

Exploring the key success strategy for mobile game developers: A distinguish between premium and freemium versions

Hendra Dinata^{1,2}, Erma Suryani^{3*}, Jerry Dwi Trijoyo Purnomo⁴

¹Dept. of Technology Management, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia.

²Dept. of Informatics Engineering, Universitas Surabaya, Surabaya, Indonesia; hdinata@staff.ubaya.ac.id (H.D.).

³Dept. of Information Systems, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia; erma.suryani@gmail.com (E.S.).

⁴Dept. of Statistics, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia; jerry@statistika.its.ac.id (J.D.T.P.).

Abstract: This study aims to investigate the most effective revenue-generating strategies for mobile game developers, particularly in choosing between premium and freemium versions since these two versions come with distinct characteristics. This study employed a qualitative approach, interviewing five gaming studio managers in Indonesia to analyze their experiences and strategies to manage activities at different phases of game development—pre-release and post-release—depending on their chosen monetization strategy. The findings indicate that premium game version developers demonstrate heightened activities during the pre-release phase, dedicating substantial efforts to advertising campaigns, customer engagement, and providing a game demo. In contrast, freemium game version developers exhibit increased activities in the post-release phase, primarily focusing on advertising campaigns, selling virtual items at low prices, giving virtual item rewards, and updating content. In conclusion, the optimal strategy for game developers depends on the version they pursue. Pre-release phases are critical for the success of premium game versions, while freemium versions require an ongoing focus in the post-release phase. These insights offer game developers direction on resource allocation and effort concentration according to their selected monetization strategy, hence facilitating revenue maximization and optimization of the game development process.

Keywords: *Developers, Freemium version, Mobile game, Premium version, Qualitative, Strategy.*

1. Introduction

With the rising popularity of smartphones, people are becoming increasingly familiar with downloading and utilizing applications from platform-specific application stores, including mobile game applications (Feijoo et al., 2012; Lu et al., 2016). Mobile games are similar to video games, although they tend to be more informal because of their simplicity and ability to be played quickly (Wei & Lu, 2014). Mobile games possess highly apparent mobility features and employ a touchscreen control mechanism, which grants them significant benefits over games on alternative platforms (Chen, 2021; Chen & Leung, 2016; Engl & Nacke, 2013; Kim & Lee, 2017).

According to Statista.com, the global mobile gaming user base is projected to exceed 1.6 billion users by the end of 2023 (Clement, 2024). While in 2022, the global income generated from mobile game applications reached \$92.2 billion (Newzoo, 2022). This figure illustrates that 50% of the overall revenue generated by the gaming business is derived from different gaming platforms, including consoles, PCs, and browsers. This implies that it is undeniable that the growing user base of mobile games directly correlates with the rising revenue potential for developers. This situation underscores the importance of users' presence for developers.

The researchers demonstrate the vital importance of these users in attaining success in operating this mobile game enterprise. Nam and Kim (2020) asserted that developers have time constraints in acquiring the maximum number of users following the game's initial release. Hence, it is crucial for developers to swiftly amass a substantial user base within the brief early phase. To prevent user attrition and discourage them from switching to alternative mobile gaming applications, developers must introduce game concepts that offer novel challenges to pique curiosity and ensure continued engagement (Jang & Liu, 2019; Merikivi et al., 2017; Su et al., 2016). It is crucial to realize that the expense of recruiting new users is substantially higher than retaining existing ones (Reichheld & Scheffer, 2000). In addition, developers can identify the appropriate monetization strategy for existing mobile game applications by comprehending the users' traits and experiences (Budak, 2020; Harviainen et al., 2018).

It is important to note that the mobile games that users can download are divided into premium and freemium versions. For the premium version of the mobile game, users are required to pay upfront fees to access and play the game. Meanwhile, in the freemium version, users are initially given the chance to try and play the games without any charge before deciding to upgrade to the paid version or buy virtual items within the game (Budak, 2020; Merikivi et al., 2017; Reichheld & Scheffer, 2000). Developers incorporate adverts into the freemium version of the mobile game to generate revenue. By displaying advertisements within the game application, developers can also earn revenue. The distinct attributes of these two categories of mobile gaming applications necessitate different strategies to effectively compete in the mobile game business and generate revenue from the application. The plan includes implementing tactics to attract new users and maintain the loyalty of existing users.

