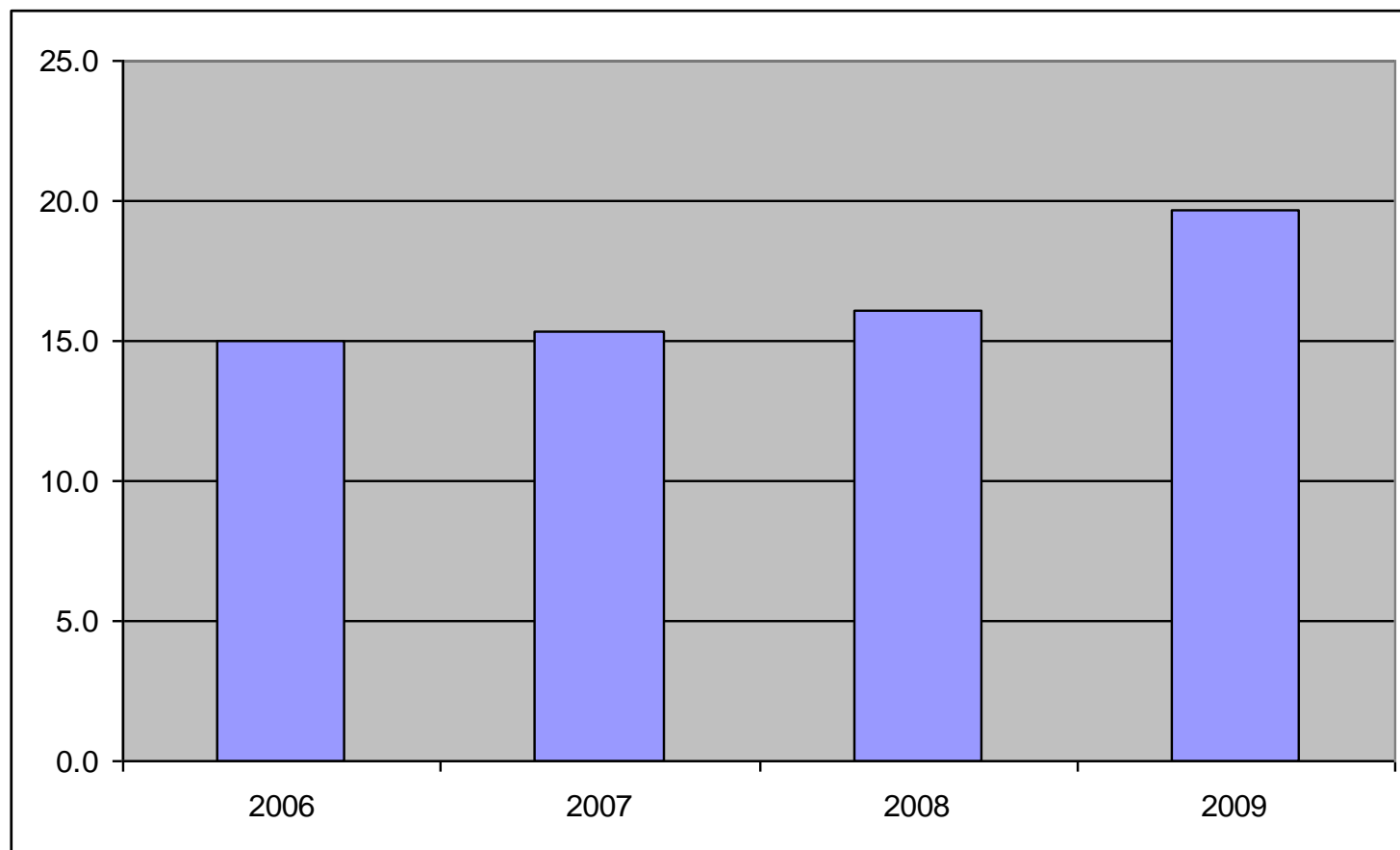
Source: AppData, LCM Research

Console Games: U.S. Market Size



Source: NPD

Average Game Play Hours Per Week On Console

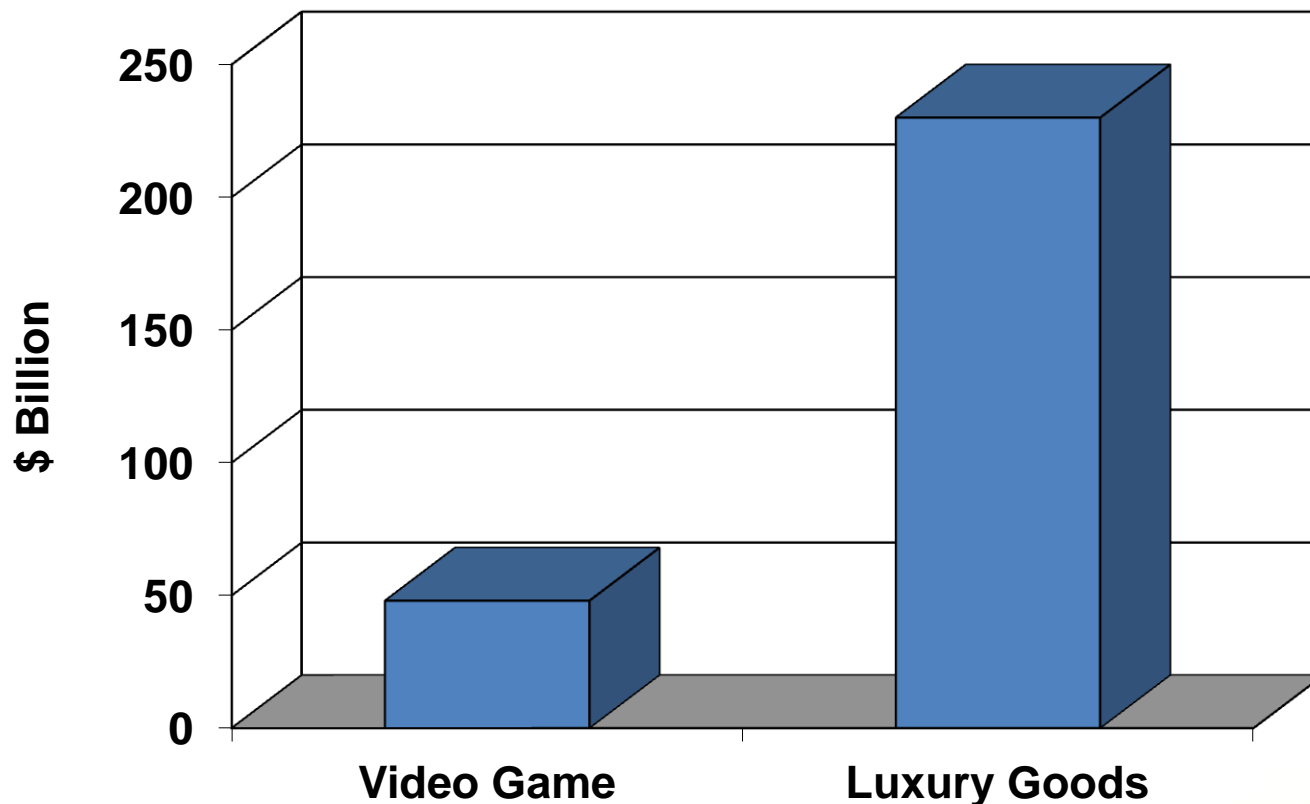


Source: The Nielsen Company

Games Going Social – What We Have Seen

- Facebook opening up a new market similar to Wii
- 55% of Facebook users play games on Facebook and Games account for ~40% of page views of Facebook
- Facebook games not just games but also a mean of communication, a mean to express oneself in virtual environment

