Research report for Southeast Asian Game Industries (2011-2013)

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1. Industry Report:

1.1. Market

Since the 2008 global financial crisis, Southeast Asia has been identified as one of the world's emerging markets. The region is expected to have promising economic outlook for the world's economy by producing an average GDP growth of 5% and above among most of the ASEAN countries from 2013 to 2017 (Mead, 2012).[i] In the video game industry, in particular, recent regional market growth in Singapore, Malaysia, Indonesia, the Philippines, Thailand and Vietnam has collectively reached an annual compound growth rate of 17.4% from 2011 to 2016 (Mead, 2012). By 2016, Southeast Asia will reach a market size of 117 million gamers. The growth in the gamer demographic will generate more than one billion dollars of market revenue. While Singapore, Malaysia and Thailand will form one interconnecting market, the Philippines, Indonesia and Vietnam will constitute three single markets on their own (Grubb, 2012). The region's economic growth has developed from an online market that prefers free-to-play multiple player online games (MMOG), social games and casual games over other game genres.

Despite its positive economic outlook, Southeast Asia still faces new challenges to its goal of becoming a collective regional economy entity. The major barrier to this integration lies in the internal differences that each nation bears in its own national political system, its economic structure and its technological infrastructure (Kim et al, 2011). In 2012, the total inflow of foreign direct investment to Southeast Asia is $56.1 billion in US dollars. Among all the nations, Singapore received more FDI capitals than the other five countries (Malaysia, Indonesia, the Philippines, Thailand and Vietnam) combined (cogitAsia, 2012). In the political system, Brown (1994) argues that there are at least four types of political systems existing in Southeast Asia today. For example, corporate authoritarianism defines the political system of Singapore, while the Vietnam system operates under heavy communist control. All these systems face individual challenges created by internal problems that intertwine with domestic racial tensions and political power struggles. Therefore, game developers in Southeast Asia have to face the problem of censorship while at the same time dealing with the lack of transparency in a restricted socialist market[ii]. In additions, internal racial and state tensions have also appeared in the process as these countries move toward democratization. Historical animosities, territorial disputes, racial and religious division and ideological differences all appear to strengthen interstate tensions among the member nations in the region. Differences in language also increase the challenge of content localization for games that are marketed in this region (Rao, 2012).

Economically, Southeast Asia represents countries with different forms of economic progress. Particularly in game industry, Singapore, Thailand and Malaysia are closely connected gaming markets, while Indonesia, the Philippines and Vietnam are more divergent. As Singapore stands out as a developed economy, Malaysia, Indonesia, the Philippines, Thailand and Vietnam represent the fastest-growing five nations with a middle class on the rise. Although the region constitutes only 9% of the world's total population, Southeast Asia has attracted multinational companies with its resourceful labor profile. Particularly Indonesia and Vietnam have gained the reputation as low-cost production locations to attract foreign direct investment (Chandran, 2011). Multinational companies invest in the region because of the availability of a large pool of highly skilled labors. These low cost workers work in outsourced studios, producing quality work for multinational companies such as Hollywood.[iii] A comparison of average hourly wage rates between China, Vietnam and Indonesia shows that a company pays $1.56 US dollars to hire a worker in China while it only requires an hourly rate of $0.81 and $0.51 US dollars to hire the same kind of worker in Vietnam and Indonesia. In additions, Southeast Asia is also going through a social transformation as the result of the rise of its newly "rich" middle class. It is reported that the collective middle class population in the region in the five fastest-growing Southeast Asian countries will grow from 90 million people in 2011 to 150 million people within the next four to ten years (PricewaterhouseCoopers, 2011).

Disparity also appears in ICT infrastructure among Southeast Asian nations (Ang, 1996). Singapore and Malaysia have developed a high degree of Internet household penetration, reaching 133% and 90% respectively. However, Vietnam, the Philippines, Thailand and Indonesia still lag behind the global average of 45% (Kim et al, 2011). The low growth in Internet penetration slows down the region's collective competitiveness in the global game scene. Internet connectivity in Southeast Asia is slower by more than six times than in the country with the world's fastest connection, South Korea. Internal disparity also exists. For instance, Indonesia has 11% of ownership of home computer in 2009, while the rural area has only 2% (Audiencescape, 2010). In all, creative talents in the region can communicate in English and are receptive to western game art and storytelling. While game developers can overcome language and content localization, game development remains a restricted environment, due to the high price of broadband connection charged by local telecommunication companies.

Table One: Demographic Background of Internet Penetration in Six Southeast Asian Countries (In million users)

	Indonesia	**Philippines**	**Thailand**	**Malaysia**	**Singapore**	**Vietnam**
Population	245	101.8	66.7	28.7	4.7	83
Internet Users	55 (22% penetration rate)	29.7 (29% penetration rate)	18.3 (27% penetration rate)	17.7 (61% penetration rate)	3.7 (77% penetration rate)	30.5 (31% penetration rate)
Facebook Users	43.5	27.7	14.2	12.3	2.6	2.9
Online Gamers	14.8	12	6.4	5.8	1.3	12.4

From various sources.