Particularly in developing countries, such as Indonesia, there is still a broad potential to generate revenue from the mobile gaming sector. With a population of 279.1 million people in 2022, the revenue generated from mobile games originating from Indonesia amounts to only \$980.9 million (Statista.com, 2022b). Indonesia's revenue is still lower than China's, with China holding the top place with a total income of \$34.45 billion (Statista.com, 2022a). Even South Korea, with a population smaller than Indonesia, generates a higher revenue of \$10.31 billion. However, due to a favorable increase in smartphone sales and a substantial population, Indonesia remains to be a market that should be taken into account.

This qualitative research seeks to address the existing knowledge gap on competitive strategies in the sector by conducting interviews with industry players in Indonesia and providing significant contributions. First, this study offers a valuable understanding of the state of the mobile gaming business in Indonesia, specifically from the viewpoint of developers. By being aware of this, other developers can receive information on factors beyond game design skills that these developers must consider to attain success. Furthermore, this study highlights the disparity in the strategy developers use when deciding between a premium game model and a freemium game model. The objective is determining the most suitable strategy for competing in this business. Therefore, this study will address the following research inquiry:

1. Does the monetization strategy change between premium and freemium mobile games?
2. What strategies may developers employ to promote their mobile game applications in Indonesia?

The organization of this study is separated into several sections. The second section focuses on the theoretical framework of mobile games, while the third section discusses the technique used. The fourth section presents the findings of interviews conducted with the respondents. In the discussion section, we give our analysis as the fifth section. The final section is the conclusion of this study.

2. Theoretical Framework

Kontagent, a company, has developed a model called ARM Funnel that pertains to the lifecycle of mobile games (Moreira et al., 2014). This model consists of three stages that developers, especially those releasing freemium mobile games, must go through, namely acquisition (A), retention (R), and monetization (M), hence abbreviated as ARM. Meanwhile, the term "funnel" refers to the decreasing

number of users who pass through these stages over time, indicating that the number of users retained is inevitably more petite than the number of users initially acquired. Similarly, the number of users who can go to the monetization stage is inevitably more petite than those who continue to use a specific mobile game application.

The two initial stages are considered key to the success of a mobile game application, as this type of application has a shorter lifecycle compared to games on other platforms (Nam & Kim, 2020; Yi et al., 2019). Since the first release of a mobile game application, developers have had a limited time to acquire new users quickly before those users abandon it if they do not find a reason to continue using it. Users will promptly switch to another gaming application if the conclusion drawn from their evaluation of a game indicates that it is not enjoyable enough to play (Hou et al., 2011; Liu & Lee, 2020; Zheng, 2019). Therefore, developers are expected to acquire new users promptly and continuously retain them since the release of their mobile game applications. If users do not make any monetary investment during their first adoption, they will likely quickly abandon it and transition to other gaming applications.

This approach is understandable because users are not burdened with the initial purchase expenses. Hence, users of mobile game applications are likely to promptly abandon the application shortly after installing it, particularly in cases where there is no initial price, as is the case with this Freemium application (Liu et al., 2018; Nam & Kim, 2020; Song et al., 2013; Wu & Liu, 2007). Users have the freedom to install the game and subsequently delete it after experiencing it and assessing its level of enjoyment (Drachen et al., 2016; Nam & Kim, 2020; Yi et al., 2019).

According to another report on mobile gaming users, the global average retention rate is significantly low, specifically at 3.1%, as measured on the 30th day after installing the application (Liftoff, 2020). This report demonstrates that mobile game developers must exert effort to keep their users, ensuring their continued interest in playing the game. Liu et al. (2018) present a concept that asserts that users' ongoing usage of applications is contingent upon their performance experience. When players achieve a state of flow, characterized by an excellent experience, in mobile games, they may experience immense pleasure and anticipate the desire to relive this experience. To enhance the overall user experience, creating a stimulating scenario that motivates people to attempt the game for the first time is essential.

