

CHAPTER 1: INTRODUCTION

1.1 COMPANY PROFILE

Cygames, founded in May 2011 by its parent company, CyberAgent. CyberAgent is one of the biggest internet advertising company in Japan. Apart from internet advertisement business, CyberAgent has also expanded its business to other sector such as Game Business, Media Business and Investment development business.

Cygames has published various successful free-to-play mobile game during the years. For instance, Rage of Bahamut, The idolMaster: Cinderella Girls, Cinderella Girls Starlight Stage, Princess connect Re:Dive and Shadow Verse. At the start, Cygames was a browser centric game developer. Most of the early games published Cygames were web games. Such as Rage of Bahamut, Granblue Fantasy and IdolMaster: Cinderella Girls. After the development of smart phones and the rising population of smart phone users. Later titles from Cygames has shifted from web game to mobile game. Such as Princess connect Re:Dive on iOS and Android from Feb, 2018. Also, Cygames has reworked some of their old web games into mobile apps. Such as Granblue fantasy, Granblue fantasy has now process different version of game client like a web application and a mobile apps version.

Most of the games from Cygames have strike a major success in the Japanese game industry. Cited from the sales ranking from the result announcement of CyberAgent at 1Q FY2019, all the game published by Cygames managed to stay in top 100 in the Japanese iOS game sales rank. All the games Cygames created are free to play and are utilize the Gacha system to generate revenue. The business model of free to play game with Gacha provided Cygames a pinnacle point in their business.

1.2 DEFINITION OF MMORPG

MMORPG stands for “Massively Multiplayer Online Role-Playing Game”. It is one of a type of game genre. As an MMORPG, there must be a mass amount of user who are participating in the game. Also, there should be roles for users to participate and role play in the game. After achieving all these, the game could call itself an MMORPG. MMORPG has been a great hit in the game industry. Famous examples are Blizzard’s World of Warcraft and Jagex’s RuneScape. They are both subscription-based game. Meaning if users want to play the game, they have to pay monthly or annually to access the game.

Until now, the subscription-based business model has shifted to free to play with microtransactions business model. The most famous free to play MMORPG nowadays would be Maple Story, Path of exile and Warframe. The old subscription-based MMORPG still hold ground on its own and have a group of die-hard fans still enjoying it.

As the gaming industry develop from Subscription based service and one time “pay for product” model to the “free-to-play” models. Game developer come up with a new method to earn revenue. Microtransaction and In-App-purchase such as Gacha and loot box system. “Gacha” is heavily used in most of the free mobile games on the market. Games would emphasize itself to be “free to download” and “free to access”. Even users never spend a single dollar in the game, they can still have full access to most of the game. In most cases, the Gacha content in these “free-to-play” game can offer players significant advantage in their gameplay. Such as new characters, new equipment etc. The business model of these games is based on attracting users to pay for the premium content.

Cygames, Inc. ‘s Granblue Fantasy is one of the examples as a free to play Gacha game in the Japanese mobile game industry. Released in 2014, and it is one of the main featured game from Cygames. By December 2018. The Overall player count has exceeded 23 million worldwide and soon meet its 5th anniversary in March 2019. As the game was released worldwide, Granblue Fantasy is available in two language. Japanese and English. The English localization was released at April 2016.

1.3 GAME CONTENT IN GBF

Granblue Fantasy is a web-based MMORPG game where the user will role play as the main characters in their journey. Main character as the user avatar is available in both genders. Apart from the avatar, most of the game content of Granblue Fantasy is free, such as main story, events and battle content. Although certain content is locked behind Gacha, most users are able to experience the game without spending money. Content such as most of the characters, characters stories and summon are locked behind Gacha. User are required to draw certain content out of the Gacha pool to unlock them. Different content and their relation to Gacha will be explained below:

1.3.1 STORY CONTENT IN GBF

- Main stories, character stories

Main stories and event stories are the free to play story content in Granblue Fantasy, they receive regular update from Cygames. In some occasion, stories will feature new characters which will later be featured in Gacha. It can be taken as a teaser to future characters. The main story of Granblue Fantasy has exceeded 120 total episodes, each episode has full Japanese voice acting for every dialog. Every character available in game have a Fate episode of their own. Fate episode provide more context in the story perspective. For Gacha characters, their personal stories are locked behind gacha and require users to participate in Gacha to unlock them.