Table One provides details of the unequal internal development that exists among six Southeast Asian countries. In the category of population, Indonesia's demographic scale is the largest. The country has a total of 245 million people, which makes it the fourth largest country in the world. On the contrary, Singapore has the smallest population size, only 4.7 million people, among whom 1.4 million are foreign residents. However, in terms of Internet development, Singapore enjoys the highest degree of Internet penetration, while penetration in most of the other countries reaches only about 30% or lower, as the necessary technology awaits further development. In social media, Indonesia possesses the highest number of users, nearly 43 million people, whereas Singapore and Vietnam counted only 2.6 and 2.9 million users respectively in 2011. All these Internet demographics depend on gamer demographic that in Indonesia, the Philippines and Vietnam has surpassed ten million users. Singapore, Malaysia and Thailand possess smaller markets in online game.

Consequently, governments in the region respond to the region's economic growth by proposing creative industry policies that will boost their national economy. ASEAN Economic Community (AEC) is the central governing office working on a pan-Southeast Asian strategy. The AEC's policy, *ASEAN ICT Master Plan 2015*,[iv] identifies the development of ICT as an agreed area of growth for ASEAN's member nations. Looking at the national context, Singapore has an ICT policy, *iN2015 Digital Media and Entertainment*,[v] created to respond to a fully integrated Southeast Asia in 2015. The plan considers digital gaming as one of the country's core sectors in creative industry development. This plan shows Singapore's ambition to use ICT in order to build the country's leadership in the region as an intelligent nation in Southeast Asia (Tan, 2012). Similarly, countries such as Malaysia, Indonesia and Thailand have also adopted the ICT approach as they compete with each other to become the hub of digital content in Southeast Asia. In Malaysia, for example, the government has formulated its game development policy based upon the plans of *Multimedia Super Corridor*[vi] and *Economic Transformation Programme*.[vii] In Indonsia, the government implements the "14 Year Economic Master Plan" to develop internet infrastructure. The Palapa Ring project builds the country's national optical fiber ring around major islands of Indonesia. In Thailand, the government forms digital content clusters to improve the competitive ability of local start-ups in plans like *Thailand's ICT Master Plan 2009-2013*.[viii] The government invested a total of 20 billion Baht in 2010 to build a nationwide network for high-speed Internet services. n additions, it also sets up the "Thai Game Cluster" office in order to provide funding to foreign game ventures, which receive 100% ownership after they use the funds to set up companies in Thailand (Tan, 2005).

International game companies also respond to the economic output by entering Southeast Asian markets to achieve first mover effect. As the problem of rampant piracy has been the major cause that prevents American and European game developers from distributing products throughout the region, rising consumer power in the region's growing middle class changes such perception. In the 2010s, international game companies such as Blizzard (US), Gumi (Japan), Dragonfly (Korea), NHN (Korea), Tencent (China) and Baidu (China) subsequently set up offices in Singapore. More recently, Western game developers began migrating to Southeast Asia to join the local talent pool, just as game studios in United Kingdom and Europe closed down their offices in the financial crisis.

2.2. Industry Value Chain

The relationship between the development of Southeast Asia's game industry and the creative industry policies of the region's six Southeast Asian governments require an examination of industry dynamics that shape the current industry structure of the region. Key players that form the Southeast Asian industry dynamics come from three categories: local game developers, global game developers and local game publishers. Among the six Southeast Asian governments, Singapore, Malaysia and Thailand have been recently adopted an activist approach that intervenes in the industry with schemes to grow local startups in their domestic industries. Each of the other three countries of Indonesia, the Philippines and Vietnam have yet to develop a policy focus. At the current stage, most game industry policies still aim at connecting local game development to global capital by strengthening the industry components of outsourcing and trade export in the local production.

As for three industry players, most of the local game developers in Southeast Asia are small- and mid-sized companies. These companies are either companies that started in the 1990s or 2000s, and grew from contractual work that they accepted from international game companies seeking to outsource projects, or as start-ups that produced small budget games like mobile and flash games. These local game companies produce quality art assets for global titles. They hone their expertise in cross-platform production to excel in console, PC and mobile and casual development. Most of the global game companies set up their studios in Southeast Asia due to the region's cheap cost in skilled talents. Such companies include Electronic Arts, Lucasfilm, Koei, Gevo and Ubisoft in Singapore; Codemasters Studios in Malaysia; Square Enix and Gameloft in Indonesia; Activision, Bioware, Bungie and Eidos in the Philippines; and Gameloft in Vietnam.[ix] The problem of rampant piracy imposes barriers for most international game publishers wishing to distribute products in Southeast Asia. Publishers present in the region instead focus on online game publishing. These companies include Thailand-based Asiasoft, Singapore-based Infomcomm Asia Holdings and Malaysia-based Cubinet and E-Club.[x] Local publishers that publish games only within a single nation are a rare situation, except Vietnam. While most publishers see Southeast Asia as an integrated single market for game publishing, Vietnam remains restricted to them, because of barriers to foreign imports due to censorship by the Vietnamese government. The government adopts a protectionist approach in its support of local companies like VNG Corporation and FTP Online. These companies grew from the import of online games from China and Korea, but later evolve to become main players to produce local popular games such as historical MMORPG, *Thuan Thien Kiem* and the historical war game, *Battlefield 1942*.

