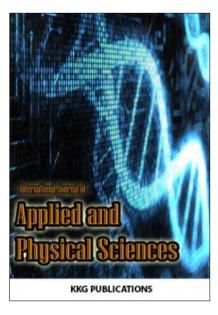
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Finding the Reasons of Accelerated Revenue of Mobile Games in APAC



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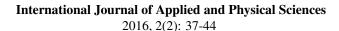
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FINDING THE REASONS OF ACCELERATED REVENUE OF MOBILE GAMES IN APAC

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Keywords:

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Received: 05 January 2016 Accepted: 22 March 2016 Published: 27 July 2016 Abstract. The objectives of this study were (1) find the factors behind the most accelerated gaming market industry in APAC region. The sample consisted of 38 Interviews of gaming industry-related people in Thailand and the Philippines. These are working as the owner of a game development company, game producers, marketing, designers, user acquisition experts, developers, and quality assurance in various companies of the APAC region. The conducted research was done with a survey about the real reasons behind the APAC region's accelerated revenue. Research findings were as follows: (1) APAC likes FPG games with social features and cute characters. (2) Smartphone has evolved as the first and only personal device for most APAC people; hence, gaming on mobile is getting more popular. (3) Big family sizes in APAC support the business ecosystem of mobile gaming as each member of the family has his/her device for playing. (4) Increased internet supports social culture, and hence it's a big boon for social games which APAC people like. (5) Better hardware and software of evolving smartphones are one reason for switching hardcore console gamers to the Mobile platform, increasing revenue. (6) Smartphones are easy to use, and more and more people are getting aware of using smartphones. (7) Mobile phones are more social than console games and available with user all the time under "all things in one device" concept and hence are used more for gaming and compared to consoles. (8) Last five years mobile gaming is evolved in APAC because more developers and publishers are in this region. (9) The next five years are very unpredictable as the gaming industry has become very dynamic, and future possesses the possibility of using wearable devices, virtual reality, or any other new technology on a mass scale.

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INTRODUCTION

Video games have got a powerful thrust in terms of revenue generations in last few years. People of all ages are now finding some or other games which are interesting for them. Famous games are making people addictive up to an extent that people are happily paying money to play games through IAPs (in application purchases).

This is known as monetization of games. And this industry has already become close to \$12bn revenue generation. Gaming analysis companies like "AppLift" and "NewZoo" are making predictions that this industry is going to grow to \$23bn revenue generation by 2016 with increased share of tablets, smart phones and other hand held devices.

Most surprising fact is that Asia Pacific countries are biggest contributor in this revenue (\$5.9bn out of \$12bn in 2013) in spite of mainly developing countries. So what is making gaming industry highly monetized in this part of world is area to research upon.

During literature review and initial primary research, it has been found that there is no real qualitative research done to

find out main factors which are accelerating the revenue in APAC region. Only quantitative researches or global level qualitative researches are performed.

So currently we know only global reasons of why mobile gaming industry is increasing. Also previous quantitative researches have only provided the trends based on historical analytics data collected with no subjective reasons for those trends specific to APAC region. Findings of this research will help in understanding those subjective reasons.

OUTLINE

Scope

This research is conducted to find the major factors responsible for best games revenue in APAC region. Research will be done by analysis of secondary data and interviews of participants who are related to gaming industry in APAC.

The responses from respondents will be summarized and supported by statistical data in order to clearly define the exploratory facts of this research.



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LIMITATIONS

1. Lesser number of participants: The participants count is less. Though since most the participants have worked for various game development companies in APAC region so their

view point is expected to reflect the prediction close to actual situation in this region.

2. Only four companies in two countries are covered in APAC region: The participants are from only two countries

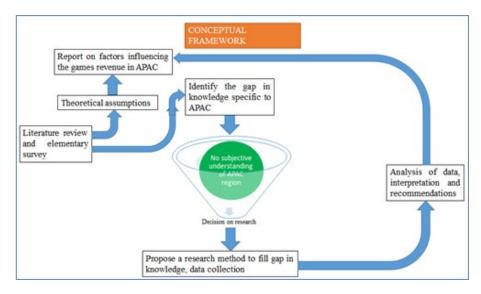


Fig. 1. Conceptual framework

Figure 1 above explains the conceptual framework. Researcher did elementary survey and literature review to understand the world's mobile gaming market. During the survey, it has been found that there is no qualitative research done to identify factors influencing the mobile gaming revenue in APAC.