The consistent nature of this experience will foster user loyalty towards a specific application (Hsiao & Chen, 2016). User loyalty is seen as a crucial determinant for users to engage in the purchasing process within the application (Balakrishnan & Griffiths, 2018; Cheung et al., 2021; Hamari et al., 2020; Hamari & Keronen, 2017; Huang et al., 2017; Munadie & Widodo, 2019). Devoted users of a game will decrease the amount of time they allocate to searching for alternative games. Loyal users possess ample experience in assessing the game before purchasing (Hsiao & Chen, 2016). The user's inclination to buy will be influenced by their prior engagement with a mobile game application. Alternatively, if the preceding review determines that the game being played is unsatisfactory, the user may promptly delete it and transition to a different game program (Liu & Lee, 2020; Zheng, 2019). Consistent with prior research, it has been established that users' earlier experiences with existing products will impact their choice to transition to new products (Burnham et al., 2003; Nagengast et al., 2014).

3. Method

Five developers in Indonesia were interviewed for this study. The developers chosen are individuals who established their own game studio or who work for the game studio and are currently operating within Indonesia. The profiles of the five responders are presented in Table 1. The oldest game studio was established in 2009, while the youngest was in 2019. Interviews were conducted in Indonesian language through Zoom, a video chat platform, and recorded with the respondents' consent for documentation purposes. The interview results are disclosed in this study after being translated into English.

Table 1.
Respondents for the interview.

No.	Respondent	Position	Year of establishment
1	R1	CEO and founder	2018
2	R2	CEO	2013
3	R3	Co-founder	2016
4	R4	CEO	2019
5	R5	Head of PR and marketing	2009

Furthermore, the interview was conducted separately between one respondent and another. The five respondents were provided with identical question material, which focused on the tactics they typically employ to monetize their products. Respondents were allowed to express their opinions and share their experiences regarding the effectiveness of strategies identified in prior research published in foreign journals, specifically concerning their applicability in the Indonesian market.

4. Result

4.1. User Acquisition Strategy

Nam and Kim (2020) highlight the critical timeframe for developers to attain maximum users. This crucial period begins during the pre-release phase. The primary objective during this pre-release phase is to acquaint users with this product. A common approach is implementing a unidirectional advertising campaign, such as displaying video teasers on specific advertising platforms. Presenting a captivating video trailer can stimulate users' imagination regarding the potential experience they can expect from playing the gaming application in the future.

R2: "By watching the video preview, individuals should clearly understand the type of experience they may expect. Once they become inquisitive, they will ultimately make a purchase."

Nevertheless,

the drawback of displaying this advertisement is the exorbitant expense. Furthermore, the excessive expense does not necessarily ensure a substantial user base.

R2: "The expenditures we allocate to advertising are not commensurate with the returns we receive."

Developers can circumvent this issue by advertising using their pre-existing social media presence. Developers can utilize their social media profiles to foster user involvement and establish communities, indirectly facilitating the spread of information regarding upcoming game releases.

R2: "High-quality content generates user engagement, piquing their curiosity about the game. Once a community is established, it will aid in disseminating information about our game."

R4: "A common practice is to share it on social media platforms, where you may upload the character design or the level to elicit user feedback. This action helps gauge the amount of interest and the number of likes it receives."

During the pre-release phase, it is imperative for developers, particularly for premium version releases, to offer a game demo. The main challenge with premium versions is that potential users cannot access and play the game without purchasing. However, these potential users must also know the game's quality before purchasing. This situation differs from freemium versions, as users are free to play the game without any cost before deciding whether or not to make a purchase. Thus, the purpose of showcasing this game demo is to entice potential users to initially engage with the game that will be launched in the future, despite it only offering a single playable level. This provision of the demo game

allows potential users to make an informed decision before committing to a purchase. Before the video trailer presentation, it is possible to release the game demo, which will showcase advanced-level footage.