1.3.2 Battle content of Granblue fantasy

Apart from the story mode, the gameplay of Granblue Fantasy is focused on battle with monster and various bosses. In order to proceed the story or to get loot and equipment from the monster. An in -game battle is necessary. Since Granblue Fantasy is a web-based mobile game, the battle in Granblue Fantasy is not 3D action. But 2D turn-based battle. The Attack button must be pressed to process a turn. User can unlock characters, weapons and summon stones from Gacha to participate in a battle.

There are two types of battle content in Granblue fantasy. Single player battle and multiplayer battle. Single player content is usually within story mode. In the story mode, there would be story fitting battle for the user to participate. Different battle content caters to different kind of users. Also, for diversities in battle. Six elements are featured, fire, wind, water, earth, light and dark. An element is effective against their counters. For instance, Fire against wind, wind against etc. The element counters mean that users have to consider about element when commencing a battle. Also, weapons, characters and summon stones have differences in element and they would only provide the benefits to its corresponding elements more aspect when facing a battle and they could have different experiences when fighting different bosses.

To participate in battle content, user cannot avoid Gacha. Even the game thus provides free weapons and equipment through normal play throughs, the most effective way of obtaining characters is still in Gacha. To be better in the battle content are often the reasons for user to participate in Gacha in Granblue Fantasy.

1.3.3 Social feature in Granblue fantasy

Users in Granblue Fantasy can create crew. Apart from just being a story setting, the crew is an in-game feature which individual users can create to group up other users to

participate in coop battle, raids and compete with another crew in the crew battle event. In another word, the crew is as same as “Guild” or “Association” in other MMORPG. It works as a union of players and allow them to interact with each other in a daily basis. Moreover, a crew can provide boosts to rank point and attack to users. There is also guild battle which requires user to be in a guild to participate.

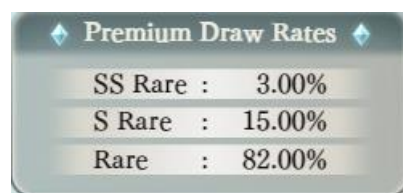
1.3.4 Gacha system of Granblue Fantasy and related scandal

As a free to play game, Gacha is the main method for Granblue Fantasy to generate revenue and maintain itself. The Gacha system cost 300 MobaCoin on desktop version or 300 yen in Apple store/ Android store for one draw. One MobaCoin equals to 1 yen. In general, there are 3 types of virtual items that are available in the Gacha system of Granblue Fantasy.

1. Weapons
2. Character Weapons with characters
3. Summon stones

For the result of the Gacha, there are 3 rarities in total. SSR, SR and R. SSR stands for SS rare, SR stands for S rare and R stands for Rare. SSR being the rarest and rare being the most common item in the Gacha. The odds of the Gacha pool are listed by the game, 3% for SSR, 15% for SR and 82% for R. The rarity makes the item available in the Gacha divided into these categories;

1. R/SR/SSR Weapons
2. R/SR/SSR Character Weapons with R/SR/SSR characters
3. R/SR/SSR Summon Stones



◆ Premium Draw Rates ◆
SS Rare : 3.00%
S Rare : 15.00%
Rare : 82.00%

Figure 1.1. Gacha draw rate

Source: <http://game.granbluefantasy.jp/>

The Gacha in Granblue Fantasy divide into 2 types.

1. Single draw
2. 10-Part draw



Figure 1.2. Single draw and 10-Part draws

Source: <http://game.granbluefantasy.jp/>

Single draw and 10-part draw have no differences in terms of its universal draw rates, they have some difference features to attract user to participate. For 10-part draws, the last draw in the 10 draws will guarantee to draw 1 SR/SSR item. It is called the premium 10-Part draw. The odds of it is 97 % SR and 3% SSR for the SR/SSR item chance. For single draw, 1 time per day, the price will drop to 90 MobaCoin.