After initial survey, researcher got convinced that there is need to understand the APAC mobile gaming market subjectively. This thesis also includes theoretical assumptions in gaming industry.

These assumptions will help to analyze literature review content and primary data collected to generate the final report on proved factors which are responsible for outstanding performance of APAC region in terms of game revenue generation. These theoretical assumptions consist of following:

- 1. People in two countries can be participant for a survey in whole APAC region: This theoretical assumption holds good since the companies involved in elementary survey are producing games in whole world with special strategy for each region.
- 2. Secondary data collected over internet sources are correct: Though resources used are authentic previous surveys in this area but there is no verification done on facts provided by corresponding researchers.

This research takes the work done by other researchers as prerequisite and work additionally on it.

LITERATURE REVIEW

A. Types of Mobile Games

- 1. Adventure Games: Adventure games usually consist of a series of actions and which makes the player to interact with game environment, in-game characters/objects for solving any mystery or completing a task
- 2. Arcade Games: These types of games bring the classic types of games on smart devices. By definition, the Arcade games are coin operated games physically installed into public places like restaurants, clubs, etc.
- 3. Platform Games: These games consist of movement of in-game character controlled by player on a platform dealing with obstacle to achieve the end of level collecting the rewards in the whole course and maintaining the rank or high score.
- 4. Puzzle games: These types of games involve some logic or knowledge by player to advance in the game [1].

B. Understanding European Gaming Market

Germany is rank one in Europe in terms of average monthly per paying user. UK nurtures a big online gaming market with 20% of internet users as online gamers. Consoles and PC are still popular in Germany but UK is trending towards gaming on tablets and mobiles. The most selling games are strategy, casual and action games. Physical games' sales are declining in France and digital games on mobile are catching up. Computer is most frequent device used for playing games



followed by smart phones. Players play social and casual games. Similar pattern is observed in Italy and Spain. Turkey and Poland are emerging markets of online games. Computer games were most popular in Poland in 2013 but Mobile games are increasing rapidly. In Turkey, 20 million people play online games with social games leading in chart. Russia is suffering from piracy of games but still it showed the growth of 20% in 2013. With increasing mobile gamers in Russia, the number of players may reach to 60 million in 2016 [2].

C. Understanding Gaming Industry in China

The mobile gaming market has expanded to 247% in 2013, as reported by Investors Business Daily Chinese Mobile gaming Soars. Keeping future growth in mind, Chinese internet companies like Baidu and Qihoo are spending a lot to monetize the mobile users especially with help of attractive mobile games. In May 2014, Baidu has signed carrier billing contract with mopay, online payment solution providing company.

These companies are hoping the payoff of these heavy investments as more people will start playing online games with convenient payment system available [14], [15], [16]. Niko partners in Sept 2013 predicted that Chinese gaming market will reach \$1.2 Billion in 2013 and there will be 80000 mobile app development studios in all over China. These 80000 app development studios will release at least new 100 games each day. In Dec 2013, the market reached to \$1.2 Billion beating all predictions [7].

As per another report from [3] 84% of Chinese people play video games compared to 64% of Americans and mobile platform is most famous among all available platforms in China. 79% of gamers play on tablet and 57% play on smart phones. Percentage of players playing games at least once in a week has risen to 50% and 59% on tablets and mobiles respectively [3].

D. Mobile Games Versus Gaming Consoles

Though overall gaming market revenue was increased from \$65 BN to \$70 BN from year 2011 to 2012, on other hand for gaming console makers and packaged gaming companies, retail software revenue was decreased from \$29.5 BN to 28 BN from year 2011 to 2012. So statistically the growth segment for gaming was mobile games. Global cause for this big shift from gaming console to mobiles was reported by [4] as big evolution in mobile technologies to support heavy games in terms of hardware and software requirements. More over the mobility of mobile devices ensures that people can play games on the go [4].