R2: "The homework is how to make people curious to continue the story to find out how the story ends."

R4: "The gameplay in this game demo is made half-hearted, leaving players intrigued about the progression of the plot."

Considering the crucial importance of game demos in acquainting potential users with their products, they must be meticulously produced. By offering game demos, potential users can evaluate the game and decide whether to purchase it. This statement is under the statement provided by respondent 5 below.

R5: "If, for instance, the demo is of poor quality, individuals will certainly lose interest in keeping up with the game's updates. The demonstration will ascertain if they would persist in purchasing or not."

Once the game is released, developers can persist with their advertising approach. Developers can also implement this approach by leveraging the services of influencers to promote their game.

R3: "The impact of influencers significantly contributes to the growth of user numbers, particularly among those with a substantial follower base."

R4: "The role of influencers is very influential, especially since our target is Indonesia, and in Indonesia, there are many gamers who follow these influencers."

Nevertheless, developers must be vigilant in discerning the attributes of the influencer and their followers. Influencers who lack a deep understanding of the game typically generate widespread discussion about the game product, but the actual conversion rate for game adoption remains low. This might occur due to a mismatch between the influencer's followers and the target market for a game product.

R5: "...conversion from non-users to users will not be as big as expected because the audience only sees the influencer, not the endorsed product. But specifically for content creators who usually review games, they can generate product sales value."

The sales metrics peak at the outset, particularly for premium game versions, and then see a slow fall. Hence, it is more advantageous to conduct advertising efforts for premium game versions with greater intensity before release. Still, continual advertising campaigns for freemium versions remain worthwhile after their release.

R3: "In freemium versions, the early impact of adverts may be minimal, but they have the potential to boost the number of users rapidly. Although premium versions may have challenges in increasing their popularity after pre-release, it is not impossible. An advertising campaign might be conducted after the release, often within a week or a month."

Developers should leverage pre-existing social media platforms or community forums to motivate fans to promptly provide favorable reviews for the game, even before its release. The ratings of a game hold significant importance. The adoption of a game is contingent upon its ratings, as they indicate the game's inherent excellence. The absence of any reviews can generate distrust among potential users.

R1: “The game rating is contingent upon the game’s quality. Hence it should be upheld from the outset before its release.”

R2: “Ratings have significant importance as potential users often base their purchasing decisions on the reviews they encounter while visiting our store page. ...Following the release, it is imperative to promptly obtain user feedback within a week.”

R3: “A poor rating will undoubtedly make it exceedingly difficult to attract users.”

Developers should prioritize soliciting user ratings immediately upon users’ initial gameplay experience. Hence, it is recommended for developers to foster user engagement.

R2: “Following the release, it is expected that you will receive user reviews within a week.”

R5: “...it would be prudent to solicit evaluations from users (via online forums) within the initial week of the game’s launch. This requirement is because the absence of reviews may arouse suspicion and deter potential buyers.”

There is a fundamental difference in retaining the game users between premium and freemium versions after their release. The premium game versions may not necessarily have regular features or level updates. Furthermore, users who choose premium game versions have invested financially before engaging in gameplay. Hence, developers are relieved from retaining users’ interest in playing their games, especially when users have successfully finished all the levels.

R1: “Our objective does not involve creating a desire for users to continue playing the game once purchased. Hence, it is imperative to craft the game in a manner that captivates users right from the beginning, thereby incentivizing them to make a purchase.”

R2: “Premium versions must be designed to be very attractive so that users like and trust our brand, so that the next time we release a new premium version, they will repurchase it.”

This condition contrasts the freemium game version, which requires user retention for continued gameplay and eventual user purchases within the program, generating advertising money dependent on user count. To mitigate user attrition and maximize potential purchases, developers must regularly introduce novel features or content to engage users.

R1: “... When starting the design process, developers must consider whether there is sufficient space to incorporate additional content.”

Developers of the freemium versions may also investigate the possibility of offering virtual items to retain their current users.