Table Two: Major Local and Global Game Developers in Southeast Asia

Country	Names of Selected Local Companies	Names of Global Companies
Singapore	- Boomzap - Envisage Reality - Nexgen - Nabi Studio - Ratloop Asia	- Electronic Arts - Lucasfilm - Teckom Koei - Gevo - Ubisoft
Malaysia	- Game Brains - Lemon Sky - Pixel	- Codemasters Studios
Indonesia	- Altermyth - Agate Studios - Main Studio - Manticone Studio	- Gameloft - Kapcom - Square Enix
Philippines	- Anino Games - Che Q - Digital Arts Chefs - Glyph Studios	- Activision - Bioware - Codemasters - Eidos
Thailand	- Cyberplanet - Sanuk Software - Novaleaf	- N/A

	- Studio Hive - DeBuzz	
Vietnam	- Colorbox - FTP Online - VNG - VTC Studio	- Gameloft

Table Two shows the global-local relationship between local and global game companies by displaying select major global game developers that have set up studios in Southeast Asia. It describes a global industry structure through outsourcing in local game development in Southeast Asia. In Singapore, global game companies such as Electronic Arts, Lucasfilm, Koei and Ubisoft establish their studios with the incentive of accessing regional creative talents in Southeast Asia. As the Singapore government actively promotes game industry development by offering global game companies tax-free packages and relocation support, these global game companies select Singapore due to its geographic location as a gateway to Southeast Asia. Similarly, the Malaysian studio of Codemasters enjoys a reputation as a developer of global racing game titles. Gameloft in Vietnam has the company's largest studio in Southeast Asia, and provides porting support in the company's mobile game development.

In all, these game companies are important players in shaping a particular type of game art that is consumed both within and outside of the region. The outsourcing experience helped local game developers to grow during the time that they work with American and Japanese game companies, which allows them to learn a production pattern that reflects a corporate style of content creation. These local developers in turn become the primary agents of development, rather than the government, capable of transferring local stories into global form. Game arts from games such as *Rocketbirds: Hardboiled Chicken* (2013, Singapore)[xi], *Asura* (2006, Thailand)[xii] and *7554: Glorious Memories Revived* (2011, Vietnam)[xiii] indicates such trends as local game developers adopt international game development standards to tell stories that derive from local game artists, and which are developed for local markets, not to mention the rebuilding of national histories that provide counter-narratives to Western game stories.

2.3. Policy

Consequently, governments in the region respond to the region's economic growth by proposing creative industry policies that will boost their national economy. ASEAN Economic Community (AEC) is the central governing office working on a pan-Southeast Asian strategy. The AEC's policy, *ASEAN ICT Master Plan 2015*,[xiv] identifies the development of ICT as an agreed area of growth for ASEAN's member nations. Looking at the national context, Singapore has an ICT policy, *iN2015 Digital Media and Entertainment*,[xv] created to respond to a fully integrated Southeast Asia in 2015. The plan considers digital gaming as one of the country's core sectors in creative industry development. This plan shows Singapore's ambition to use ICT in order to build the country's leadership in the region as an intelligent nation in Southeast Asia (Tan, 2012). Similarly, countries such as Malaysia, Indonesia and Thailand have also adopted the ICT approach as they compete with each other to become the hub of digital content in Southeast Asia. In Malaysia, for example, the government has formulated its game development policy based upon the plans of *Multimedia Super Corridor*[xvi] and *Economic Transformation Programme*.[xvii] Particularly in Indonesia and Vietnam where internal disparity in ICT implementation among rural and urban areas have increased gap of digital divide among different social groups in the society. Sustainable ICT development has been adopted as an essential strategy for the government to continue national growth. In Indonesia, the government applies 14

Year Economic Master Plan to develop broadband penetration in the Palapa Ring project. In Vietnam, the government follows the regional agreement on ICT implementation under the concept of e-ASEAN to development networks for wireless and broadband penetration (Vietnam Posts & Telecommunications Group, 2011). In additions, Thai government forms digital content clusters to improve the competitive ability of local start-ups in plans like *Thailand's ICT Master Plan 2009-2013*.[xviii] The government invested a total of 20 billion Baht in 2010 to build a nationwide network for high-speed Internet services. In additions, it also sets up the "Thai Game Cluster" office in order to provide funding to foreign game ventures, which receive 100% ownership after they use the funds to set up companies in Thailand (Tan, 2005).