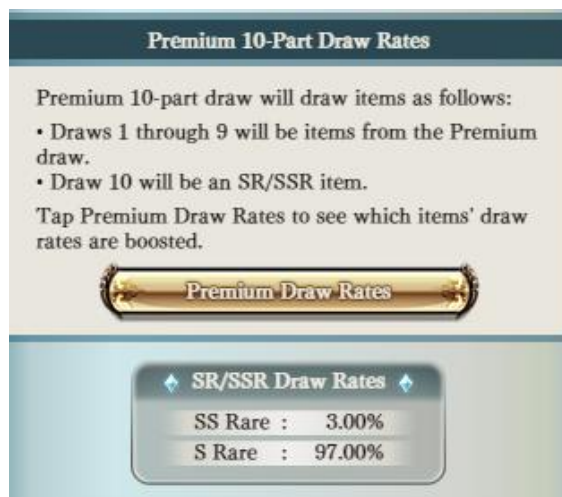


Figure 1.3. Premium 10-part draw

Source: <http://game.granbluefantasy.jp/>

The Gacha pool is extremely crowded with all the items available in it. There are over 150 SSR characters/weapons and SSR summon stone are over 50. With draw rates of 3% for SSR, the draw rate of an individual SSR character weapon would be lower than 0.1% and the draw rate of an individual SSR summon lower than 0.01%

SS Rare Summon		Rates
	Agni	0.009%
	Athena	0.009%
	Michael	0.009%
	Prometheus	0.009%
	Satyr	0.009%
	Sethians	0.009%

All Included Items	
SS Rare Rates 3.00%	
SS Rare Character Weapons	
	Rates
Dainsleif (Altaif)	0.011%
Lohengrin (Percival)	0.011%
Claiomh Solais (Charlotte)	0.011%
Gottfried (Agloval)	0.011%
Nagelring (Izmir)	0.011%
Ascalon (Siegfried)	0.011%

Figure 1.4. Draw rates of an individual SSR item

Source: <http://game.granbluefantasy.jp/>

Moreover, for Gacha in Granblue fantasy, the update cycle is fixed. For every week there is a new Gacha pool. There are fan favorite character weapon and summon boost. The overall draw rates do not change in these events, but they would boost individual items draw rate. Although there is a new pool every week, most of the time it is only a rate boost event for certain type of items and characters.



Sacred Lance Draw Rate Up! (Athena) 0.300%	Shiva Draw Rate Up! 0.050%
Daemon's Spine (Anne) 0.011%	Surt 0.009%

Figure 1.5. Draw rates boost of fan favourite SSR item

Source: <http://game.granbluefantasy.jp/>

Apart from the non-scheduled draw rate boost mentioned above, there are two regular draw rates up event. They are Premium Gala and Flash Gala. Premium Gala and Flash Gala appears in the end of every month. Before the English translation is published, they are known as legend festival (Legfest) and Grande fest (Granfest) in Japanese. Each fest featured a group of limited characters. Premium Gala (Legfest) featured the SR version of story protagonist and the Chinese Zodiac characters and Granfest feature other story related character. Chinese Zodiac characters are obtainable for the zodiac year in Legfest and will return after next year.

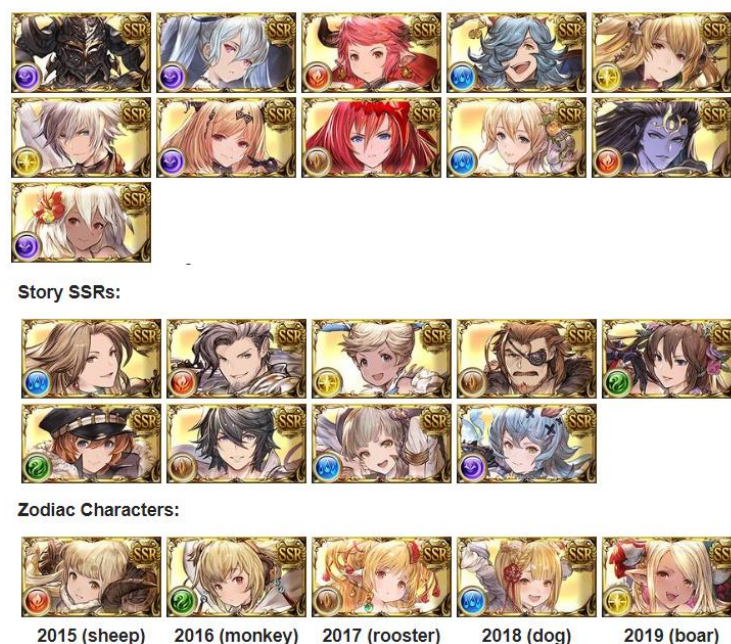


Figure 1.6. Fes limited character and each years zodiac characters

Before 2016, there is no ceiling in how many draws are required to do in order to get one specific item. After an update to Gacha system in 2016, draw rate are visualized and “Cerulean Spark” system is implemented. Every draw made in the Gacha after that update will receive one Cerulean spark. The spark is kept until the end of each Gacha pool. When 300 sparks amass within a Gacha pool period, 1 chance is provided for users to choose what they want in the featured item. Draw until 300 draws to guarantee of getting an item is called