E. Changes in Gaming Market Over Last Few Year

1. More than one screen for games: Five years ago, there were mainly 4 screens available for games namely TVs

for consoles, gaming hand held devices, Monitors for home PC and single-sized phone displays. But with the evolution of smart devices, the number of screens have been added as smart phones and tablets off course of different screen sizes. Smart TVs with lesser penetrations are becoming other platforms for gaming. Players are now playing on more screens and they are distributing their expenses across the screens. All game producers have to take care of this fact [5].

- 2. Games are Free Now: A trend of free games has started now. People are willing to spend more money inside the game then buying it upfront and then playing it. Players do not want to pay for any low quality game upfront and then regret.
- 3. Games are Treated as Services: In-game buying is called monetization of game and now better/new features with every new version of game at regular intervals is what most of mobile development companies follow. So games are now treated as services hence they have acquired a dynamic nature and served with something new all the time. Especially successful games have to keep adding new content into game to maintain the user retention and revenues [6].
- 4. Business Model Balancing: Since games are now treated as services so there is a continuous need to make balance between gamers' benefit and game developers' profit. Launching to game is just the start of business. The main profit comes when mass of people start playing the game and a certain percentage of players start paying for getting additional perks inside game to have a competitive edge over others [7].

Global Launches:

Mobile games can now be launched on global scale. Thanks to business ecosystem provided by companies like Apple for Apple store and Google for Android store. Game developers can now launch their games for free globally and in-game profits are shared by platform owner (Apple, Google, etc.) and game developers.

F. Revenues in APAC Countries

Statistical data for revenue generation is researched in newzoo Global mobile gaming market report and it has been found that mobile gaming industry is increasing rapidly in APAC and it has the biggest growth as compared to any other region. Based on trend being followed for last 2 years, Newzoo predicted that global mobile/tablet games revenue will increase by 400% compared to 2012 to 2016.

The APAC region currently consists of 412 million active players out of which 172 million are paying players. On an average, each player spends \$2.86 per month constituting \$5.9BN in year 2013. Second rank in revenue generation is secured by North America with overall revenue of \$3BN and

average spending per player is \$3.87. APAC is far ahead from second rank region for revenue generation. In depth insight of countries in APAC reveals that in Japan, China, South Korea and Australia, on an average 63.75% of men are payers and 36.25% women are payers. After detailed analysis and research, newzoo gave 4 star rating to APAC for global appeal score for mobile game publishers [8].

Reasons of Revenue Increase in Gaming Industry

In 2008, an online magazine Communications of ACM, [9] tried to understand the world's gaming industry by finding out the prospects of mobile gaming in comparison to gaming consoles and other hand held gaming devices. In their global perspective, they predicted a good overall mobile gaming growth with various factors responsible. In its conclusion to why mobile gaming has good chance of growing globally, this research gives summary as below:

- 1. Technology Advancement: With a fierce competition among top mobile making companies like Apple, Samsung, etc., mobile phones hardware and software are benefitted by these company's billions of dollars of research work to exploit the first in market factor. With better hardware and software, now it is possible to play high graphics games smoothly. Technology advancement is impacting whole world in similar fashion as all new products in mobile industry are readily made available by companies in time duration of few months. So technology advancement cannot be unique reason for accelerated revenues in APAC region [10].
- 2. Mobile Devices as One Smart Device for All: With increased technology advancements, mobile devices are making an essential part of every individual's life. Mobiles are now no longer just cellular calling devices on the go. These have taken the shape of smart communication devices. People are now using it as a partial replacement of their laptops also. Being such a necessity for all mobile devices and becoming natural platform for playing games by masses and giving high competition to gaming consoles making companies. The concept of "all in one device" is applicable across whole world so this reason also cannot be unique reason for accelerated revenues in APAC region.
- 3. Improved Internet Accessibility on Mobile Devices: Internet providers and mobile network companies have grown manifold in terms of customer reach since they have started. The increased penetration of GPRS, 3G and 4G internet facilities over mobile have made them potential gaming devices too. When a mobile device is connected to servers through internet, it opens a gateway for downloading big games, competing among other online players, etc. Increased internet accessibility could be one of the reasons for accelerated revenue in APAC so

this point will be added in interview questions while collecting primary data for analysis.

