MOBILE GAMING PLAYBOOK

BEST PRACTICES FOR MARKETING AND MONETIZING MOBILE GAMES

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As mobile technology improves and mobile phone penetration increases around the world, mobile games have seen their popularity increase over the years. The mobile game industry is currently worth $68.5B, and many of the largest gaming companies are investing heavily in the space. Activision acquired King Digital Entertainment several years ago to solidify its position in the mobile gaming space, Blizzard has invested heavily in Hearthstone’s mobile presence, and Riot Games is developing a mobile version of its hugely popular League of Legends IP due out in 2020.

Many of these larger companies have entire teams dedicated to managing and optimizing their mobile offerings, but smaller developers often do not have the same resources and institutional knowledge. In essence, AAA publishers and studios have been able to leverage much of the marketing expertise they have on the console side to optimize and hone their mobile operations. This has allowed them to maximize user acquisition, retention, and monetization of mobile games, creating a set of best practices that works very well in the mobile arena. Meanwhile, mobile developers do not have a similar ability to learn these best practices from console studios, which creates a knowledge gap between mobile studios and AAA studios. This paper is an attempt at creating a playbook for mobile game developers to help them optimize, market, and monetize their games using lessons gleaned from interviews with AAA game studios as well as primary research into the mobile and console game industries. The companies interviewed for this paper include Activision Blizzard, EA, Square Enix, Rockstar Games, and Respawn Entertainment. Interviewees did not provide specifics or proprietary information about their specific games, but they did speak at a high level about the strategies, considerations, and tactics that mobile game developers should employ as they think about how to manage their games going forward.
MARKETING

COMPETITION

In 2012, 379 games were released on Steam. In 2019, that number was 8,290. The amount of competition for customers’ attention is significant, and as a result marketing has become more important than ever in breaking through the noise. Games that are released into the market with no marketing will be drowned out by the thousands of other games vying for attention, so creating a thoughtful and effective marketing strategy is more important than ever.

ALLOCATING MARKETING BUDGET

In terms of allocating marketing budget, a quick rule of thumb is that a AAA game’s marketing budget is approximately equal to 75-100% of its development cost. This means that for a large game launch, the marketing budget should roughly equal its development cost. This will obviously vary by game, but should give you a sense of how much money AAA studios allocate to the marketing of their games.
IMPORANCE OF SOFT LAUNCHES

Mobile game launches are very high profile and important to get right. Since new games only get one opportunity to launch, it is important that they take advantage of this opportunity to make an impression, acquire users, activate them, and retain them as recurring players. The difference between a game that successfully acquires and retains players and one that doesn’t is the game’s performance on several key KPIs, such as conversion rates of its marketing campaigns, sign-up and activation flows, retention rates of the game itself, the percentage of users that spend money within the game, and the frequency and type of recurring spend. “Soft launches” are a way to optimize these metrics in a real-world setting before fully launching the game to the wider world.

A soft launch involves releasing a mobile game in a small international market, such as Australia or Singapore, and tracking the game’s metrics as real people download and play it. During a soft launch the game developer will tweak and patch the game as they see real data come in, adjusting things such as marketing copy, in-app purchases (IAP), and game mechanics (e.g., damage values, wait timers, XP earn rates). This allows the developer to assess the game’s strengths and weaknesses in a live environment and make changes to ensure that the game’s user acquisition, retention, and monetization is maximized. This way developers can ensure that when the game does launch globally, they are not missing out on potential user acquisition due to unoptimized user flows or experiences.

The goal of a soft launch should always be to achieve certain predetermined KPIs that ensure a game will be successful when it does launch. The size of your studio and the amount of money you can afford to spend on a soft launch will determine how long to run the soft launch process. Given enough resources, soft launches can even be used to determine which games are worth releasing or not. Some larger companies with significant resources, such as Supercell, will kill games during the soft launch process if the game does not achieve the required KPIs. Obviously not all studios will have this luxury, but it does emphasize the importance of soft launches.

