Unexpected Growth Surge in Gamers in China and in Southeast Asia

- What is driving the growth?

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GAME DEVELOPERS CONFERENCE CHINA

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About Niko Partners

- We are a niche market intelligence firm with a strong reputation for our expertise on the games markets in mainland China and Southeast Asia.
- Founded in 2002 by Lisa Cosmas Hanson, we collect proprietary data from surveys, interviews, focus groups and more and conduct our dataoriented analysis regarding these markets.
- Our SEA coverage began in 2010.
- Offices in Shanghai and Silicon Valley.

Unexpected Growth Surge in China

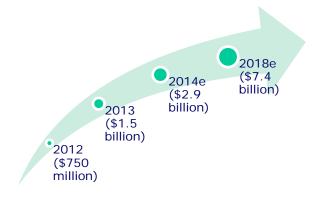
- Chinese Mobile Games Market Snapshot
- Mobile Games Market Revenue Analysis
- Mobile Games Market Trends Analysis
- Key mobile game operators and publishers
- Samsung and iPhone are the leading devices
- 360 Assistant, Android Market, and Doujia are leading platforms
- Growth Drivers in China

Chinese Mobile Games Market Snapshot

- 2013 mobile games revenue was \$1.5 billion, we forecast 2014e to be \$2.9 billion (up 93%), and 2018e to be \$7.4 billion (CAGR 37.8%)
- Average monthly spending for the 38-41% of gamers who will spend in our forecast period is \$1.14-1.74
- There will be 420 million mobile gamers in 2014, rising to 770 million by 2018
- Mobile games revenue is growing much faster than that of PC online games, but PC online games achieved \$11.9 billion in 2013 so has a much larger base value
- We estimate that the Top 10 mobile games (by revenue) comprise 40% of total revenue
- Most mobile gamers play 1-7 hours per week, and the location of choice is at home or while commuting
- Tencent has roughly 50% of the market share for mobile games in 2014

Chinese Mobile Games Market Revenue Analysis

- In early 2013 Niko forecasted 2013 mobile games revenue to be \$1.2 billion, up from \$750 million in 2014. The market grew faster than we anticipated so we have restated the 2013 market size as \$1.5 billion still lower than the claims of some other data sources, but we feel it is accurate and it was 100% larger than 2012.
- Our 2014 forecast is for 93% growth YoY to \$2.9 billion, and by 2018 we estimate revenue will hit \$7.4 billion for a CAGR of 37.6% (2013-2018).
- This growth is fueled by a rapid increase in the number of mobile gamers.



Chinese Mobile Games Market Trends Analysis

- More mobile gaming is taking place in cities in Tiers 3 and 4 than ever before, and those cities will hold the most growth in our forecast period.
- Android users are spending more money than they used to, so the rate of iOS usage is 25% but the portion of revenue accounted for by iOS users is 30% down from at least 50% in the past years.
- Free to play games are very popular, as are downloadable games.
- The top 10 games make up approximately 40% of revenue, based on an average of 60 million RMB/month per game (some make much more, some less).
- Tencent represents about 50% of the market revenue for mobile games in 2014.
- Digital Trading Card Games (TCG) are very popular both for PC and mobile. Some of the most popular mobile TCGs in 2013 were I'm MT Online, The Big Head, Reversal of the Three Kingdoms, Fantasy Magic Card, and Sanguo lai le.
- Gamers are moving from PC online games to mobile games, and mobile games are welcoming new gamers into the gaming ecosystem, bypassing PC games.

Revenues for public and pre-IPO mobile game operators

Units: Million RMB	2012	2013	2014Q1
Tencent		2,000.0	1,800.0
Shanda		483.0	65.6
CMGE	172.1	319.2	214.7
SkyMobi		210.0	
OurPlam	162.4	191.3	67.0
Talkweb	3.4	112.5	
Kongzhong	129.9	92.1	50.3
Boyaa		37.3	111.4
Bewinner	83.0	139.9	<u>—</u> —
Kunlun	35.0	708.0	
Chukong	69.5	546.6	237.0