4. Low New Entrant's Cost for Mobile Gaming Industry: Initiated by Nokia and now mainly Google's android and Apple's IOS is providing a very affordable mobile games business ecosystem that more and more mobile game developers and publishers are attracted towards it. This is resulting into better and variety of games worldwide and hence attracting more mobile gamers. Low entrant's cost could be one of the reasons specific to APAC region as there is availability of cheap labor of IT industry. This point will be added in interview questions while collecting primary data for analysis [9].

Literature Review Summary

So with help of all the literature review done here, the gap existing in researches done till now is very clear. There are professional research companies like newzoo which have given statistical data region wise about games revenue generated but no reason for why there is a huge difference in revenue among APAC (\$5.9BN), North America (\$3.87BN) and Europe (\$5.67BN) in 2014. There are some global reasons identified by some researches like technology advancement of mobiles/tablets, mobile devices as one smart device for all, improved internet accessibility on mobiles, low new entrants cost for mobile gaming industry. Statistical research on Whole Europe is also done explaining about the growth and trends of games in European countries. Chinese internet companies have seen the possibility of enormous growth in mobile games hence they have started investing in developing better infrastructure of internet especially for smart devices over wireless connection. There are researches about comparison between gaming consoles and games on mobiles/tablets. And mobiles/tablets are promising for future keeping in mind many advantages of them over gaming consoles. The question is still unanswered that why there is high gaming revenue in APAC region so there is a need of thorough research specific to APAC region to find out the factors responsible for this unprecedented growth over past few years.

METHODOLOGY

Gaming industry trends are understood by all people related to gaming industry in that particular region. This research is very niche and limited respondents have participated in this research's survey. But since the gaming industry is very niche and a considerable sample group of people can actually reflect the fair opinion about subject, the research is restricted to 40 respondents.



Research Population

- 1. Games are Published on Global Scale: All game publishers have aim to publish their games globally. Once the initial version of one game is ready it gets launched in test market which consists of 2 to 4 countries. Test market gives the sense of future of that game in big markets like US, UK and APAC. Analytics data collected through test markets performance of game help developers to apply some improvements in game. Once improvements are implemented game is published globally. All publishers apply this strategy to launch game. So it has minimum effect that their headquarter is in which location.
- 2. Different Marketing Strategy for Different Geography: Once the game is available on global basis further user acquisition is done with help of targeted marketing through various publicity channels. This marketing varies from one geography to another. Gaming companies hire geographical user acquisition experts and any user acquisition expert can be respondent of this research.

Research Instruments

This research is about finding main reasons of accelerated revenue of mobile gaming industry in APAC. Researcher thinks that there should be open-ended questions to respondents to collect raw primary data. So this research should be an exploratory research and hence primary data collection is done by personal interviews of respondents. Personal interview is a form of direct two-way communication between interviewer and respondents.

Data Collection Procedure

1. A questionnaire for personal interviews for collecting data for analysis: This is performed to achieve the qualitative research part. So personal interviews are conducted with gaming industry people. Responses from them have been collected analyzed and summarized to understand the research question. The eight questions asked from respondents are as follows:

Question 1: Could you suggest what games are most revenue generating in APAC region and why?

Question 2: Asia pacific region mostly consists of Developing countries then what is the reason behind most growth in gaming industry in this region during last year and why is this year promising too?

Question 3: Can you describe your views on increasing internet penetration in APAC region in last 5 years and how does it affect the mobile gaming industry?

Question 4: Can you describe your views on increased number of smart phones in APAC region in last 5 years and how does it affect the mobile gaming industry?

Question 5: Can you describe your views on increasing technical awareness (especially in using mobiles) in APAC region in last 5 years and how does it affect the mobile gaming industry?

Question 6: Do you think people are more attracted to use mobile phones for their gaming needs as compared to gaming console like Play Station? Why?

Question 7: How has gaming industry changed in last 5 years and how does it affect the APAC region gaming revenue generation?

Question 8: Where do you see the gaming industry in next 5 years globally and in APAC?