Gaming Versus Expression

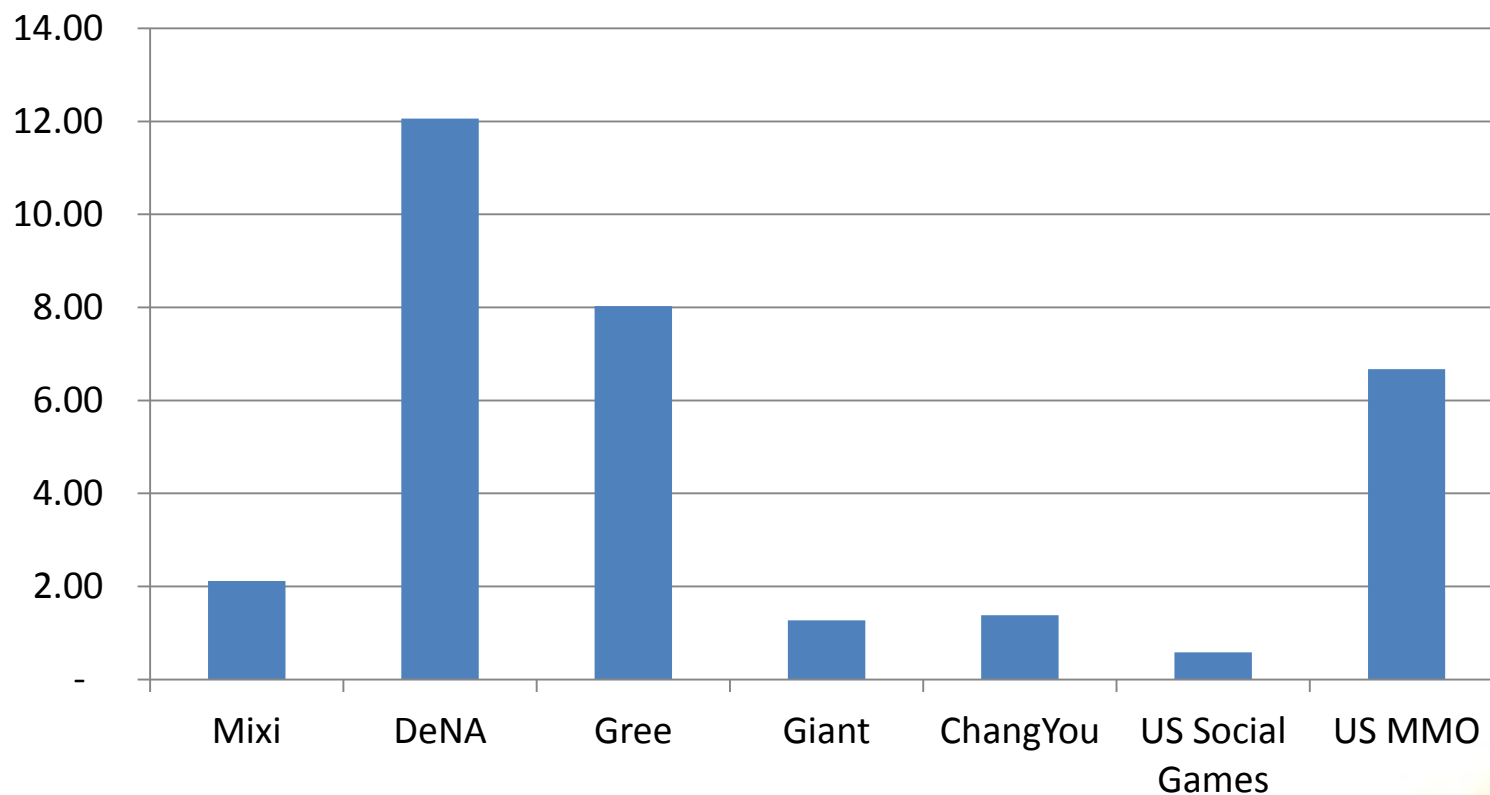


Source: Bain & Company, PWC

Trends in Social Games

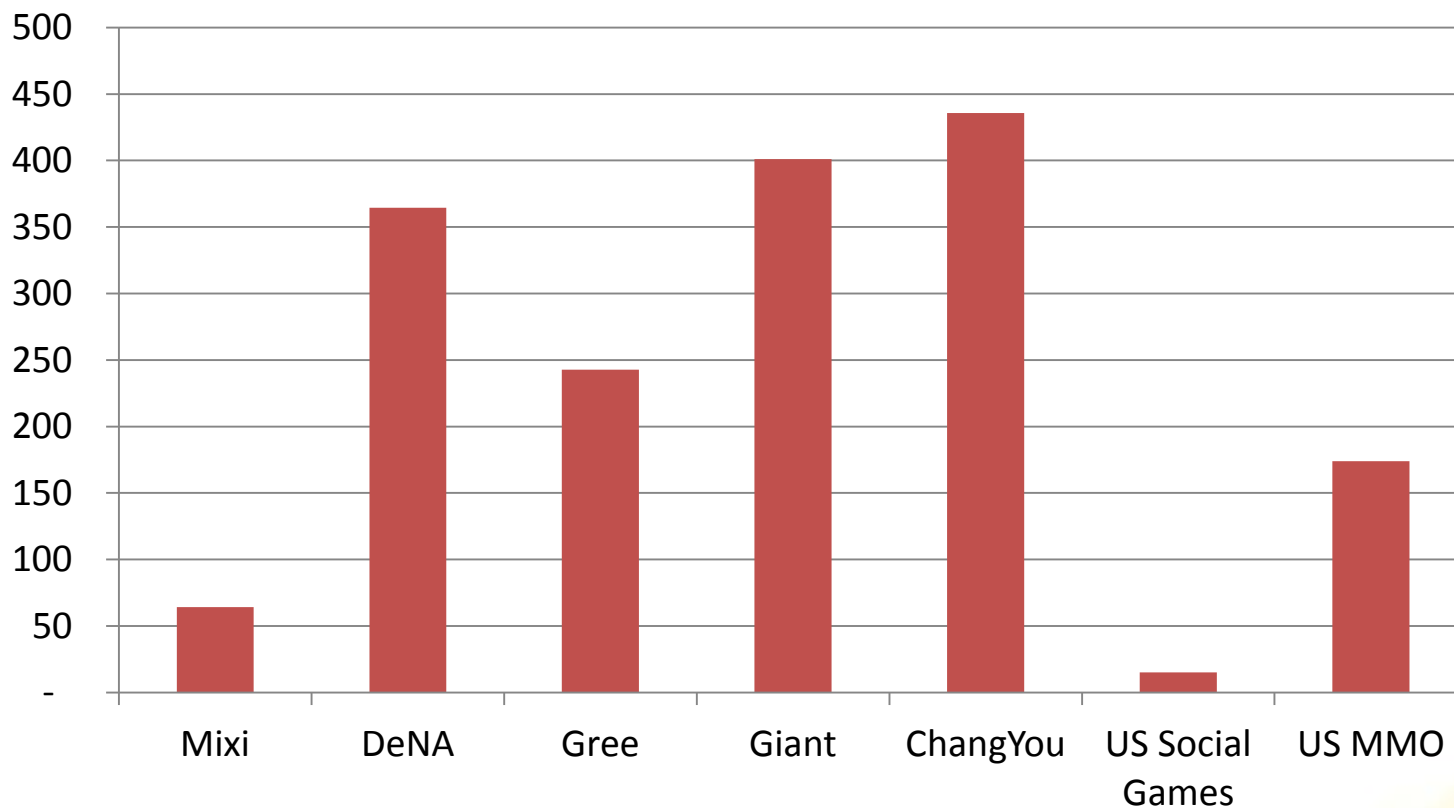
- Focus on Monetization
 - Conversion
 - Advertising
 - Payment mechanisms
- Platform maturing
 - IPs Matter
- Social Games outside Facebook
 - Using Facebook social graph
 - New platforms
- Mobile another wave of disruption
 - Location: convergence of physical and virtual world

Focus on Monetization – ARPU (\$/MAU)



Source: Company Reports, LCM Research

Focus on Monetization – ARPU Adjusted for GDP



Source: LCM Research

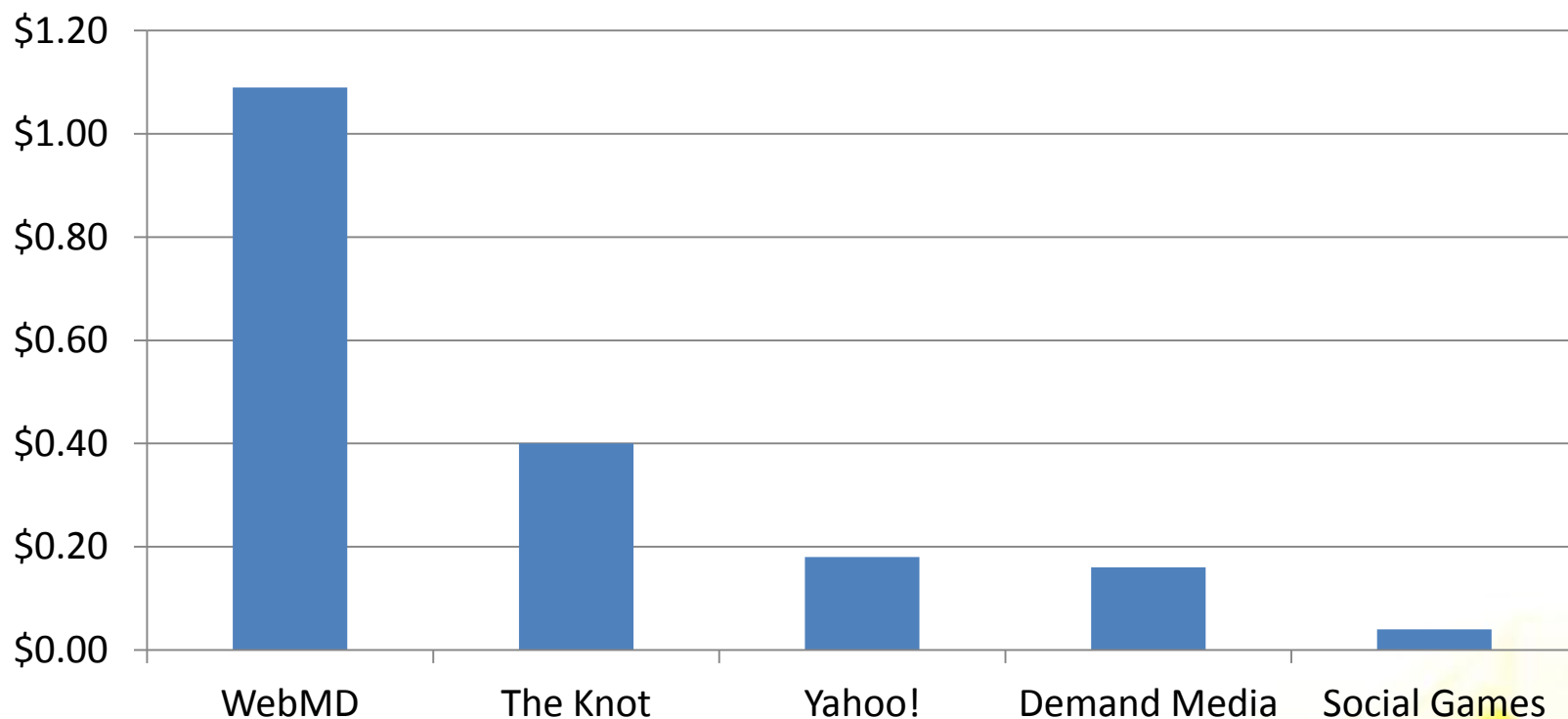
Focus on Monetization: Advertising

	Advertising	Virtual Goods - Indirect Payment	Virtual Goods - Direct Payment
Playdom	5-10%	15%	75-80%
Kabam	NA	10%	90%
Rekoo	10%	NA	90%
Serious Business	10%	10%	80%