Specific policy initiatives that show the government's support in game industry development include projects of the following:

- Singapore game box: http://www.gsc.sg (a government project to support local game developers and to promote their publishing)
- Contact Singapore: http://www.contactsingapore.sg/ (a government office that assists foreign companies to set up offices in Singapore)
- Multimedia Development Corporation (MDeC): http://www.mdec.my (Malaysia's government office in charge of game industry)
- Under MDeC, there is a division called Shared Services and Outsourcing (SSO) cluster of the Multimedia Super corridor project.
- Under MDeC, there is also a project called Creative Malaysia that encourages co-production project between animation, game and visual effect industries
- Malaysian government has a plan to promote International Creative and Multimedia Market in 2017
- Money collection agent site: Money Online (https://global.mol.com/global/portal/en/gameshive.aspx)
- Indonesian government implements plan such as "Creative *Economy Development Plan 2009-2015",* "14 *Creative Industries Subsector Development Plan 2009-2015",* and "Work *Program 2009-2010 National Creative Economic Development, Ministry of Trade".* The goal is to create productive creative economy in 2025.
- Responsible governing office: Ministry of Tourism and Creative Economy
- Indonesian government has law on copyrights (*Law of the Republic of Indonesia No. 19 of 2002 regarding Copyrights*), but piracy is still a serious problem in the country.
- Suggestion for government's improvement on Indonesian game industry is available on page 243 and onward in the chapter of http://www.eria.org/Chapter%205-Indonesia's%20%20Report%20on%20Creative%20Services.pdf
- In Thailand, the government has Smart Thailand Master Plan
- Much fierce market competition to come in Thailand
- Government associations related to game in Southeast Asia include associations such as: Games Exchange Alliance, Singapore (GXA) Singapore, Game Developers Association of The Philippines(GDAP) Philippines

- In Vietnam, the government monitors game industry by requiring providers to apply licenses from the Ministry of Information and Communication.

3. Proposed Analysis on Industry Transformation within Nations

3.1. Singapore

The region's industry dynamics have shown various stages of development unfold in the process of forming industry value chains within each nation. Most of the countries form their industry value chains based upon the level of influence outsourcing exerts on them. All these nations seem to face the challenge to connect local developers and publishers. In Singapore, for example, the country's game industry has shifted its focus from global game companies to local small- and medium-sized firms. This shift reveals an industry transition at the level of creative capital, where local talents move from the position of labor to that of entrepreneur. A historical review of the local development sector shows how global players exert an impact on knowledge transfer and talent education. For instance, the Media Development Authority has signed several collaboration agreements with global game companies. These companies offer industry exchange programs, including *Talent Exchange Program* (Teckom Koei), *Independent Developer Evangelic Groups* (Microsoft), *Ubisoft-Digi Pen University Campus* (Ubisoft), in order to train budding young talents to develop games in the global title environment. In the case of Singapore, the global-local relationship has recently taken the form of local start-ups that are beginning to produce internationally award-winning indie titles in the global market. The following interview with the lead artist at one of Singapore's global game companies shows the type of global influence that he receives in his career training.

Regional game publisher based in SG and Malaysia: Wargaming: http://asia.wargaming.net
Declout: http://www.declout.com
Webzen (C9): http://c9.webzen.com/events/expansion

3.2. Malaysia

Industry transformation in Malaysia proceeds in two directions. Firstly, in game development, the Malaysian government, under the auspices of the Multimedia Development Corporation, steers the country's ICT development in order to promote local game industry under the concept *Digital Malaysia*. It is reported that in 2010 80% to 90% of the content accessed on the Internet in Malaysia originated from overseas (Economic Transformation Programme, 2010). Another infrastructure challenge is the imbalance of development in internet penetration between the city and the rural area. The government sets up the office of Malaysian Creative Content Association to steer the development direction of the country's creative industry. It considers outsourcing as the potential aspect of local game development. Secondly, in game publishing, most of the online games are published for Chinese ethnic communities. Although the Chinese population only occupies 30% of the country's population, Chinese gamers have become the major source of income that shapes a publisher's local style of marketing to promote games. According to an interview with a Malaysian online game publisher, because most of the paying customers are Chinese gamers, publishers mostly offer gaming environment in Chinese language. Despite the government's effort to promote racial harmony under the "One Malaysia" plan's title, this emphasis reveals a potential problem in the lack of development and publishing for local content that exist for all races in the country. In addition, a clear disconnection exists between Malaysian game developers and publishers, as game development concentrates on producing content for the global market while local game publishers import competitive foreign games for Malaysian gamers.