Supercell is a very successful, very sophisticated mobile game developer, and by killing games during the soft launch process they are highlighting how important they view soft launches in determining the future success of a game. The lesson you should take away from this is that you should have a well thought-out framework going into your soft launch, outlining all the KPIs the game needs to hit in order to move forward to the next development step. While killing a game is a very difficult decision to make, the biggest mistake you can make is to continue investing time and resources into a project that has a very low chance of success. This will result in throwing good money after bad, deepening your losses and impacting the long-term sustainability of your business.
SOFT LAUNCH LOCATION

Picking the right region for a soft launch is important in this process. Ideally, the selected region should reflect the same language and user habits as the primary launch market to ensure that similar users are playing the game. At the same time, the soft launch market should be small since there will be a lot of inefficiency in the game’s initial state. In the time it will take the developers to optimize the game, many users will drop the game never to return. It is thus risky to conduct a soft launch in a large target market, because developers risk alienating a large portion of a potentially lucrative user base. It is much safer to test the game in a smaller market where revenue potential is limited, so that when the game does finally launch in the larger markets it is poised for greater success.

<table>
<thead>
<tr>
<th>POTENTIAL SOFT LAUNCH MARKETS FOR A PLANNED US LAUNCH</th>
<th>CULTURALLY CLOSE TO THE US BUT CHEAPER</th>
<th>SOMETHOW SIMILAR TO THE US BUT MOSTLY TO BE USED FOR TESTING ENGAGEMENT AND RETENTION</th>
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<tbody>
<tr>
<td>• Canada</td>
<td>• Ireland</td>
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<td>• UK</td>
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<td>• India</td>
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<td>• Australia</td>
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In a scenario where you have a Western game that you would like to launch in Asian markets, then consider **TAIWAN, HONG KONG, AND SINGAPORE** as potential soft launch markets. These countries’ populations are the most receptive to Western publishers in the region.

In addition to picking the right market, it is important to identify the appropriate sample size for your soft launch. In particular, you must ensure that your soft launch’s sample size is statistically significant to ensure that the performance you see is reflective of the performance you should expect in your global launch. There are many online calculators that can give you a more accurate estimate of the sample size you should be targeting, but some general rules of thumb are:

**INDIE GAMES: ABOUT 5,000 TO 10,000 USERS**
**AAA GAMES FROM LARGER STUDIOS: 10,000 TO 20,000 USERS**

Casual games with higher expected retention can be at the lower end of the range, whereas hardcore games with lower expected retention should be at the higher end of the range.
Sizing the marketing budget for a game will depend on multiple factors and at the end of the day will differ for each studio and game. Soft launch success can be a factor in determining launch budgets. For example, a game that performs very well in the soft launch phase is likely to be successful in a general launch, and therefore a higher marketing budget will not go to waste as the game has proven its ability to retain and monetize users. Meanwhile, a game that performed poorly during the soft launch phase may not be worth spending a lot of marketing money on, since that money could potentially be put to better use elsewhere. It is important to note that a launch is the most cost-effective window to acquire users, given that re-acquiring a user can be up to 3x as expensive as acquiring a user for the first time. Therefore, it is important not to under-spend during the launch window.

While there are no hard and fast rules for sizing marketing budgets, below is some general guidance on how to think through these topics. Note that most mobile gaming studios have mastered these topics, so this section is included for the sake of completeness and is likely to be less sophisticated than the tools and processes your studio may have already developed.

Reacquiring a user can be up to 3x as expensive as acquiring a user for the first time.
ROAS (Return on Advertising Spend)

This metric can help you understand which marketing channels are performing well and which ones are not. ROAS involves splitting up your user base into cohorts based on what day they were acquired and which channel they were acquired through. For example, users that were acquired on May 5th via Facebook would be in their own cohort, while users acquired on May 5th via Google Ads App Campaigns would be in another cohort. For each cohort you can track the percent of ad spend that was earned back after a certain number of days. For instance, if the Facebook cohort earned back 30% of their ad spend within 7 days, but the Google cohort only earned back 50%, you might begin to conclude that Google advertising is more effective for your game. Of course, it is important to create multiple cohorts per channel and to track those cohorts over longer periods of time to ensure you are not taking a short-term view of user behavior. Short windows like D1/D3/D7 are used to quickly spot trends and apply minor tweaks and adjustments, while longer term windows like D14/D30/D180 are used to track long-term revenue performance, LTV, and sustainability of the business.

Engagement

Understanding long-term trends can help you understand what the lifetime behavior of a user might look like, and can also help you predict when users are most likely to be lost. You can then attempt to re-engage users before they drop the game by targeting them with promotions, discounts, special events, or other strategies to keep them engaged with the game.