- 2. Secondary data collection from previous researches on same topics and analysis: Though there are very less qualitative researches related to APAC gaming eco system but still there are many researches which give an idea of previous work done in this field and provides guideline for this research.
- 3. Online gaming magazines, blogs, and related authentic web pages: Gaming is never considered serious topic for big qualitative researches but there are various blogs and online magazines which have published the important data on time to time basis. So those sources are also considered by researcher for data collection. Data collected from Personal interviews were properly formatted, validated and analyzed. Hence forth related conclusions were drawn from it.

1. QDA Miner Tool:

QDA miner tool is Qualitative data analysis tool used in this research. QDA miner was found most suitable for this qualitative research because of following reasons.

- a) Project files can directly be imported from .txt or .xls files.
- b) Large project files can be compressed so backing up data is very easy.
- c) Relevant data selected from big interview transcript files can be exported and saved as excel sheet for further analysis.

2. Defining Categories and Codes in QDA Miner

Codes are specified categories which are added in QDA miner to tag the relevant text from raw case files under categories defined by researcher. As shown in table 1, categories and codes are added for data analysis in this research.



TABLE 1 CATEGORY AND CODE NAMES IN QDA MINOR

Category name	Code name
Q1. Most revenue generated	Revenue generated games in APAC
Q2. Reasons for most revenue in APAC develping countries	Reason for most revenue
Q3. Effect of Internet penetration in mobile gaming in APAC	Effect of internet penetration
Q4. Effect of increased number of smart phone in APAC	Effect of increased number of smart phone
Q5. Effect of increased technical awareness in APAC	Increased technical awareness
Q6. Mobile Vs Gaming consoles	Mobile Vs Gaming consoles
Q7. Gaming industry changes in last 5 years in APAC	Changes in last 5 years
Q8. Gaming industry changes prediction in last 5 years in APAC	Next 5 year prediction

Each CASE in QDA Miner was analyzed and each relevant information text was tagged corresponding to category and code.

3. Retrieving and Extracting Relevant Information of each CASE in Excel Format

QDA miner has feature of retrieving information tagged to one code. After retrieving text tagged to this code, it can be saved in excel format. Same process is repeated to extract the relevant data of all cases and presented in detail in form of research findings in next section of this research.

RESULTS

Summary

APAC likes FPG games with social features and cute characters involved. Smart phone has evolved as first and only personal device for most people in APAC and hence gaming on mobile is getting more popular. Big family sizes in APAC support the business ecosystem of mobile gaming as each member of family has its own personal device for playing. Increased internet supports social culture and hence it's big boon for social games which APAC people like. Better hardware and software of evolving smart phones is one of the reasons of switching of hardcore console gamers to Mobile platform hence increasing revenue. Smart phones are easy to use and more and more people are getting aware of using smart phones. Mobile phones are more social than console games and available with user all the time under "all things in one device" concept and hence are used more for gaming compared to consoles. Last five years mobile gaming has evolved in APAC because more developers and publishers are in this region. Next five years from now are very unpredictable as gaming industry has become very dynamic and future possesses the possibility of using wearable devices, virtual reality or any other new technology on mass scale.

DISCUSSION & CONCLUSION

Conclusion

- 1. Conclusion of types of games most liked by APAC region mobile users: APAC region wants to try games for free before they can start any payment for game. Hence FPG games are dominating here. Due to their strong social bonding, people want social integration in their game too. If the game has luck-based playing mechanics it fits well in their culture. Additionally if game play involves cute game characters people connect to them easily as they like adorable and cute characters more than in any other region.
- 2. Conclusion of impact of mostly "developing countries" in revenue generation: Internet has grown so fast in last five years and has added more new mobile gamers and good percentage of paying players with improved payment solutions. This region has grown in era of personal device as a mobile phone and not the computer. So huge percentage of people use mobile phones and cheaper android phones have made mobile as need and not the luxury any more. APAC is quick in adapting new technologies including games attracting younger generation. Small houses with big family sizes of mostly middle class population here is ideal situation for gamers to have mobile as personal gaming device and not gaming console or computer.