“Sparking” among the users. Although a ceiling for Gacha is peeked at 300 draws, it still cost 90000 Yen (847 USD) just to ensure to get a wanted item in Gacha.



Figure 1.7. cerulean spark system

Source: <http://game.granbluefantasy.jp/>

Also, in Gacha of Granblue Fantasy, user can get duplicate items from Gacha. In case duplicate character weapon are drawn, a “moon” token is rewarded as a compensation of the duplicate. No moons will be awarded if duplicated summon stones are drawn. A total of 3 types of moon will be awarded when the user gets duplicate SSR, SR, R character weapons. Gold moon for SSR. Silver moon for SR and Bronze moon for R. Moons can be exchanged for various virtual items. Such as weapons and material needed for forging equipment.



Figure 1.8. Moon system

Source: <http://game.granbluefantasy.jp/>

1.3.5 Other Gacha related item in GBF



Figure 1.9. Outfit set

Source: <http://game.granbluefantasy.jp/>

Apart from the Gacha content, there are other items a user can spend money on, and it is related to Gacha. Outfit set is one of them. One outfit set cost 3000 moba coin or 3000 yen equals of iOS/ android store credit. It contains an alternate outfit for a character and a 10-part draw ticket. Although the character is not included in the outfit set, quite a lot of user would buy outfit set because it is the same price as doing a 10-part draw.

1.4 RESEARCH BACKGROUND

The objective of this research is focused on the user of the free to play MMORPG games under Cygames, Inc. – Granblue fantasy, and its revenue earning system, Gacha. “Gacha”, a term originated from Japanese. The word developed from the Physical toy vending machine “Gachapon”. Upon purchase, the “Gachapon” machine will dispense a random transparent and spherical capsule which contain one of the items featured on the machine. In normal circumstance, there might be five or six unique items featured in one machine. Usually those items would be the merchandise of an anime serie. “Gachapon” machines is still a great hit today in the streets of Japan. There is a roughly 30 million Japanese Yen industry with 150 new toys published every month (Hornyak, 2017). A feeling of uncertainty of what would be dispensed next by the machine is the most fascinating factor from “Gachapon”. The randomness and the low cost of doing each separate “Gacha” draws (200 – 300 YEN or 1.8 – 2.7 USD / time) is enough to attract people to do it repeatedly just to get the toys they want.

According to a Forbes news overview, Granblue Fantasy is a free-to-play game and uses “Gacha” system. (Barder, 2016) Gacha system is the virtual version of “Gachapon”, The

result of a draw is random. Instead of getting a toy capsule, Gacha will dispense virtual items. The mechanics are mostly identical as the physical “Gachapon”, different from Gachapon, Gacha has no physical limits as Gachapon. The items in Gacha will not exhaust from multiple usage. In order to get one specific item from Gacha or Gachapon, multiple tries are required. Based on the randomness and the non-exhausting nature, Gacha system from Japanese game are often labeled as digital gambling. As it may end up with an enormous amount of money being spend over.

The author is a loyal user of Granblue fantasy since 2016. The player nickname of the author is called “サバンナ” (Savanna) and at the rank of 187. There are numerous players that the author has met and played together. In the process, the author has a group of fellow players to play along with. In the game, the author witnessed a lot of overspending in Gacha of this game in general. One of the experiences is a crewmate of the author has done 150 draws (406 USD) in Gacha. He goes by the nickname “Nothing” in the crew. “Nothing” announced in the author’s Granblue playing WhatsApp group that he must get a certain character within a pool no matter how much it would cost him. He started posting the Gacha result in the group. 10 draws in, 30 draws in, He still got nothing. Nothing at first want to withdraw in the first 30 failed draws. Thinking about the luck was not with him that time. Upon some thinking, he decided to dive further into the rabbit hole and used his credit card and proceed to draw more. Luckily, he stopped at 150 when he finally got his wanted characters. In the end, “Nothing” ended up with a credit card dept of 400 USD and the character he wants. After this experience, “Nothing” has seemed less passionate to the game.