R1: “...In freemium versions, developers might strategize ways to enhance user engagement and retention, such as implementing notifications and offering loot boxes or rewards, to minimize the churn rate. ...”

4.2. Revenue Enhancement Strategy

Premium versions have an initial surge in sales upon release, followed by a slow drop. Therefore, in premium versions, developers can provide discounts for at least a year at certain moments to boost sales again.

R5: “Discounts are undeniably the most impactful factor in boosting sales. When examining gamers’ conduct, it is typically observed that they have harbored a long-standing desire for it during its initial release.”

As per respondent 5, it is necessary to understand the attributes of the intended user clearly. In Indonesia, users eagerly anticipate discounts. Therefore, this particular user does not find it problematic to delay acquiring the desired game and will persist in waiting for a specific moment to obtain it at a discounted price.

According to respondent 3's study, the typical users of the freemium version enjoy playing games but have limited leisure time. Consequently, people are inclined to expend money on purchasing items within the program as a convenient means of obtaining gratification. Nevertheless, respondent 5 stated that the individuals who utilize this freemium version are those seeking rapid gratification at a low cost. Hence, offering discounts on virtual products is highly advantageous in boosting sales numbers since freemium version users prefer lower prices and have the propensity to make repeated purchases. However, since discounts typically occur at specific intervals, it is more advantageous for freemium versions to consistently offer low rates without the need to wait for particular instances.

R3: "Users who purchase stuff to expedite their advancement are typically individuals who derive pleasure from playing games but have limited availability, such as individuals employed in office settings."

R5: "Gamers do not perceive the money they expend as a form of investment. However, it serves to attain satisfaction rapidly and inexpensively."

Deliberately causing inconvenience to users of the free version to compel them to purchase an item or upgrade to the premium version of the application is strongly forbidden. The discomfort arises when the player fails to buy a specific item, disrupting the game's progression. Developers must exercise caution while developing their games, as users are believed to spend their money willingly, even without any external pressure.

R1: "...If users have a positive disposition towards the game, they will be inclined to purchase. It is advisable to avoid imposing obstacles on them and instead focus on enhancing the quality of the game."

Freemium version users may experience inconvenience in the form of pop-up adverts that compel them to watch the ads for a specific period before being able to continue playing the game. Nevertheless, developers bear a moral obligation when users have invested significant time in playing our games. Should we extend their gameplay by mandating users to view advertisements? Indeed, banner advertising placed in an appropriate position are preferable to intrusive pop-up ads that compel consumers to view them before being able to proceed with the game.

R1: "Considering the significant amount of time users already dedicate to playing games, it would be more advantageous to refrain from incorporating further pop-up ads."

Tangible products such as t-shirts, tops, or merchandise can provide developers with an additional source of money. Nevertheless, as indicated by respondent 5, the ability to sell tangible products like merchandise is contingent upon having a substantial user base. Hence, to execute this plan, it is imperative to augment the user base by offering high-quality games.

R5: "Merchandises can exert an influence in fostering loyalty. If the fan base lacks strength, we cannot launch items due to their lack of interest in purchasing. Therefore, the first focus should be on the game itself, as its ability to captivate fans is of utmost importance."

Freemium version developers are not obligated to implement this technique to sell tangible products. For freemium versions, it is advisable to monetize by offering virtual products within the game, even if

these things are purely decorative, such as avatars or specific skins. For enthusiasts, the presence of these digital commodities might be regarded as a means of endorsing the developer's existence by offering support.

R2: "... To cater to such fans, we also engage in the sale of items. What motivates users to provide help to developers? Due to their emotional affinity for the game."

5. Discussion

Developers make mobile games with the primary objective of generating revenue. Developers make game applications with a purpose beyond mere entertainment. While games are indeed made to provide enjoyment to their users, it is essential to acknowledge that developers naturally anticipate remuneration for their services. The remuneration is obtained through distributing mobile games in either premium or freemium versions. The decision of whether to choose a business model that offers a premium or freemium version of the game is with the developer. There is a noticeable disparity between the two versions of this mobile game. The distinction is in the timing of revenue acquisition. In the premium version, developers get revenue when users initially accept the product. In the freemium version, the developer's revenue is generated once the user has used it for a certain period since initially adopting it.