Source: LCM Research

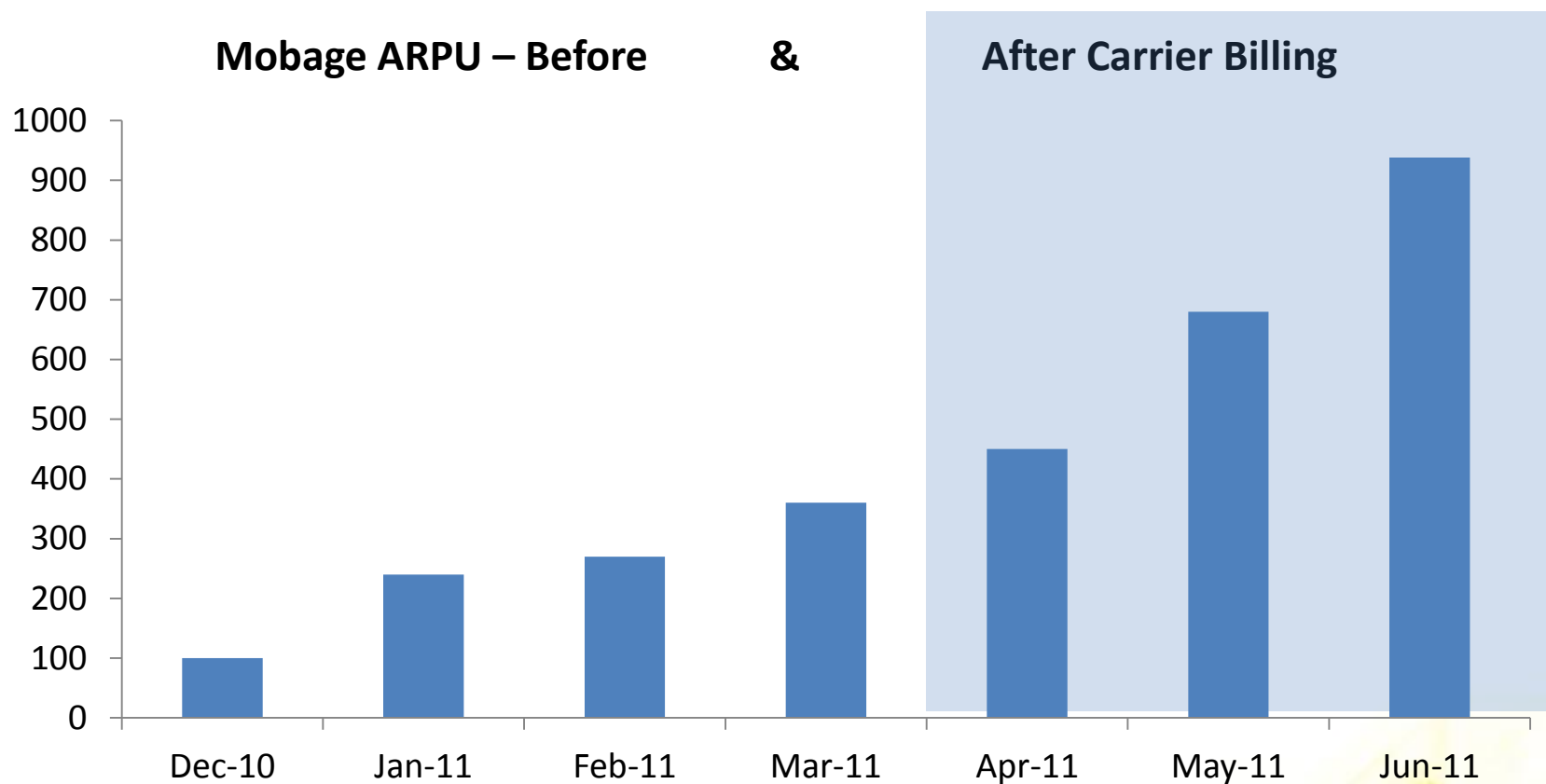
Focus on Monetization: Advertising

ARPU/DAU



Source: comScore, Company Reports

Monetization – Payment Mechanisms

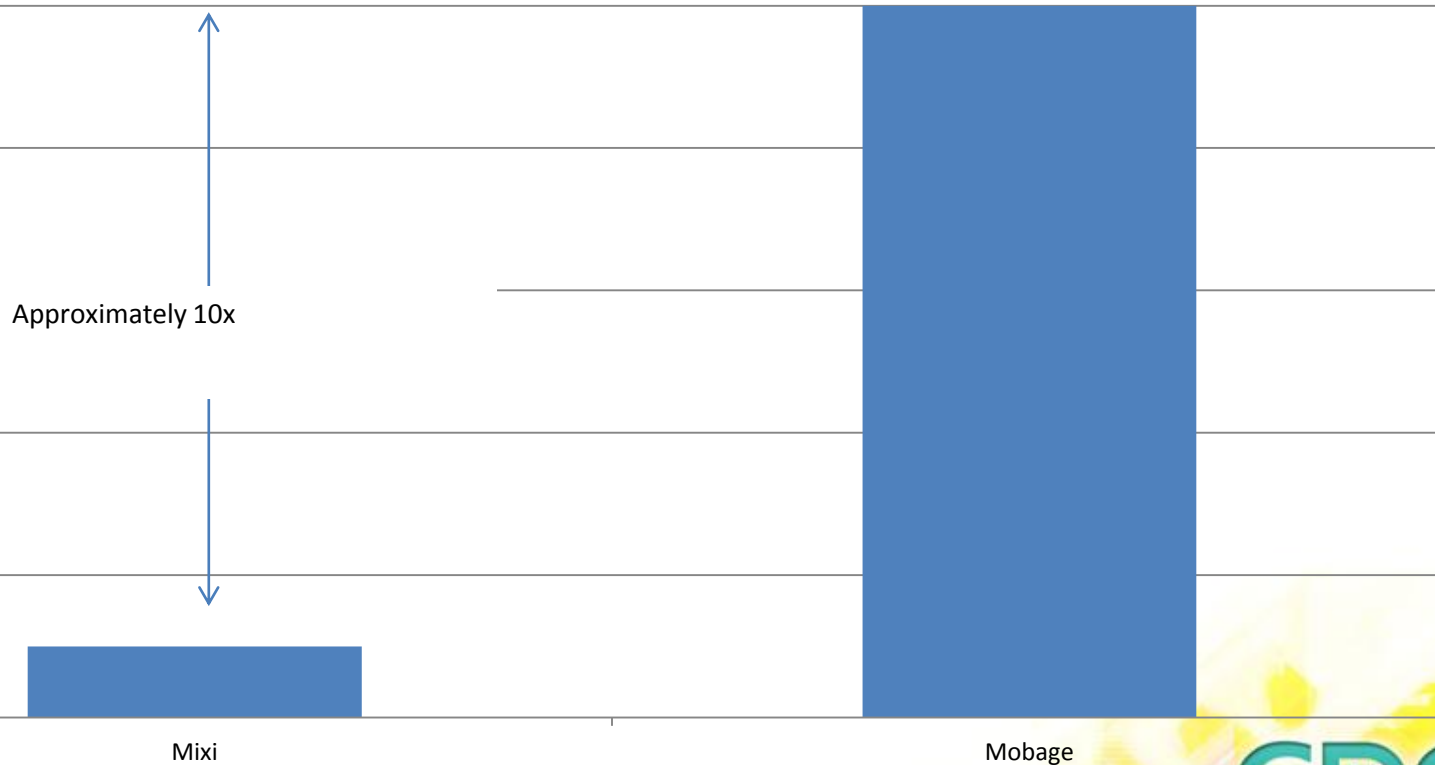


Source: DeNA

Social Games Outside Facebook

- Social feature no longer a proprietary of SNS
- Users want to stay connected with friends – to brag, to compete, to have a fun-experience together
- Monetization of DeNA vs. Mixi
- First iteration of social games outside Facebook already there
- Next iteration of social games with deeper integration/social games from ground up
 - Imagine a social shooter, action game – trophy save your real-life friend in virtual environment

ARPU Comparison– Game Centric SNS Vs. Broad SNS



Source: DeNA

As Platform Matures; IPs Become More Important

	2009		2006	
	Game	Publisher	Game	Publisher
1	Battlefield 1943	Electronic Arts	Geometry Wars	Bizzare Creations
2	Castle Crashers	The Behemoth	Gauntlet	Midway Games
3	Trials HD	Microsoft Games	Smash TV	Midway Games
4	Hasbro Family Game Night	Electronic Arts	Bejeweled II	Oberon
5	Shadow Complex	Microsoft Games	Zuma	Oberon
6	Marvel vs. Capcom 2	Capcom	Bankshot Billiards	PixelStrom
7	Magic: The Gathering	Wizards Of the Coast	Outpost Kaloki	NinjaBee
8	UNO	Gameloft	Mutant Storm Reloaded	Microsoft Games
9	Worms	Microsoft Games	Joust	Midway Games
10	Peggle	PopCap Games	Wik: Fable of Souls	Reflexive Entertainment