As per white paper published on "E-Payments in Emerging Markets" by [11], First Data Merchant Solutions' Growth in middle class population in APAC (which is majority) has given birth to alternate payment solutions in last 5 years. Extrapolating his point of global mobility in this region, people in this region travel a lot for business purposes, jobs (Ex:- IT employees of India) and inter-country tourism within APAC. Cross border travel created huge demand for online convenient payment systems because of which mobile games business industry is also getting benefitted [11].



- 3. Conclusion of Impact of Internet penetration in APAC: Increased access to mobile internet has supported the social culture of this region. Though it is an invisible base facility but it has connected people easily because mobile internet penetration is easier than wired internet. Hence games integrating social aspect of playing with friends or globally are highly successful here. Better internet has created talented game developers who can use world's best tools and techniques to create successful games and improve them based on analytics feedback captured. It has become easy to show push notifications of games and in-game advertisements to generate more revenue and directly communicate with players.
- 4. Conclusion of Impact of increased smart phones on revenues: Started with iPhone, Smart phones market has

- improved a lot with better hardware and software supporting more games with better gaming experience. Smart phone has exposed non- gamers to games under "one device for all" concept.
- 5. Conclusion of Impact of technical awareness on gaming revenues Using smart phones is easier than using gaming console or computer so even non-gamers find it easy to play. And hardcore gamers are also now accepting mobiles as gaming devices which is leading over all mobile gaming skills to advance to mid core genres and there is demand of such games now. Developer's technical awareness is also increasing and producing better games. New players like online messaging services (WeChat, Kakao Talk, Line, etc.) are gaining huge customer penetration specifically in APAC.

TABLE 2 CUSTOMER BASE OF MESSAGING APPS

Messaging App	Customer Base(M)
WeChat	396
Viber	300
Line	300
Kakakotalk	110
(6 5103)	

(Source: [12])

- 6. Conclusion of comparison between mobile games and consoles: Games on mobiles fit in APAC culture due to big family sizes and skipping of computer age in this region. Mobile phone is first personal electronic device in this region. Mobile games are generally more social than console games and hence are in demand in APAC. Though hardcore gamers are still playing games in consoles but due to more availability on mobile new gamers or casual gamers are preferring mobiles device for playing game. All developers of gaming industry foresee a big growth in mobile gaming industry hence they are investing in this business and this is resulting into better games in this region.
- 7. Conclusion of gaming industry changes in last five years: Last five years' mobile games mechanics have completely shifted to free to play games. All big gaming companies are either founded in APAC or have their headquarters in this region. WeChat and other platform-related services have become a big power in China in terms of game distribution. Similarly Alibaba has bought 10% shares in Kadam, SuperCell majority of stakes are with Gung-Ho now [13].

Monetization of games is still not in its matured state, that's why investment to make games solely for this region is still less. Gaming variety has increased up to an extent that now not only young adults but kids and old people are also attracted towards mobile games. Hardcore gamers are attracted to mobile games because here they get chance to compete at global level. Due to much unsaturated market and less entry barrier, number of mobile game developers and publishers is increasing a lot. This increased level of competition has made user acquisition very harder and forced game publishers to be more focused in making game salable through its advertisements, then making it interesting.

8. Conclusion of gaming industry prediction in next five years Growth of gaming industry is still not saturated in APAC and hence there will be more players, more business and more revenues in this region. Monetization will improve when all players will have access to better payment systems. New technology in mobile industry will focus more on gaming. Wearable devices communicating with mobile are the focus.

Big developers will dare to make better games, fully dedicated to APAC. And they will do it by exploring small gaming companies with good games and guiding them to publish their games to have better success.

RECOMMENDATIONS

Gaming industry is dynamically changing APAC. Recommendations for further studies are as follows:

1. APAC once grown into biggest mobile gaming market



can be divided into smaller regions and each region can be similarly studied for better understanding.

- 2. For getting updated information of this dynamic mobile gaming industry in this region, same research can be repeated after a couple of years focusing on changed situations due to reason like new technology, better monetization, better internet penetrations, etc.
- 3. An exploratory research on how big publishers are seeking small gaming companies, to market some new games in better way, can be performed.

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