This disparity in timing implies that developers will need to employ distinct strategies to generate revenue from their games. There are two classifications for the strategy: pre-release and post-release strategy. Premium version developers have specific tasks to do throughout the pre-release and post-release phases, while freemium version developers are exempt from these obligations and vice versa.

We present a diagram illustrating the contrasting tactics employed by premium and freemium mobile game developers using the data gathered from interviews with the five respondents mentioned earlier. Figure 1 illustrates the disparities and the suggested requirement level, indicating whether it is strongly advised or not to be implemented during the pre-release and post-release phases. Figure 1 demonstrates that the pre-release phase is the most active period for premium game version developers, during which they are occupied with executing their marketing tactics to attract a maximum number of users upon release. Developers are highly recommended to do three activities: advertising campaigns, customer engagement, and providing a game demo. Meanwhile, the freemium game version developers actively engage in the post-release phase, focusing on retaining and acquiring new users. Four highly recommended activities in this phase are advertising campaigns, selling virtual items at low prices, giving virtual item rewards, and updating content. The activities in the post-release phase are crucial because data shows that the rate at which users stop using the game, known as the churn rate, exceeds 90% during the first 30 days after adoption (Liftoff, 2020).

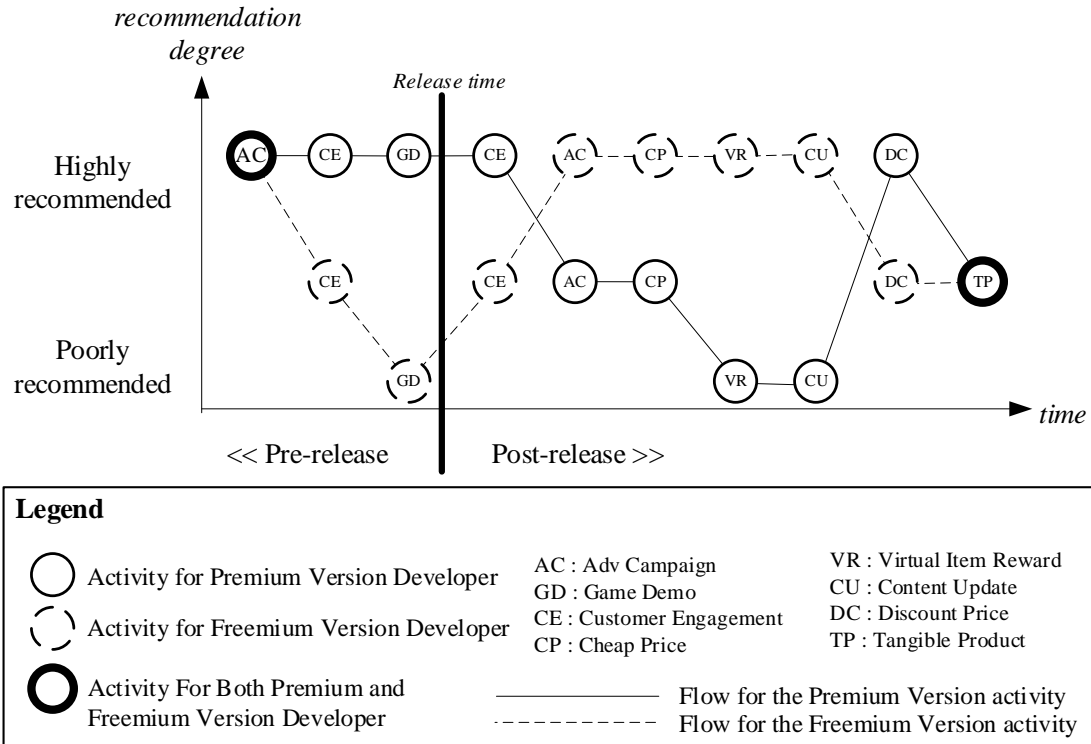


Figure 1. Strategy for developers based on release time.