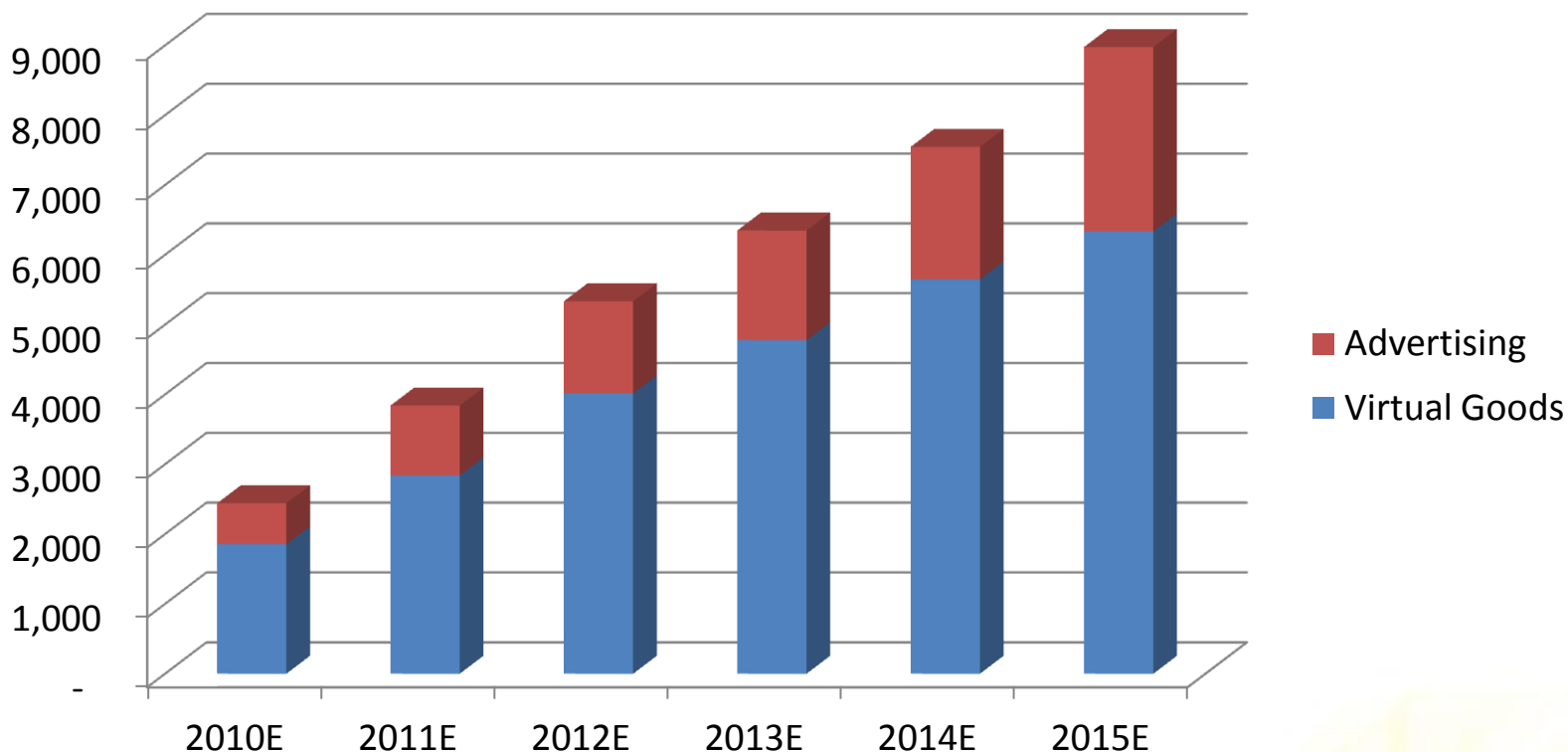
Source: IGN, Majornelson.com

As Platform Matures; IPs Become More Important

Rank	Game	Publisher	Price
1	The Sims	Electronic Arts	\$6.99
2	The Oregon Trail	Gameloft	\$4.99
3	Need for Speed: Undercover	Electronic Arts	\$4.99
4	Madden NFL 10	Electronic Arts	\$4.99
5	Tiger Woods PGA Tour	Electronic Arts	\$0.99
6	Assassin's Creed: Altair Chronicles	Gameloft	\$4.99
7	Flight Control	Firemint	\$0.99
8	Cooking Mama	Taito	\$6.99
9	Civilization Revolution	Take-Two	\$6.99
10	Wheel of Fortune	Sony	\$0.99

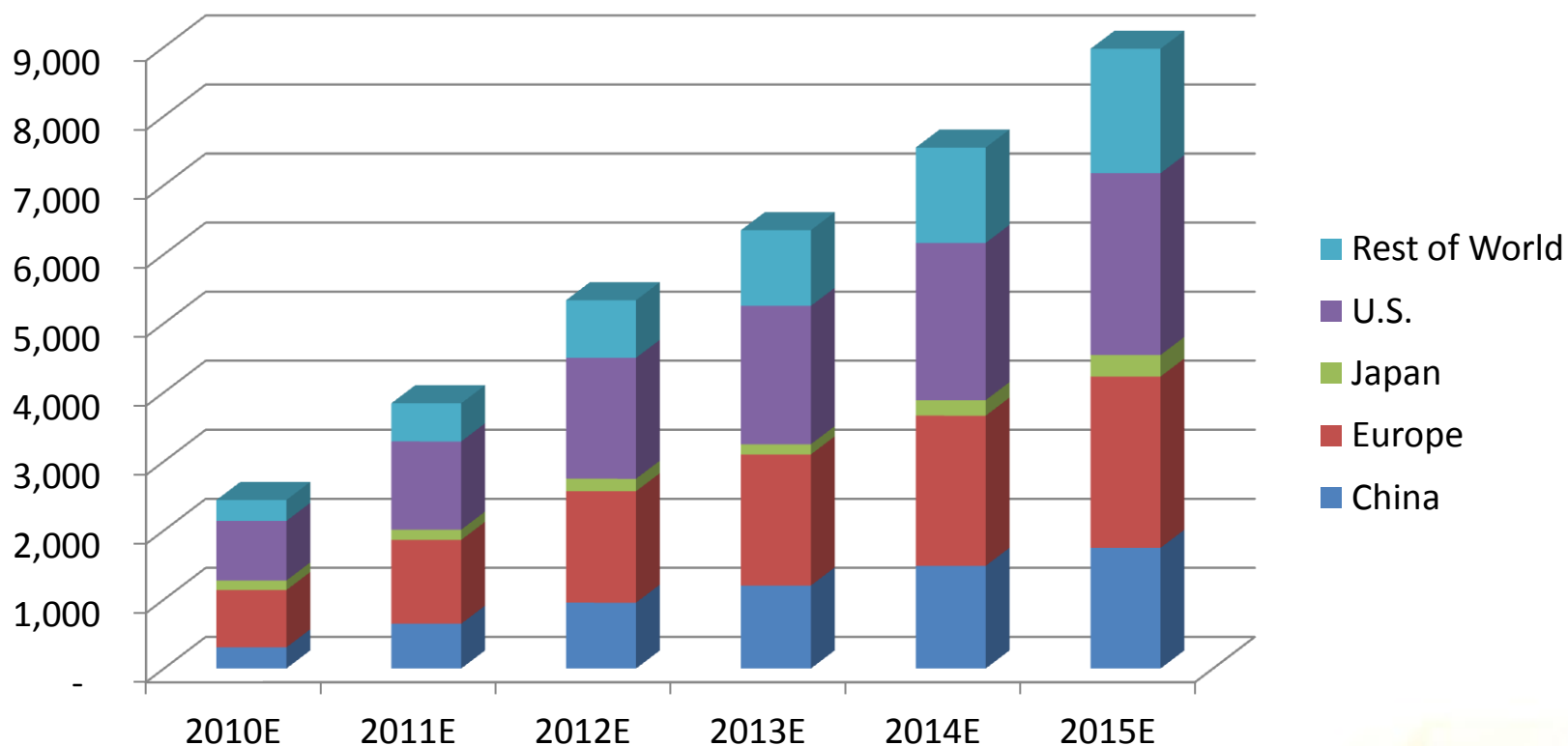
Source: Apple

Social Game: Global Market Size Estimate (\$ Million)



Source: LCM Research

Social Gaming: WW Market Size Estimate (\$ Million)