Company profiles:

Publishers:

Asiasoft: http://www.asiasoftsea.com
Rosso Index Malaysia: http://www.myrosso.com

Game Flyer: http://www.gameflier.com.my
CuB Net: http://www.cib.com.my/about/

Major channels of revenue are through subscription and in-game revenue collection. Publishers hosting a lot of e-sport events to boost game play in their games (ie. dota and League of Legends)
Southeast Asia has prolific gamers

Malaysian Chinese gamers prefer Chinese games

3.3. Indonesia

In Indonesia, the video game industry demonstrates a particular global-local relationship that is triggered by independent game studios that once undertook outsourcing game development for global game companies. The recent rise of the Indonesian market contributes to the thirst for local games that can provide Indonesian stories for domestic consumption. Since late 1990s, Indonesia has gone through technological transformation with social networks previously formed by family operated internet cafes (ie. warung) to social networks now formed by major telecommunication company (ie. Gemilang Ananta Telecom Corporation) (Lim, 2003). Indonesia's markets are filled with various items of foreign source, consumers tend to grow up reading Japanese comic books and watching American hero animation. There is a preference in the Western narrative for media storytelling, which provides independent game developers formulas with which to create content that is both western but also Indonesian. Economically, the outsourcing positions of these companies provide creative talents a basic safety net that encourages them to take time to develop titles that reflect their passion and interest in the game development profession. The financial freedom that these talents receive once they have worked on an outsourcing project allows them to learn new skills that cannot be gained in a local education system. With no assistance from the Indonesian government, independent game developers have also volunteered to teach game design at local universities. Consequently, they become cultural agents that create marketable local stories for audiences that already possess global consumer tastes. A game studio manager describes the uniqueness of the global-local relationship in Indonesia's game market as follows:

In all, production activities that game groups in Indonesia engage include video sequences, music sound tracks, digital TV gaming, gaming for mobile phones, computer manufacture, distribution, and retail games console manufacture, distribution and retail (Simotupang, Rustiadi & Situmorang, 2012).

- Agate: Eear Grey & This Rupert Guy (2011): http://www.youtube.com/watch?v=2PSKauTKMJ0
- Bamboomedia:
- Kinema Systrans Multimedia: located in Batam, producing *Sing to the Dawn*.
- Castle Animation: producing outsourcing work in animation to US and Europe (ie. the Adventure of Carlos Cartepillar)
- Garuda games (http://garudagames.com/)
- CJ and Netmrable both built reaches in Indonesia. They both built connection with warnet (internet cafes)
- Altermyth: http://altermyth.com (award winning game: Inspirit Arena)
- Kotagames (social game platform)

3.4. Philippines

The story of Philippine's industry transformation bears a resemblance to

Indonesia and Malaysia, as most of the country's local game development relates to outsourcing projects rather than game development for the domestic market. Different from other ASEAN countries, the market structure in the Philippines is that more than 70% of the GDP in the Philippines is based upon consumption, driven by USD $21 billion in overseas remittance (Digital News Asia, 2013). In game industry, independent game developers work on mobile game development for global markets, while most of the creative capital in the Philippines focus on digital art and computer graphics. The country is strong in 2D and 3D animation illustration for computer game art. Like in animation industry, game companies have faced challenges in moving upward in the industry value chain due to their long term contractual works in working on outsourcing projects (Tsang & Goldstein, 2010). Because of the limited number of jobs available in the domestic game industry, most of the country's digital artists become entrepreneurs by posting their professional information on the internet in order to find contract work with international game companies. Game development through outsourcing has transformed this group of independent digital artists into global talents who are able to illustrate computer game art with international appeal. These artists have become a major source of creative capital in the country's industry value chain. The following interview with an independent digital artist, however, shows some of the artist's concern about being an artist who maintains his profession in an isolated free-lance artistic environment:

- EA, Activision, Sony, THQ outsourced works to Philippino game developers
- Anino games: http://www.aninogames.com/aninogames/
- LevelUp: http://www.businesslist.ph/company/130759/level-up-inc/website
- Made-in-philippines games in 2013: Streetfood Tycoon, Word Stack, Undead Fever, Puzzle Pets Adventure, Purefoods Tender Juicy Shop for Mommy, Innkeeper HD, Grav, and Noypi Nota
- Top game Philippines game developers: Kuyi Mobile, MochiBits, Anino Games, NuWorks Interactive Labs, Soupware, BL-ED, Zeenoh Games, Kongregate, Komikasi, and Armorgames
- Asiasoft entering the Philippines also
- Games available in the Philippines: http://mmoph.blogspot.hk/2010/01/philippine-online-games-list.html
- Netopia: largest operator of the Internet café brand in the Philippines

3.5. Thailand

Thailand's outsourcing history in video game development resembles a similar path to the country's past history. As Thailand is the only Southeast Asian country that has not been occupied by foreign powers, it is also the only Southeast Asian country that does not have global game companies setting up their development studios in the country. Most of the outsourcing connection that Thai companies maintain is through small- and medium-sized game companies taking on contract work from American, European and Japanese major players. While some of the works focus on digital and conceptual game art, some other game companies work on cross-platform development for Nintendo, PC, Xbox and other companies. In addition, another industry dynamics includes the well-established publishing network by Asiasoft. Being the largest Southeast Asian online game publisher, Asiasoft has gathered sophisticated market information for consumer analysis. Both development training and market knowledge acquired through outsourcing and foreign game publishing have prepared Thailand to move its game industry one step ahead in local game development. The following interview with an independent game developer that produces Thailand's first history MMORPG game, *King Narusuan* (2011), describes his a cultural product to write Thailand's history in Southeast Asia 400 years ago.