Monetization

There are many KPIs used for tracking revenue, but some of the more common ones are ARPU (average revenue per user), ARPDAU (average revenue per daily active user), ARPS (average revenue per spender), and ARPS (average revenue per spend). Which KPI you use will depend on the nature of your game and your users.
## CREATIVE ASSETS

### In-House vs. Outside Agency

<table>
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<tr>
<th></th>
<th><strong>PROS</strong></th>
<th><strong>CONS</strong></th>
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<tbody>
<tr>
<td><strong>IN-HOUSE TEAM</strong></td>
<td>• Fully understands and focuses on your brand / product</td>
<td>• Fixed cost of creative team regardless of volume of work</td>
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<tr>
<td></td>
<td>• Cheaper</td>
<td>• Need to hire the right people</td>
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<tr>
<td></td>
<td>• Streamlined communication and coordination with other teams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Faster turnaround times</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Increased adaptability</td>
<td></td>
</tr>
<tr>
<td><strong>3RD PARTY AGENCY</strong></td>
<td>• Less fixed costs since you can ramp up and down usage as needed</td>
<td>• Does not fully understand brand / product</td>
</tr>
<tr>
<td></td>
<td>• Years of trained experience and expertise</td>
<td>• More expensive</td>
</tr>
<tr>
<td></td>
<td>• Can offer a fresh perspective / creativity</td>
<td>• Needs to be aligned on artistic vision</td>
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<tr>
<td></td>
<td></td>
<td>• Need to negotiate contracts each time</td>
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<tr>
<td></td>
<td></td>
<td>• May not be fully committed to you</td>
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<tr>
<td></td>
<td></td>
<td>• Less control of content</td>
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A third option is to employ a hybrid approach, in which there is a core in-house group constantly working on the brand, which fully appreciates the brand image and voice. Then, if the internal team can’t keep up with the fast pace or volume of work, you can bring in outside agencies as needed to release pressure on the internal team. **This hybrid method is commonly used by the companies we spoke with.**
AAA studios have developed strong expertise in understanding who their audience is in a very granular way. Targeting is now fully automated and can be handled by machine learning algorithms. By using player information to craft profiles and understand the wants and needs of audience segments, studios can ensure the messaging on their ads and game experiences are not generic, but extremely personalized. Note that the more audience segments you try to reach, the more complicated your analytics becomes. Recognize the limits of your team and only work on what is possible. If you only have a small team working on this, it’s best to just identify a primary and secondary target to focus on. Once you’ve grown your capability, then reevaluate whether you have the bandwidth to expand the number of target audience segments. Internal Google research has found there are 6 main gamer profiles. Identifying which type of customer will find your game most appealing will help you make the most of your marketing spend.

### Customer Segmentation

<table>
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<tr>
<th>Segment</th>
<th>Description</th>
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<tbody>
<tr>
<td>Super Gamers</td>
<td>28.2MM US GAMERS</td>
</tr>
<tr>
<td>Console Warriors</td>
<td>29.1MM US GAMERS</td>
</tr>
<tr>
<td>Transitionals</td>
<td>24.1MM US GAMERS</td>
</tr>
<tr>
<td>Easy Accessors</td>
<td>35.6 MM US GAMERS</td>
</tr>
<tr>
<td>Daily Dabblers</td>
<td>40.1 MM US GAMERS</td>
</tr>
<tr>
<td>Incidental Players</td>
<td>54.1 MM US GAMERS</td>
</tr>
</tbody>
</table>

Super invested, and super engaged – this audience reflects the broadest and deepest gamers on the market.

- Young adults
  - Play/spend heavily on multiple platforms
  - Enjoy a wide range of genres/experiences
  - Interested in gaming outside of direct play
    - Watch streams
    - Follow esports

- Console-centric gamers who keep up with the latest trends, and enjoy action-packed multiplayer experiences.

- Invested adult gamers whose stage of life means shifting from HD-centric gaming to more flexible mobile gaming.

- Younger gamers whose choice of platform is constrained by access, leading them to play primarily on mobile.

- Older gamers who regularly set aside time to play familiar casual games on PC and/or mobile.

- Non-“Gamers” who play mobile games because they are convenient and provide another way to use their device.