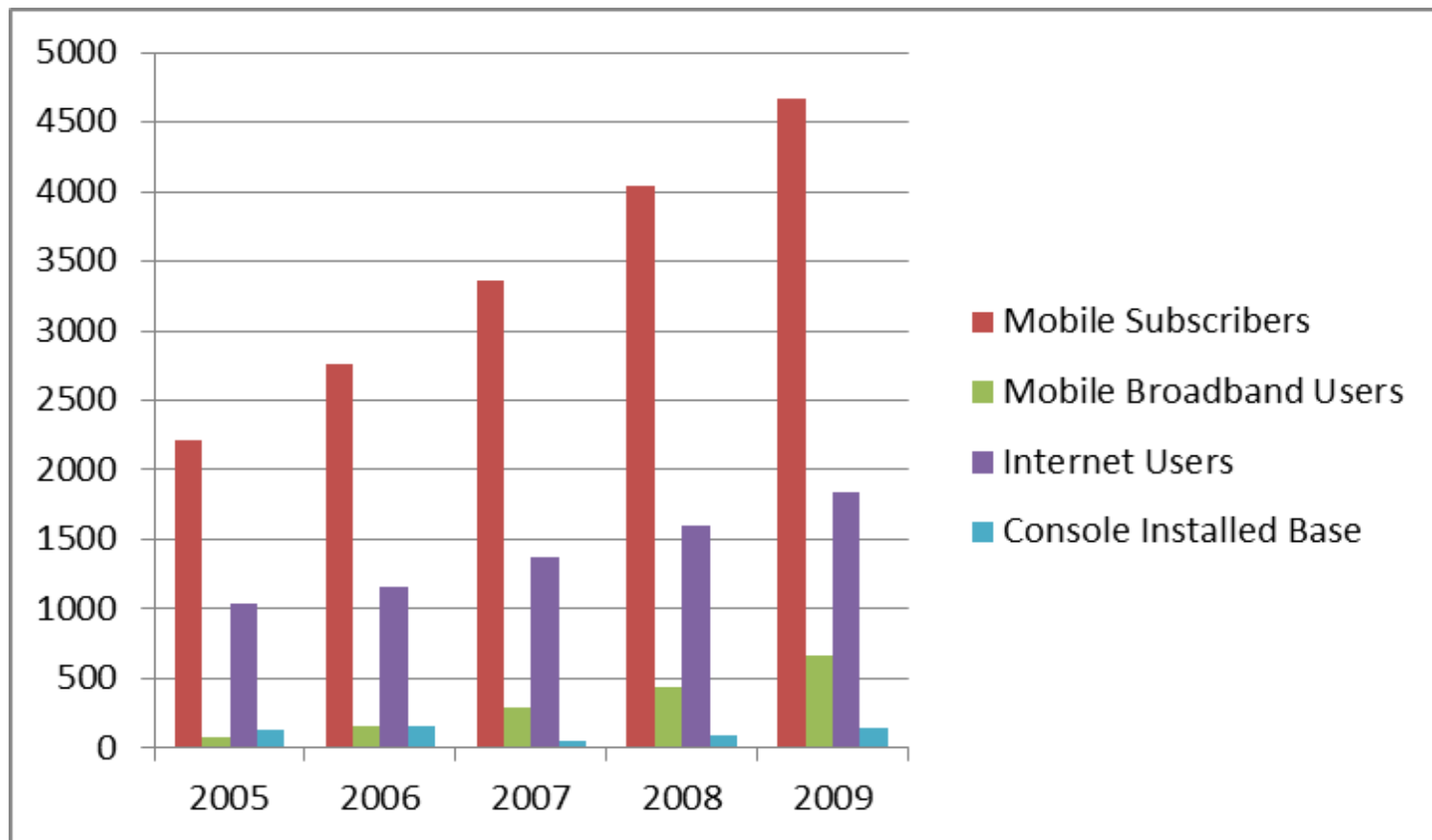


Source: LCM Research

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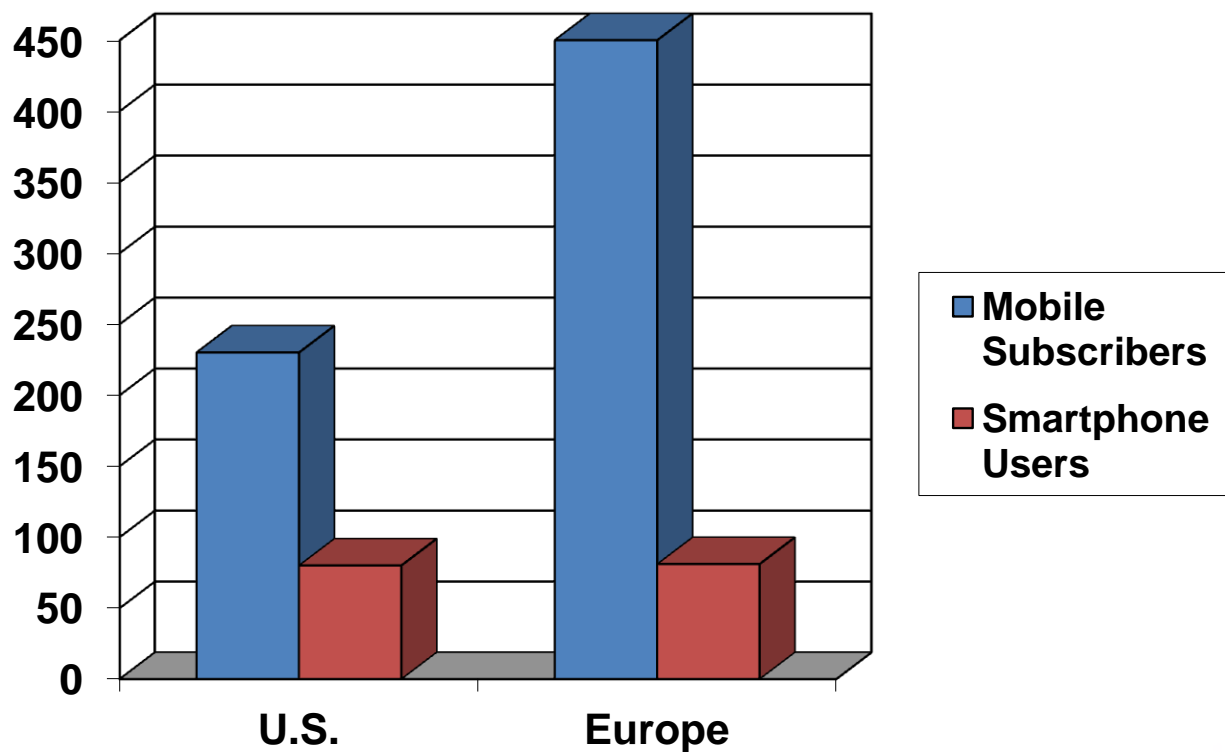
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Mobile: Next Wave of Disruption



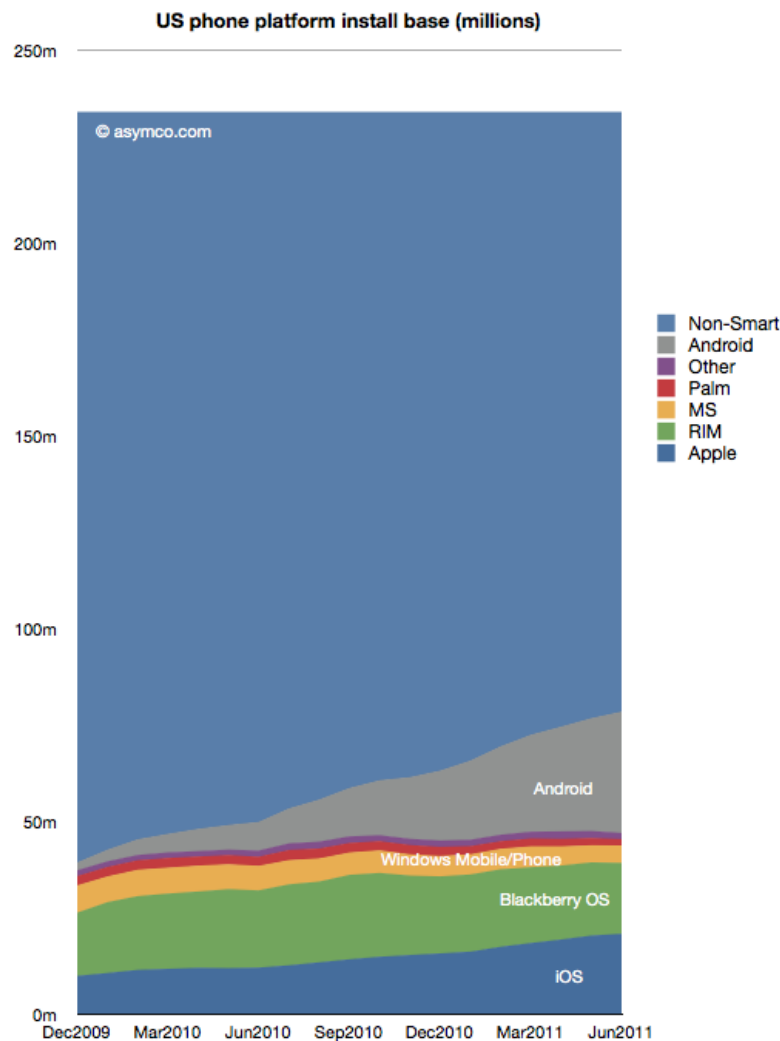
Source: International Telecommunication Union, NPD