- Bangkok Sandbox Global (emerging startup) – Stylista
- Thailand is influenced by Japanese anime and manga so the gamers like cutesy games
- Two major developers: cyberplanet and chiang mai digital work
- Top five companies: Extend studio; Sanuk, Novaleaf, Cyberplanet; Corecell
- Thailand is a market dominated by piracy.
- Small and medium sized game companies are emerging, working on apps games for iphone and ipad.
- NC True (True Corporation) publishes Korean games under developed by NCSoft
- Time for full production game (otherwise companies are not able to survive after advertising and development of the game)
- MOL purchases Zest (Thailand's largest online payment company)
- Thailand has a lot of indy and freelance game developers
- Worldwide game market sale in 2008: USA is the number 1, uk the second, japan as the third, france the fourth and Germany the fifth. (http://www.neogaf.com/forum/showthread.php?t=356585)
- History of video game revenue shows that the number increases every year.
- Debuz: also founded Game Indy as the second sub-company

3.6. Vietnam

Vietnamese game industry takes place in a restricted regulatory environment where the Vietnamese government applies protectionist approach to limit foreign influence. The domestic industry grows with two major companies, VNG (VinaGame) and VTC (Vietnamese Multimedia Corporation), dominating large part of the local market. The government has allocated $95 million USD to subsidize broadband penetration into the rural communities. In 2012, the Vietnamese game industry is the most profitable online game market in Southeast Asia. The industry became a market that earns $220.9 million in US dollars. Financial press also reports that an estimate of 15 million people participates in online gaming every day in Vietnam (Kim, Charles, Hong, Daniel, Winterle, David & Zhao, Audrey, 2011).

Game:

VNG: Sky Garden (highest grossing game)

- most domestic gamers in Vietnam have interest in playing foreign games
- in 2004, Kingsoft's Swordman Online took the Vietnamese market by storm (occupying 93% of the market). In 2011, the market is in transition from 2d to 3 d market.
- Strategies of companies in Vietnam are still focusing on low cost production to producing high quality games (including 7554).

References

Ang, Peng Hua. (1996). “Internet Development in Asia.” Online Document Available at <http://www.isoc.org/inet96/proceedings/h1/h1_1.htm>

Aslinger, Ben. (2013). Redefining the Console for the Global, Networked Era. In Huntemann, Nina & Payne, Matthew (Eds). *Joystick Soldiers: The Politics of Play in Military Video Games*. Pp. 59-74. New York: Routledge.

Audiencescape (2010). World Bank Knowledge for Development: Indonesia. Online Document Available at <http://www.audiencescapes.org/country-profiles/indonesia/country-overview/internet/internet-132>

Bertacchini, E., Saccone, D. & Santagata, W. (2011). “Embracing Diversity, Correcting Inequalities: Toward a New Global Governance for the UNESCO World Heritage.” *International Journal of Cultural Policy* 17(3): 273-288.

Brown, David. (1994). *The State and Ethnic Politics in Southeast Asia*. London: Routledge.

Chandran, Rina (2011). *FDI in Focus: Southeast Asia Surprises*. Online Document Available at: http://tilt.ft.com/#!posts/2011-08/27696/fdi-focus-southeast-asia-surprises

cogitAsia. (2012). “By the Numbers: Foreign Direct Investment in Southeast Asia.” Online document available at <http://cogitasia.com/by-the-numbers-foreign-direct-investment-in-southeast-asia/>

Consalvo, Mia (2003). “Console Video Games and Global Corporations: Creating a Hybrid Culture.” *New Media & Society* 8(1): 117-137.

Cunningham, Stuart. (2009). “Creative Industries as a Globally Contestable Policy Field.” *Chinese Journal of Communication* 2(1): 13-24.

Digital News Asia. (2013). “Is the Philippines Asia’s Most Promising E-Commerce Opportunity?” Online Document Available at < http://sgentrepreneurs.com/2013/01/30/is-the-philippines-asias-most-promising-e-commerce-opportunity/>

Dyer-Witheford, Nick & de Peuter, Greig (2009). *Games of Empire: Global Capitalism and Video Games*. Minneapolis: University of Minnesota Press.