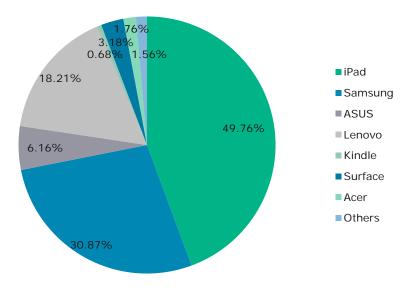
Source: Company reports

Select mobile game publishers

Publisher	Location	Representative games 2013 revenue (RMB million)		Notes	
Chukong	Beijing	Fishing Joy, I am MT, Moon of Qin, Hello Hero, Space Hunter	546.6	82 games, DAU 9.1M on Q4 2013	
Gamecomb	Beijing	Da Zhang Men, Grow Away , PvZ: All stars	140	A subsidiary of BeWinner (publicly traded in China)	
FLMobile	Beijing	Dragon's Summons, Papasanguo, Shendiaoxialv, Gongchengluedi	100 +	20 ios games, 69 android game, DAU 160Kon Q4 2013	
iDreamSky	Shenzhen	Temple Run 2, Fruit Ninja, Subway Surfers	246.6	DAU 25.8M	
CMGE	Shenzhen	Wuxia Qzhuan, I am MT, 2048, Sanguozhi	319.2		
Yodo1	Beijing	Ski Safari, Cut the Rope, Alpha Zero, Clouds&Sheep	60~80		
Gfan	Beijing	Sanguolaile, Stone Age, Tianshenzhuan, Dragon's Summons	60 +		
Rekoo	Beijing	Fishing Holiday, Zhaonimei, Dazhangmen, Baqisanguo, Shuijingsanguo	100 +	DAU 20 M+	
Kunlun	Beijing	Wuxia Qzhuan, Xiyouji, Wangxian, Hero OL	670	592.2 Million RMB form abroad Wuxia Qzhuan 203 Million RMB Hero OL 201 Million RMB	
MariyGames	Shanghai	Million Arthur, Ragnarok Online, Guadian Cross	480	Investors include Shanda and ACTOZ SOFT	

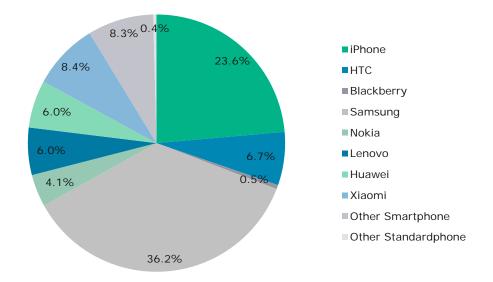
Apple iPad Holds Highest Market Share for Tablets in Our Sample

Niko asked Chinese mobile gamers who own tablets what type of tablets they own, and they could check as many of the options as they do own. iPad leads with 49.8%, followed by Samsung with 30.9%.



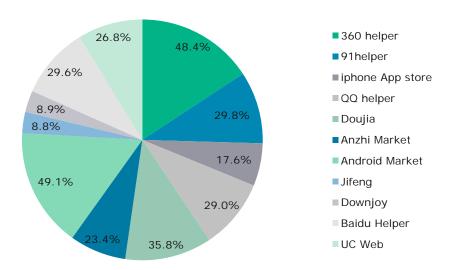
Samsung is the leading Android phone, iPhone for iOS

Niko surveyed about what type of mobile phone Chinese mobile gamers have, allowing to check as many as they own. Samsung and iPhone make up about 60%.



360 Assistant, Android Market, and Doujia are Leading Platforms in China

Niko surveyed about where gamers get their mobile games. With 500+ app stores and markets it is easy to see how the share could be distributed. Niko's respondents show which of the markets and app stores are most popular (Android Market has 49.1%).



Growth Drivers in China

- There are many drivers for growth in China's games market. Some of the most important are:
 - Increase in smartphone penetration, especially in cities in Tiers 3 and 4
 - Increase in distribution of mobile games via mobile chat apps (such as Weixin)
 - Reversal of ban on game consoles (i.e., Xbox One)
 - Consolidation and improvement of efficiency of mobile game/app discovery via app markets
 - Increased home PC and broadband penetration rates
 - Continued improvement in quality of domestically developed games for all platforms

Unexpected Growth Surge in SEA

- Trends to watch in SEA
- Key Country Demographic and Macroeconomic Data
- PC Online Games Revenue by Country
- PC Online Gamers by Country
- Country snapshots: Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam
- Growth Drivers in SEA

Southeast Asian Market

- Niko classifies six countries as SEA in our reports: Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam.
- The markets of the other SEA countries are very small as of 2014



Trends to watch in SEA

- Mobile games are hot
- PC online games are still important
- Only Singapore has had a true console market, though the new consoles may push SEA demand
- Indonesia, Thailand and Vietnam (ITV) have very intriguing games markets
- Vietnam's games market is quite similar to the market in PRC and also has many regulations