Smartphone Market Potential

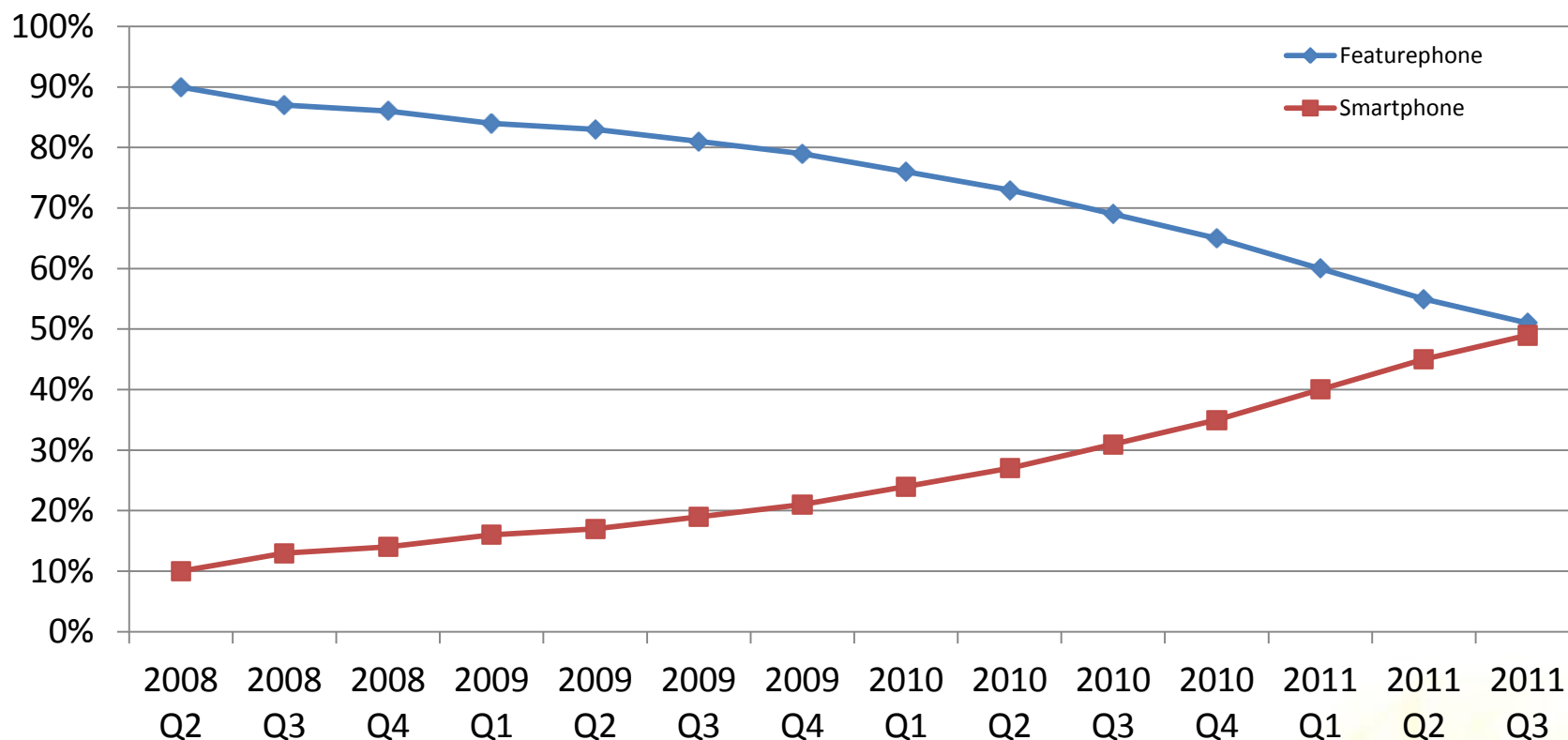


Source: LCM Research

Smartphone Market Potential

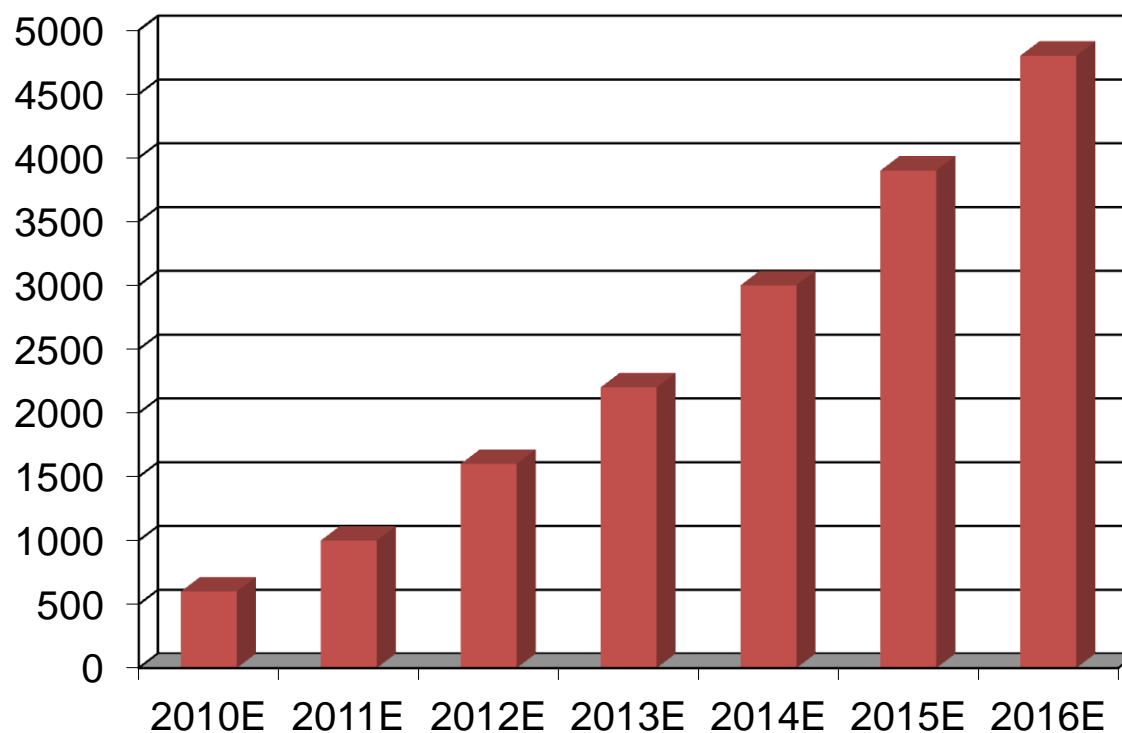


Smartphone Vs. Feature Phone – U.S.