Economic Transformation Programme. (2010). “Communications Content and Infrastructure – Driving the Transition to a Knowledge-Based Society”. Online Document Available at <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan026241.pdf>

Florida, Richard. (2012). *The Rise of the Creative Class--Revisited: 10th Anniversary Edition--Revised and Expanded*. New York: Basic Books.

Fung, Anthony. (2007). "Intra-Asian Cultural Flow: Cultural Homologies in Hong Kong and Japanese Television Soap Operas". *Journal of Broadcasting and Electronic Media* 51(2): 265-286.

Grubb, Jeffrey. (2012). “Southeast Asian Gaming Firms Expect Huge Growth in the Region Through 2016.” Online Document Available at: http://venturebeat.com/2012/11/30/southeast-asian-gaming-firm-expects-huge-growth-in-the-region-through-2016/

Hawkins, John. (2001). *The Creative Economy: How People Make Money from Ideas*. London: Penguin Books.

Hesmondhalgh, David. (2006). “Media and Cultural Policy as Public Policy.” *International Journal of Cultural Policy* 11(1): 95-109.

Hesmondalgh, David. (2008). “Cultural and Creative Industries.” In Tony Bennett and John Frow (eds) *Handbook of Cultural Analysis*. Pp. 552-569. Oxford and Malden, MA: Blackwell.

Higgs, Peter & Cunningham, Stuart (2008). “Creative Industries Mapping: Where Have We Come From and Where Are We Going?” *Creative Industries Journal* 1(1): 7-30.

Iwabuchi, Koichi. (2002). *Recentering Globalization: Popular Culture and Japanese Nationalism*. Durham: Duke University Press.

Johnson-Yale, Camille. (2008). “So-Called Runaway Film Production”: Countering Hollywood's Outsourcing Narrative in the Canadian Press.” *Critical Studies in Media Communication* 25(2): 113-134.

Kim, Charles, Hong, Daniel, Winterle, David & Zhao, Audrey (2011). *The Future of Content: Southeast Asia. A Bain & Company Study for the World Economic Forum*. Online Document Available at: http://www3.weforum.org/docs/WEF_MEI_The_Future_of_Content_Report_2011.pdf

Kline, Stephen, Dyer-Witheford, Nick & de Peuter, Greig (2003). *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montreal: McGill-Queen’s University Press.

Kerr, Alphra & Cawley, Anthony. (2012) The Spatialisation of the Digital Games Industry: Lessons from Ireland. *International Journal of Cultural Policy* 18:4, 398- 418.

Lim, Meryna. (2003). "The Internet, Social Network and Reform in Indonesia" In N. Couldry and J. Curran (eds.), *Contesting Media Power: Alternative Media in A Networked World*. Rowan & Littlefield, pp. 273-288,

McGuigan, Jim. (2006). “Neo-Liberalism, Culture and Policy.” *International Journal of Cultural Policy* 11(3): 229-241.

Mead, Nick. (2012). “OECD: South-east Asian Economic Outlook to Return to Pre-Crisis Levels.” Nov 18, 2012. *The Guardian*. Consulted on April 12, 2013. Online Document Available at: http://www.guardian.co.uk/global-development/datablog/2012/nov/18/oecd-south-east-asia-economic-outlook

Merger, Pierre-Michel. (2010). “Cultural Policies in Europe: From a State to City-Centered Perspective on Cultural Generativity.” Online Document Available at: http://www3.grips.ac.jp/~pinc/data/10-28.pdf

O’Conner, Justin. (2010). *The Cultural and Creative Industries: A Review of the Literature*. Online Document Available at: http://kulturekonomi.se/uploads/cp_litrev4.pdf

PricewaterhouseCoopers (2011). *The Southeast Asian Tigers Roar Again: This Time For Real*. Online Document Available at: http://www.pwc.com/en_US/us/forensic-services/publications/assets/marketmap-southeast-asia.pdf

Rao, Madanmohan. (2012). Mobile Southeast Asia Report 2012: Crossroads of Innovation. Online Document available at <http://www.mobilemonday.net/reports/SEA_Report_2012.pdf>

Sarikakis, K. (2007). Chapter 1: The Place and Models and Cultural Policy in the EU. arikakis, K. (Ed). Pp. 13-21. *Media and cultural policy in the European Unin*. New York: Rodopi.

Simatupang, T. M., S. Rustiadi and D. B. M. Situmorang (2012), ‘Enhancing the Competitiveness of the Creative Services Sectors in Indonesia’ in Tullao, T. S. and H. H. Lim (eds.), *Developing ASEAN Economic Community (AEC) into A Global Services Hub,* ERIA Research Project Report 2011-1, Jakarta: ERIA, pp.173-270.