Figure 1.10. Author’s user profile, August 2019

With the help of Gacha games, at 2015, Japan is the world’s largest mobile games market with 6.2 Billion USD and although having fewer users than China or the US, Japan has the highest average mobile games spending of any major country. (SuperData

Research ,2016) In japan, Gacha type free games are everywhere as the model has proved its success in different market. According to Bloomberg, Japanese Gacha games have generated at least \$55 billion since 2007. (Yuji N, 2018) And at 2015, the CEO of Konami, Hideki Hayakawa, one of the biggest consoles and pc video games company in Japan, declares that mobiles will take on the new role of linking the general public to the gaming world. (Paul T, 2015) Gacha and its gambling like nature is a double edge sword. It is capable to bring enormous revenue to game developing company, but it also causes issues like overspending and Gacha addictions.

Based on the experiences of the author in witnessing Gacha behavior in his gameplay session, the author is interested in conducting a research to create personas and find out the user preference to Gacha. Why does some user are willing to spend so much in Gacha, and is there a type of user in game who rarely spend in Gacha? The author wishes to understand such users. As Granblue Fantasy is one of the biggest Gacha game title in Japan and the author is already familiar with it. The research would be entitled **“Designing User Persona in MMORPG using Empathy Map, The study in Granblue Fantasy”**.

1.5 PROBLEM STATEMENT

The user who participate in Granblue Fantasy are studied in this research. Persona are created to represent the users and their behavior and intension towards Gacha. The author in his long experience of playing Granblue Fantasy, has witnessed a lot of stories of his fellow users who put large amount of money into Gacha. Also, there are users who refuse to spend money in game. How do different kind of users in Granblue Fantasy react to Gacha? What kind of users spend the most and spend the least? With such question in mind, the author started this research.

1.6 RESEARCH QUESTION

Based on the explanation and statement above, the research question are as follows:

1. How are the user personas in Granblue Fantasy?
2. How each persona behaves under different scenarios of Gacha in Granblue fantasy.
3. Which persona is the most willing to participate in Gacha?
4. Which persona is the least willing to participate in Gacha?

1.7 RESEARCH OBJECTIVE

Based on the research question formulated for this research, the objectives are as follows,

1. To create persona to represent the user in Granblue Fantasy.
2. To see the difference in behavior between personas under scenarios.
3. To find out the persona which are the most willing to spend in Gacha.
4. To find out the persona which are the least willing to spend in Gacha.

1.8 RESEARCH BENEFITS

1.8.1 Practical Aspect

1. Developers of Granblue Fantasy

Improvements of the game can be implemented based on the persona's characteristic from this research.

2. Industrial Experts

As the story of extensive spending in a free game being more common recently. For instance, the story of "Nothing". This research may provide insight to the phenomenon in reviewing the user behavior in a MMORPG game.

1.8.2 Theoretical Aspect

1. Researcher

Additional insight about designing personas using empathy map can be provided by this research.

2. Research issuer

This research can be used for further reference for designing persona and the practical application of empathy map.

1.9 RESEARCH SCOPE

In order to keep the research as concise and focused as possible. the limitations are set based on the needs and limits of this research.

1. The physical expression of users cannot be directly observed, as they are participating the game behind their avatar.
2. The avatar the author use is only 180 levels, the max level of avatar is 250.

1.10 SYSTEMATICALLY WRITING

This research is divided in five consecutive chapters, they are as listed as below,

CHAPTER 1: INTRODUCTION

This chapter provide the research overview, research background, problem statement, research question, research objective, research benefits and research scopes.

CHAPTER 2: THERORATICAL REVIEW

This chapter would focus on the theory of empathy map, personas, design thinking, previous research and the theoretical framework.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter describes the type of research, variables, stage of research, population and samples, data collection, validity, reliability testing and analysis techniques.

CHAPTER 4: RESULT AND DISCUSSION

This chapter will describe the characteristics of respondent, the result of the research and discussion for this study.

CHAPTER 5: CONCUSION

This chapter will finalize the result of this research and give conclusion.