5.1. Pre-Release Strategy

Nam and Kim (2020) have underscored the importance of acquiring users as a revenue stream prior to the game’s release. Developers should endeavor to generate product awareness among potential users. A practical method to enhance product awareness is by utilizing an advertising campaign encompassing paid and unpaid promotional activities conducted through social media platforms. Developers can also sustainably maintain this advertising campaign by incorporating a video teaser into their promotional content.

Respondents highlighted an intriguing aspect of advertising campaigns conducted via influencer endorsement services. Influencer services might provide advantages since the influencer’s fame can propel the marketed product to viral status. When anything becomes viral, individuals prefer to purchase products collaboratively (Hamari et al., 2016). In Indonesia, individuals are particularly susceptible to emotional manipulation by influencers, leading them to make purchases, even virtual objects, within mobile gaming applications (Hakim & Indarwati, 2022).

However, even though developers may face significant financial requirements, those with limited marketing resources may still try to promote their products through social media independently. Influencer services might drain the marketing budget, but the developers can still leverage social media at a more economical expense or at no cost. Hence, the significance of a social media manager is in their ability to showcase captivating promotional content. The managers are responsible for preserving material from social media and ensuring ongoing interaction with users.

Developers might face a hurdle when creating premium versions. Merely relying on advertising to establish product awareness is insufficient to generate the desire of potential users to embrace it. The issue stems from the payment structure in the premium version, which necessitates users to make an upfront payment before accessing the game’s premium features. Before deciding to adopt the game, it is imperative to provide these potential users with the chance to experience playing it. This action is

logical because users cannot purchase the game's premium version without any prior experience playing the game they intend to buy. Hence, it is crucial for developers who design the premium versions to include a game demo as an essential component. This game demo is not a free version in the same way as a freemium version, as it just consists of the introductory level of the complete game. Users are given the opportunity to test this sample game. If they are interested in the game's continuance, they will wait for the official release date and make a purchase.

The presence of this game demo is vital for the premium version of the game. Insufficient preparation of the game demo by the developer will have negative consequences for the developer. A poorly designed game demo, constrained by technical limitations and lacking a satisfactory playing experience, can significantly impact the user's perception and ultimately deter their interest in purchasing it. User perception of the quality of the premium version of the game will be substantially influenced by the user's perception when using the demo game. Conversely, a well-executed game demo would effectively pique the user's curiosity, prompting them to buy the premium game version to sustain the remarkable gaming experience they had previously encountered.

Developers who design a freemium game version are exempt from the requirement to provide a game demo. Essentially, users can experience this game without any initial financial obligation. Nevertheless, this does not imply that users will inevitably attempt to install and engage with every mobile game provided at no cost. Hence, once a game product is out, developers of both the paid and free versions still have tasks to augment the user base further.

5.2. Post-Release Strategy

Developers of premium game versions encounter critical junctures primarily before acquiring users, but developers of freemium game versions confront these pivotal times after obtaining users. Developers of premium game versions exert significant effort to persuade potential users to purchase their games. Once the user has made a payment, the developer may cease worrying about whether the user will continue playing the game, as the developer has already generated revenue from the user. Developers should reconsider the actions of these current users, even if they have previously completed a payment.

While premium game version developers may not need to concern themselves with whether their current users are actively playing their games, it is still essential for developers to acknowledge the presence of these users. Developers can engage in many activities to further their goals, such as cultivating connections with current users via social media platforms. They can even conduct this activity before the game's release. Developers rely on this relationship to encourage existing users to provide positive evaluations, attracting potential users who have not yet adopted the product. Furthermore, cultivating a positive rapport with current users can enhance the developer's reputation and establish a loyal following, facilitating the production of future games.