Key Country Demographic and Macroeconomic Data

								CAGR '12-
Population	2011	2012	2013	2014	2015	2016	2017	'17
Indonesia	243.80	246.86	250.07	253.32	256.61	259.95	263.32	1.3%
Malaysia	28.76	29.24	29.74	30.25	30.77	31.29	31.83	1.7%
Philippines	95.05	96.71	98.37	100.06	101.78	103.53	105.31	1.7%
Singapore	5.18	5.31	5.43	5.54	5.66	5.78	5.90	2.2%
Thailand	66.58	66.79	66.96	67.13	67.30	67.47	67.64	0.3%
Vietnam	87.84	88.78	89.71	90.66	91.61	92.58	93.56	1.1%
Fixed Broadband Subscriptions per								CAGR '12-
100 inhabitants	2011	2012	2013	2014	2015	2016	2017	'17
Indonesia	1.1	1.2	1.4	1.6	1.9	2.1	2.5	14.0%
Malaysia	7.4	8.4	9.6	11.1	12.7	14.6	16.8	14.6%
Philippines	1.9	2.2	2.4	2.5	2.6	2.8	2.9	7.5%
Singapore	25.6	26.1	26.9	27.8	28.7	29.5	30.4	2.9%
Thailand	5.5	6.2	7.3	8.6	10.1	11.8	13.8	16.7%
Vietnam	4.3	5.0	5.5	6.0	6.6	7.3	7.9	10.6%
								CAGR '12-
Internet User Penetration	2011	2012	2013	2014	2015	2016	2017	'17
Indonesia	17.8%	22.3%	27.2%	33.6%	40.1%	47.7%	56.2%	21.1%
Malaysia	61.6%	66.5%	70.1%	73.8%	77.7%	81.7%	85.8%	5.7%
Philippines	35.3%	44.2%	50.8%	56.4%	61.6%	66.0%	68.1%	11.6%
Singapore	77.5%	80.9%	82.9%	84.9%	87.0%	89.1%	91.3%	2.8%
Thailand	30.2%	33.8%	37.0%	40.6%	44.5%	48.8%	53.5%	10.0%
Vietnam	35.6%	40.1%	45.8%	52.3%	59.7%	68.1%	77.8%	13.9%
01200 1018 201890								CAGR '12-
Internet Users (M)	2011	2012	2013	2014	2015	2016	2017	'17
Indonesia	43.4	55.0	68.0	85.0	103.0	124.0	148.0	22.7%
Malaysia	17.7	19.4	20.9	22.3	23.9	25.5	27.3	7.5%
Philippines	33.6	42.7	50.0	56.5	62.7	68.3	71.7	13.5%
Singapore	4.0	4.3	4.5	4.7	4.9	5.2	5.4	5.0%
Thailand	20.1	22.5	24.8	27.2	30.0	32.9	36.2	10.3%
Vietnam	31.3	35.6	41.1	47.4	54.7	63.1	72.8	15.1%
Total	150.2	179.6	209.2	243.2	279.1	319.0	361.4	15.8%

Source: Niko Partners,

PC Online Games Revenue by Country

Country	2012	2013	2014e
Indonesia	\$88.1 million	\$110.1 million	\$136.5 million
Malaysia	\$44.1 million	\$54.0 million	\$66.1 million
The Philippines	\$43.9 million	\$53.1 million	\$64.0 million
Singapore	\$31.0 million	\$33.9 million	\$36.8 million
Thailand	\$133.0 million	\$155.1 million	\$183.0 million
Vietnam	\$219.6 million	\$255.0 million	\$298.0 million

Source: Niko Partners, November 2013

Note: We are building our 2014-2018 market size and forecast now (due Nov 2014)

PC Online Gamers by Country

Country	2012	2013	2014e
Indonesia	19.63 million	24.00 million	28.00 million
Malaysia	7.62 million	8.70 million	9.90 million
The Philippines	21.00 million	24.70 million	28.72 million
Singapore	1.53 million	1.66 million	1.80 million
Thailand	8.12 million	8.95 million	9.93 million
Vietnam	15.65 million	17.25 million	19.00 million

Source: Niko Partners, November 2013

Note: We are building our 2014-2018 market size and forecast now (due Nov 2014), and this will include estimates for the number of mobile gamers.