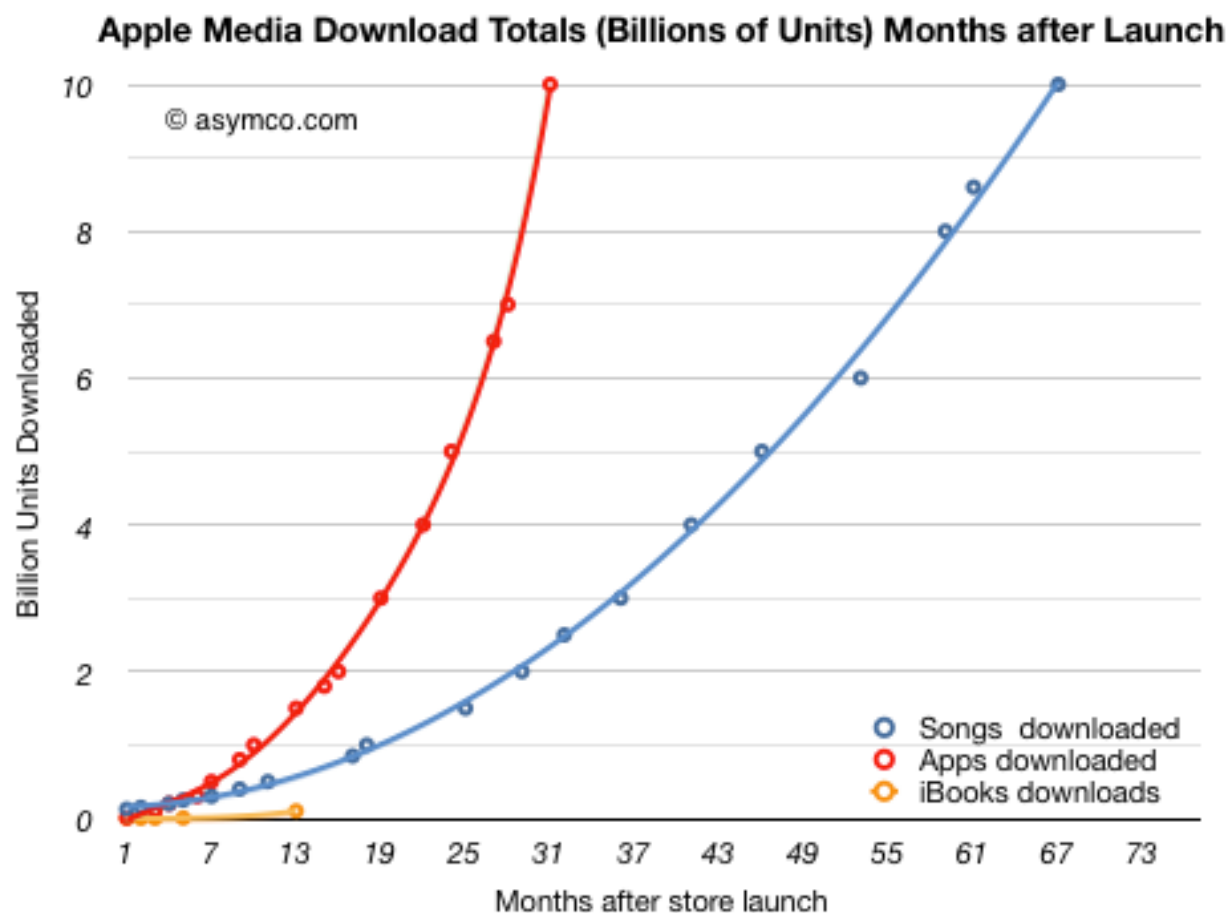
Source: The Nielsen Company

Global Smartphone Installed Base

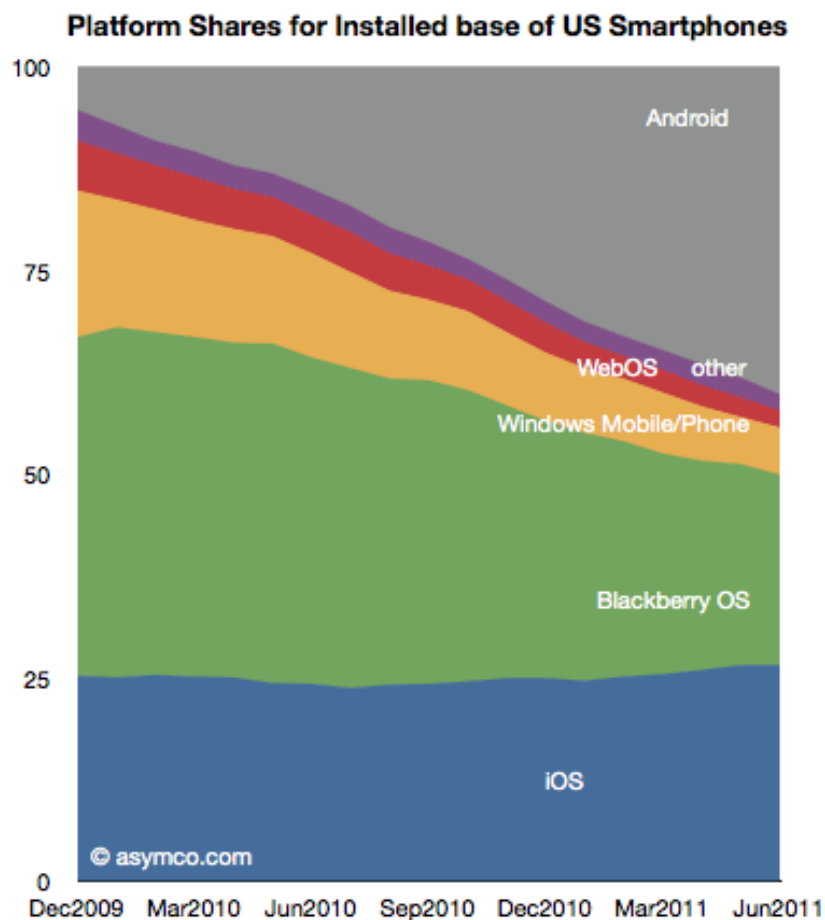


Source: Ericson

User Preference Towards Games

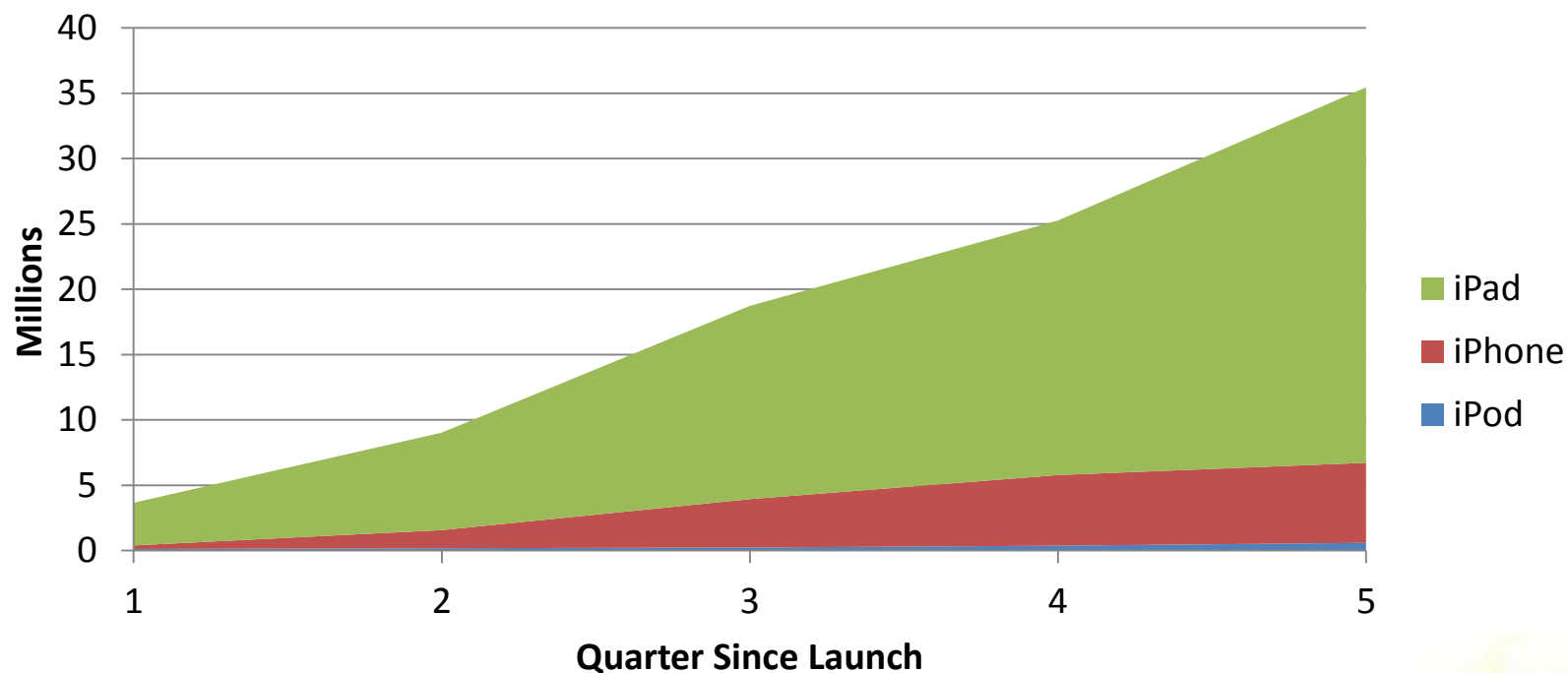


Android Opens Up Another Opportunity



Tablets Open Up Another Opportunity

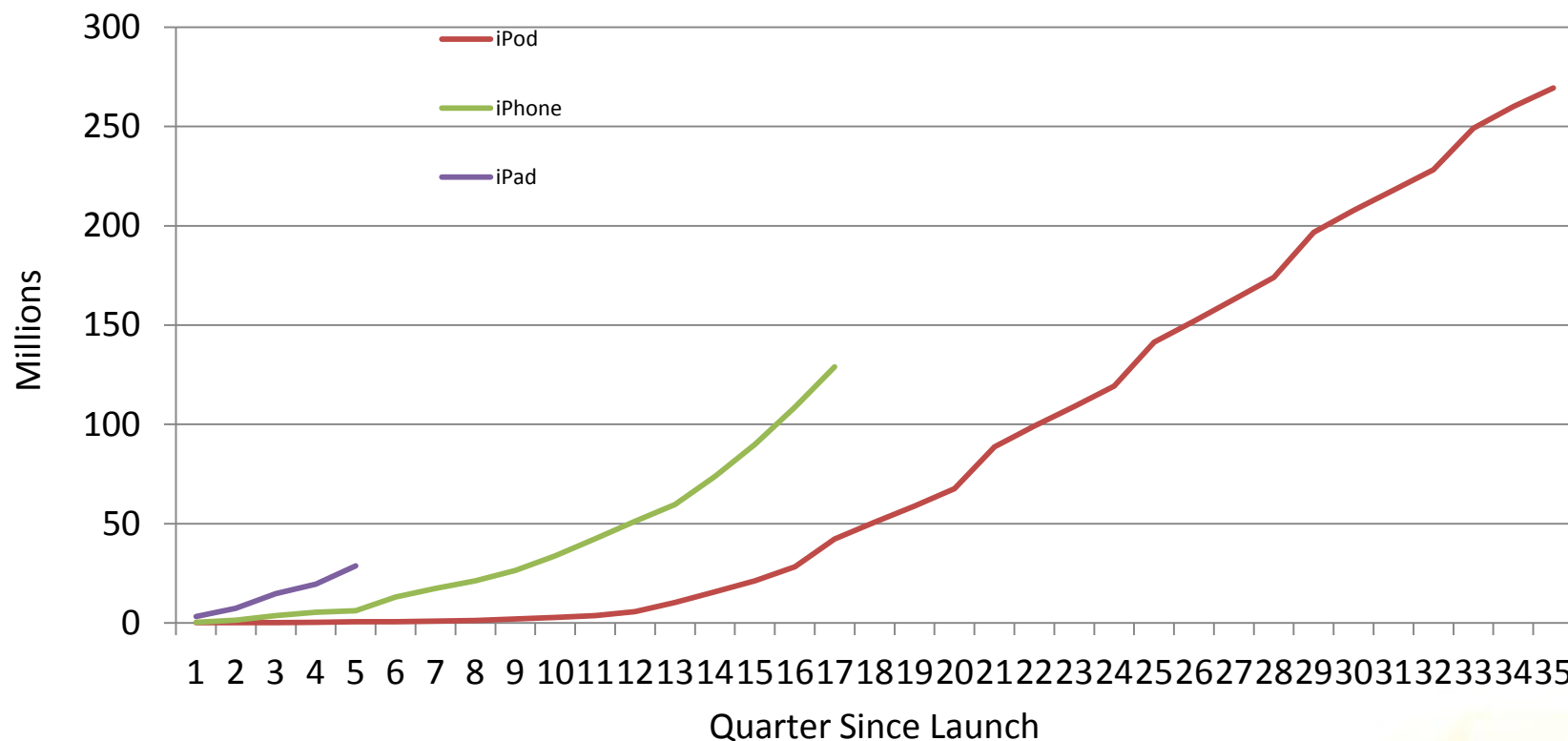
Cumulative Sales Of iPad vs. iPhone vs. iPod