Siwek, Stephen. (2011). *Copyright Industries in the U.S. Economy: The 2011 Report*. Online Document Available at: http://www.iipa.com/pdf/2011CopyrightIndustriesReport.PDF

Tan, Terrence. (2005). “Exploring Game Development in South-East Asia.” April 20, 2005. *Gamasutra*. Consulted on April 17, 2013. Online document available at http://www.gamasutra.com/view/feature/2285/exploring_game_development_in_.php

Throsby, David. (2010). *The Economics of Cultural Policy*. Cambridge: The Cambridge University Press.

Throsby, David. (2008). The Concentric Circles Model of the Cultural Industries. *Cultural Trends* 17(3): 147-164.

Tsang, Ted & Goldstein, A. (2010). "The Outsourcing of 'Creative' Work and the Limits of Capability: The Case of the Philippines' Animation Industry". *IEEE Transactions on Engineering Management*, 57(1): 132-143

United Nations Conference on Trade and Development (2010). *Creative Economy 2010 Report*. Online Document Available at: http://unctad.org/es/Docs/ditctab20103_en.pdf

Vietnam Posts & Telecommunications Group. (2011). “Vietnam Telecommunications Report”. Online Document Available at <http://www.vnpt.vn/Portals/0/users/host/052011/05/EBCVT_web.pdf>

Yusuf, Shahid & Nabeshima, Kaoru (2005). *Creative Industries in East Asia*. Cities 22(2): 109-132.

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[i] The OECD reports GDP growth from 2013 to 2017 among the ASEAN six countries Indonesia as follows: 6.4 percent, Malaysia 5.3 percent, the Philippines 5.5 percent, Singapore 3.3 percent, Thailand 5.1 percent and Vietnam 5.6 percent.

[ii] The Vietnamese government of the Ministry of Information and Communication ruled to temporarily stop licensing foreign online games in 2010 till the end of 2011 due to the public's criticism on the violent content of games to increase juvenile crime.

[iii] Creative labors in Malaysia, Philippines, Indonesia, Thailand and Vietnam have been known for their work on outsourcing projects animation and post-production in Hollywood.

[iv] The document is available at http://www.scribd.com/doc/111870071/ASEAN-ICT-Masterplan-2015

[v] The document is available at https://www.ida.gov.sg/~/media/Files/Infocomm%20Landscape/iN2015/Reports/02_Digital_Media_and_Entertainment.pdf

[vi] The document is available at http://nitc.mosti.gov.my/nitc_beta/index.php/key-ict-initiatives/multimedia-super-corridor-msc-malaysia

[vii] The 2012 annual report is available at http://etp.pemandu.gov.my/annualreport/upload/Eng_ETP2012_Full.pdf

[viii] The document is available at http://www.mict.go.th/download/Master_Plan.pdf

[ix] Information collected from various sources during fieldworks.

[x] E-Club Malaysia only publishes games from European developer Valve. It holds regional e-sport competitions to promote the company's published games. Dota 2 is one of the most popular games that E-Club Malaysia publishes, which is found in many Internet Cafes in Southeast Asia.

[xi] *Rocketbirds: Hardboiled Chicken* is a 2D game designed by Singaporean indie game developers from Ratloop Asia. The game is released for global market through Playstation Network. Game story tells about the war between a group of penguin army and a chicken general. The character design looks hand-drawn and the art style looks cute. This game won international award in the 2009 Independent Developer Festival. The game is available at http://www.rocketbirds.com/hardboiledchicken/

[xii] *Asura* is a 2D MMORPG game developed by Thailand's independent game developer, DeBuz. The game was developed in 2006 and was the first local game becoming popular among the Thai gamers. *Asura* has East Asian art style. It follows the style of game play from Korean online game, *Ragnorak* (2002). However, the developer modifies the development into Thailand's cultural context. The game is now exported to overseas market in Taiwan and is available at http://www.asura.in.th/index.html

[xiii] *7554: Glorious Memories Revived* is a first person shooting game developed by Vietnamese game developer, Emobi Games. The game was released for Vietnamese market in 2011. Story of the game is set within the historical context of French-Vietnam war from 1946 to 1954. The title refers to the date of Vietnam's victory over France. The game presents an art style of visual realism. Its narrative shows a contrast of gamer perspective on Vietnamese history during WWII to the widely popular Electronic Arts title, *Battlefield Vietnam* (2004). The game is available at http://7554.vn.

[xiv] The document is available at http://www.scribd.com/doc/111870071/ASEAN-ICT-Masterplan-2015

[xv] The document is available at https://www.ida.gov.sg/~/media/Files/Infocomm%20Landscape/iN2015/Reports/02_Digital_Media_and_Entertainment.pdf

[xvi] The document is available at http://nitc.mosti.gov.my/nitc_beta/index.php/key-ict-initiatives/multimedia-super-corridor-msc-malaysia

[xvii] The 2012 annual report is available at http://etp.pemandu.gov.my/annualreport/upload/Eng_ETP2012_Full.pdf

[xviii] The document is available at http://www.mict.go.th/download/Master_Plan.pdf