Country Snapshots: Indonesia (2013)

- Largest economy in SEA and largest archipelago with 6,000+ islands; 70% of gamers live on Java island
- 10,000+ I-cafés for gaming
- 6% paying gamers, ARPPU \$6-8/month
- Three online game companies dominate the Indonesian market and Niko estimates that they generate 75% of the revenue. These are PT Kreon Gemscool, PT Megaxus, and Lyto Kreon
- Mobile very important, the total mobile games revenue in Indonesia is \$11 million. In this country, women love to play social games but do not often go out socializing or to Internet cafés. The popular mobile games in Indonesia are familiar the world over. BlackBerry was very prevalent among Indonesian mobile phone users, but Apple and Android devices are gaining share steadily, particularly among younger users.

Country Snapshots: Malaysia (2013)

- Strong Chinese population, especially among gaming population
- Malaysia & Singapore often lumped together, share servers
- MOL is regional online payments platform leader and HQ in Malaysia
- 800+ I-cafés for gaming
- 10% paying gamers, ARPPU \$4-5/month
- Malaysia and Singapore have a shared list of leading online game operators, as a result of the combined market many operators perceive the two countries to make up. A notable game platform headquartered in Malaysia, yet operating regionally, is MOL.
- Malaysian gamers enjoy Chinese games and behave similarly to gamers in mainland China.

Country Snapshots: The Philippines (2013)

- Mostly English speaking, Gaming is very popular, but very low spending
- 20,000+ I-cafés for gaming and home PC and BB penetration is very weak
- Facebook gaming very popular, 4% paying gamers, ARPPU \$4-5/month
- The top games are Cross Fire, Grand Chase, RO, Point Blank, KOS, Special Force, Cabal, Dragon Nest, League of Legends, Dota and Dota 2 though Dota is much more popular because it is entirely free to play, whereas Dota 2 is monetized.
- Mobile games are less relevant in the Philippines because smartphones and tablets are too expensive for this demographic, though people do play simple games on their standard handsets. However, sales of iPad, iPhone and Android smartphones (Samsung Galaxy being the most popular Android smartphone) are all on the rise, and there has been steep growth in downloadable games for these devices coming off of a very low base.

Country Snapshots: Singapore (2013)

- Communications hub of SEA, Regional HQ for many game companies
- Vibrant and legitimate market for consoles and PC offline games, plus online games and mobile
- Internet penetration very high at 75%+
- Smallest market in absolute value and growth potential
- 17% paying gamers (highest in the region), ARPPU \$8-10/month
- Niko estimates that at least 85% of the revenue is generated by 5 online operators: Asiasoft, IAH Games, Cherry Credits, Garena and Cubinet.
- Singaporeans have embraced mobile gaming and the country has the region's highest smartphone penetration rate at 87%, and 29% of mobile users have more than one handset. Mobile Internet usage is common for these smartphone users. Mobile gaming is eating away at the casual and social gaming previously done via PC.

Country Snapshots: Thailand (2013)

- MMORPGs very popular
- Infrastructure beyond major cities is weak, I-cafés are popular (20,000+)
- Local companies are strong
- 15% paying gamers, ARPPU \$8-10/month
- The top game operators in Thailand are Garena, Asiasoft, True Corp/NCTrue (True), and Ini3. Some smaller operators and games operated off international servers are also popular, including Wargaming's World of Tanks.
- Niko estimated \$155 million for PC online games revenue in 2013.

Country Snapshots: Vietnam (2013)

- Vibrant gaming culture
- 3-year ban on new game licenses was overturned in September 2013
- Facebook partially blocked but still popular
- Web-browser games are popular, 15% paying gamers, ARPPU \$7-9/month
- The top game operators with licenses to operate games in Vietnam are VNG (partially owned by Tencent), VTC, and FPT Online. Smaller operators that are likely operating without licenses make up less than 10% of market revenue and include Soha and S-game, V-game, and Like.vn.
- Vietnam should achieve \$22 million in mobile games revenue in 2013. App Annie captures data from the App Store and Google Play, but Vietnam also has local app stores with significant presence. For example, M-game is a popular local app store. Roughly 65% of mobile users have feature phones, but smartphone penetration is rising rapidly.

Growth Drivers in SEA

- Growth in gamers leads to growth in games revenue. The entire games ecosystem benefits if more gamers enter the market. These drivers are true globally too.
- There are many drivers for growth, and some of the most important include:
 - Expanded usage of mobile chat tools for games distribution
 - Increased smartphone penetration
 - Higher-quality locally developed games
 - Increase in % of hard-core PC gamers adding mobile games to their usage
 - · Rising popularity of competitive gaming to build popularity and demand
 - Increase in home PC and broadband penetration rates

THANK YOU

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