Source: Apple

Tablets Open Up Another Opportunity

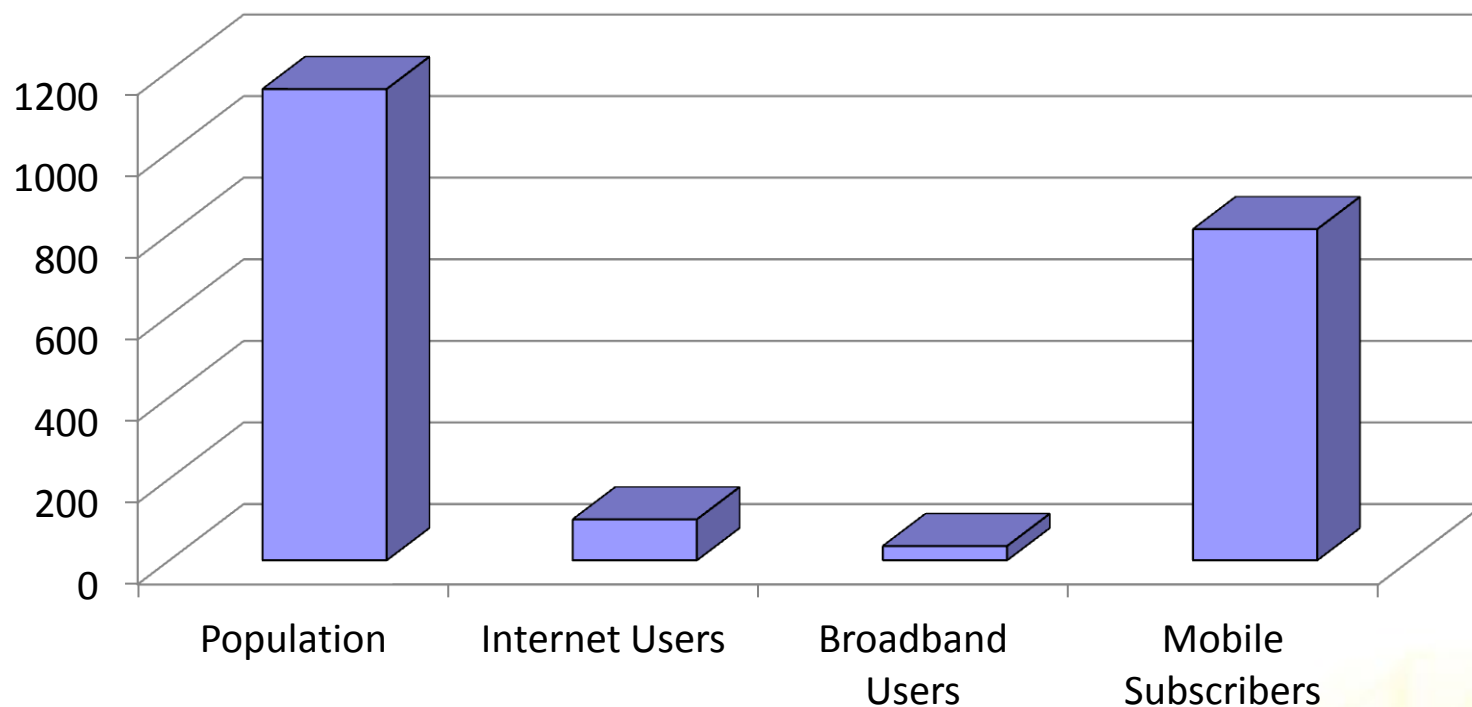
Cumulative Sales Of iPad vs. iPhone vs. iPod



Source: Apple

Skipping The PC Web?

Number of Subscribers in India (Million)



Source: Telecom Regulatory Authority of India, InternetWorldStats.com

No Contract, Android = \$150



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Micromax Andro A60 with
with 1 Year Micromax India Warranty and Fre

Price: **Rs. 6666**

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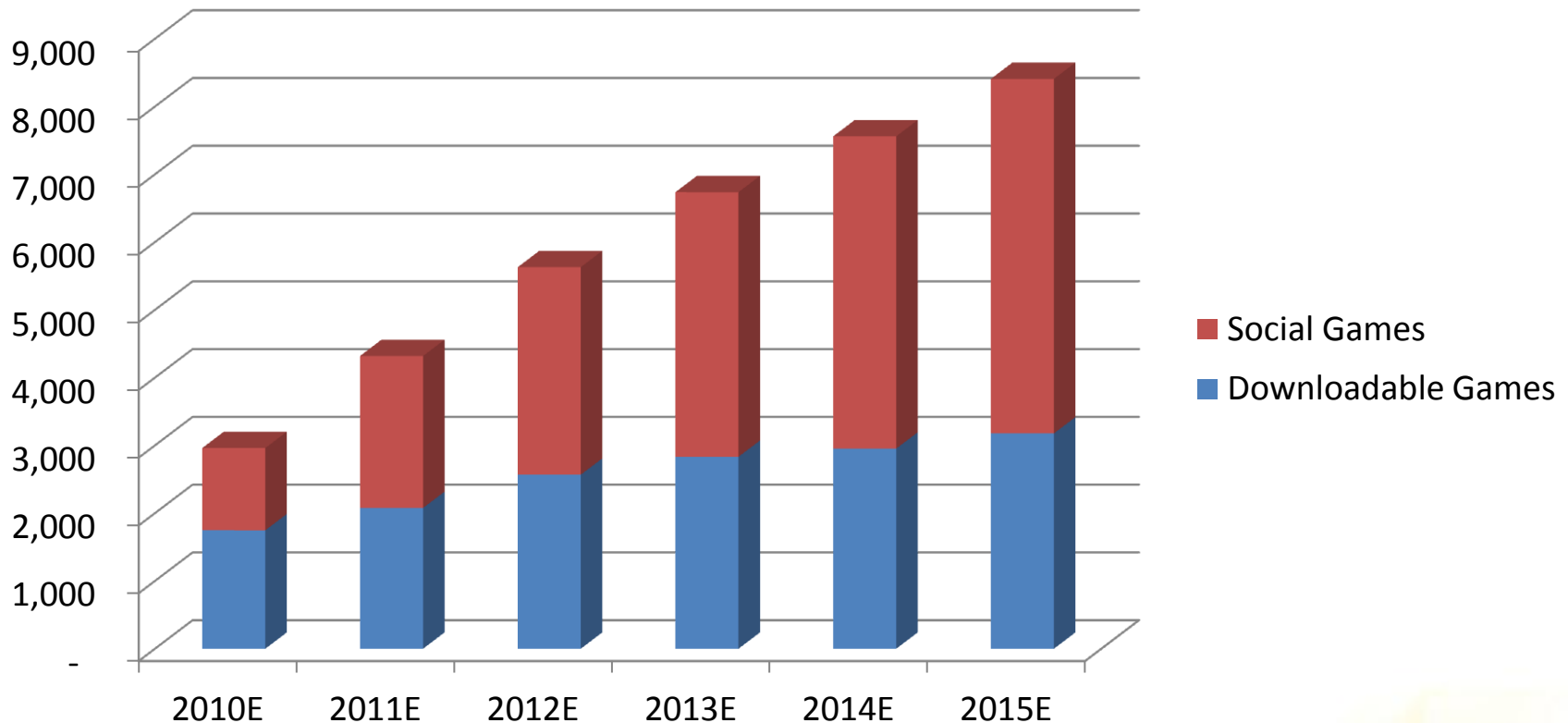
FREE Home Delivery

Notify me when this product is in st

Email:

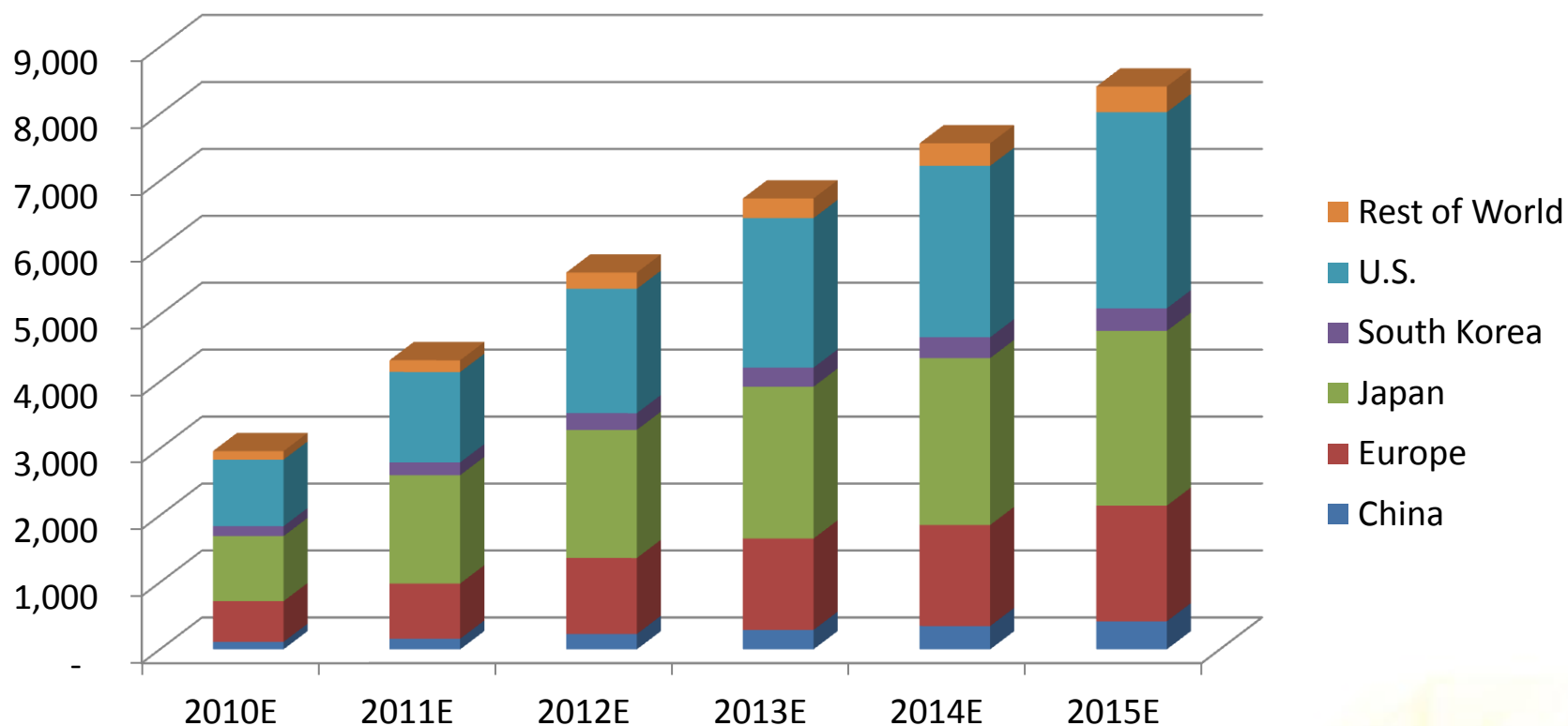
Source: www.flipkart.com

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Source: LCM Research

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