Freemium game version developers encounter diverse experiences. The developers must ensure user engagement with the freely downloaded game. Users will only have the purpose of purchasing through continuous playing experience (Balakrishnan & Griffiths, 2018; Cheung et al., 2021; Hamari et al., 2020; Hsiao & Chen, 2016). However, developers should prioritize repeat purchases by offering virtual items within the application at lower prices or through a discount scheme rather than at a high price.

Freemium game version developers are not obligated to interact with users in the same manner as premium version developers. Developers of freemium game versions can offer feature upgrades or introduce additional levels to the game after its initial release. The purpose is to prevent players from becoming bored, reduce the likelihood of abandoning the game, and increase their desire to continue using it. To sustain the hedonic experience of users, developers must consistently release content updates (Cheung et al., 2021). Hence, building a freemium game version that can receive future updates is imperative.

Furthermore, offering rewards in digital merchandise might incentivize users to persist in engaging with the game. Failure to present something new or a reward that can attract users to replay the game

will cause developers to lose existing users. Cheung et al. (2021) have demonstrated that providing rewards can foster user loyalty and sustain their engagement in playing. Nevertheless, it is essential to acknowledge that excessive rewards can adversely affect users' inclination to make purchases. Users should consider the rationale behind purchasing a specific virtual object if it is free.

The objectives pursued by premium and freemium game version developers diverge once the game is released. Premium version developers actively engage with their current user base by adopting a forward-thinking strategy: anticipating the release of the following titles, deviating slightly from the practices commonly employed by freemium version developers. After the game's debut, the efforts are focused on retaining current users, ensuring their loyalty, and encouraging them to continue playing until they are inclined to make in-app purchases.

Regardless of the business model, premium and freemium game version developers are encouraged to expand their user base as much as possible. As the number of user bases increases, developers will find it increasingly convenient to allocate resources toward diversifying their revenue streams. One potential revenue stream involves selling tangible products like t-shirts, hats, or other merchandise. Before establishing a sales plan for tangible products, developers must thoroughly assess the loyalty of their large user base. Developers find it futile to create a tangible product if there is limited demand for it. Naturally, this tangible product's purchasers are the individuals who play the game.

6. Conclusion

This study examines data from interviews with industry players to determine the optimal strategy for mobile game developers to generate revenue from their games, encompassing the premium and freemium game versions. The developers can adopt two types of strategy based on timing: pre-release and post-release strategies. The findings of this study demonstrate that developers who aim to distribute games in premium and freemium versions employ shared and distinct strategies. For example, during the pre-release phase, premium and freemium game version developers can employ advertising campaigns to create product awareness. Creating product awareness aims for potential users to adopt the game once it is released readily. Both premium and freemium game version developers might employ the same strategy when carrying out this advertising campaign.

A notable distinction in the approach taken by developers of premium and freemium game versions is that developers of premium game versions must produce a game demo that includes the introductory level of the game that will be released. On the other hand, developers of freemium game versions are not required to offer a game demo. The freemium version of the game allows users to play without making an initial purchase, so the game demo is unnecessary. Furthermore, premium game developers are not required to try to retain their current users and ensure their continued engagement with the games they have bought. Nevertheless, this diverges from the practices of freemium game version developers. Freemium game version developers must persist in retaining and engaging their current user base since continuance and loyalty are essential for motivating users to make purchases.

However, the results of this study do not provide clear guidance to developers on whether they should prioritize developing a premium or freemium version of their games. This study only provides an overview of the strategies developers might adopt, regardless of the business model preferences, whether they create premium or freemium game versions. This study did not assess the comparative revenue generated by the premium game version and the freemium game version.

This study's analysis relies on interviews conducted with respondents from developing countries in Asia, specifically Indonesia. The focus of these interviews was to get insights from the respondents' experiences in evaluating market conditions in Indonesia. Nevertheless, exclusive data from Indonesia reveals substantial and encouraging revenue statistics bolstered by its sizable populace and the ongoing advancement of its infrastructure (Statista.com, 2022a). Hence, the findings of this study might serve as a valuable point of reference for developers who promote their products in other nations with attributes similar to Indonesia's.

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