- Evenly distributed across demo groups
  - Play exclusively casual genres on mobile
  - Gaming is tied to external factors (e.g. waiting, taking a break), not to a specific interest in games

#### Typical Gamer Profiles

- **Teens/young males**
  - Primarily play/spend on consoles
  - Most enjoy action-oriented genres (e.g. Shooter, Sports), esp. those with multiplayer
  - Play on other devices, focus on cross-play

- **Mid 30s-50s adults**
  - Primarily play/spend on mobile
  - Over-index in play of Casino and Quiz/Trivia
  - Devote significant time and money to their gaming hobby

- **Kids/teens**
  - Play heavily on mobile, but have limited spend
  - Focus on mobile because they have fewer device options and/or often have to share TV access

- **Women age 45+**
  - Favor familiar Puzzle and Skill & Chance games (e.g. Solitaire)
  - Unlikely to spend on the games they play, but are likely to have a routine time they play

- **Evenly distributed across demo groups**
  - Play exclusively casual genres on mobile
  - Gaming is tied to external factors (e.g. waiting, taking a break), not to a specific interest in games
CUSTOMER SEGMENTATION METHODS

When working on new customer acquisition, the most common method is to use demographic information, such as age, gender, education, and income. There are three main methods used to pinpoint target customer segments. Which you chose to use will depend on your priorities, KPIs, budget, and time constraints.

AN E C D O T A L M E T H O D

Use existing first-hand knowledge of people you know are fans of the product to be the starting point for building out a target audience. Ideally this method is used hand in hand with another method, but this is the quickest way to put your marketing team on the right path. Similarly, identify competitive properties within your landscape and analyze what their fans look like. Creatives and messaging that resonates with these people are likely to resonate with others.

E X I S T I N G D A T A M E T H O D

Look for comparisons between your product and other previously released products. If you have a strong relationship with a media buying agency or your own in-house division, look at what audiences have found those previous products and campaigns appealing. Are there similar types of gameplay or features that could give you insight into customer segments that would also be interested in your product? Analyze whether there are certain types of people who engaged more with those similar games. Were there specific types of content or assets they interacted with more? On what channels did the campaign generate the most interest? How long before product launch did the campaign start and how long did the campaign last? What kind of ad (video or static) and content (ex: cutscenes, characters, gameplay) were more effective at driving awareness, consideration, intent, or clicks?

C O N S U M E R I N S I G H T S M E T H O D

This method is the costliest and most time consuming but gives the most comprehensive data. Through contracting with an outside market research agency or using your own in-house team, use quantitative or qualitative research methods to identify what audience segments will be most receptive to your product. Qualitative research methods can include bringing people in to talk about what games they most enjoy playing or sitting them down to actually play the game and asking them questions about how they found the experience. Quantitative methods can include surveying online audiences to figure out what types of people find the elements and features of your game most appealing or showing them a description or screenshots of the game and asking them how likely they would be to purchase the game.
Once target customer segments have been identified, research can be conducted to figure out how to best market to those audiences. Again, depending on resources, budget, and time constraints, methods here can vary. In the advertising and entertainment industries, large budgets can afford dial testing, which is a tried and true method assessing whether audiences are enjoying the media they are watching. Research participants who have been chosen for their demographic and psychographic information will physically come into a research facility where they will be shown creative assets, typically in the form of a video. They will turn dials to the left or right as they watch to measure appeal of certain scenes, characters, and actions. These insights are then used to create the most impactful final cuts of advertising or movie trailers that will be shown to the public.

The cheaper and quicker method when you don’t have the resources to test before going live is to A/B test messaging and creatives with your real audience and adjust strategy on the fly.

This method involves setting up multiple tests, showing audience segments messaging with slightly different variations and analyzing which variations are most effective at driving your particular KPI. The variations can include: different frequency (number of times users see a particular message), wording of message, call to action buttons (buy now, learn more, sign up here), colors, featured game characters, and incentives. As testing uncovers which variations are most effective, continue to iterate and launch the winner to the larger audience.
A customer relationship management (CRM) system is a cheap and effective method to acquire, retain, and reactivate customers. In app messaging and push notifications are ways to interact with players and keep them engaged, up to date, and interested in your game. With the help of a tracking platform (ex: Braze, DeltaDNA, Leanplum, Clevertap, Mixpanel, or Batch), notifications can help marketers test and reach players with personalized messages. When users open messages, data analytics can track open rates, opt out rates, and clicks. This data can give insight into the path to purchase, the kind of content users are interested in, and whether the wording is working. Marketers can attribute behaviors down to the individual customer level and craft messaging and content that is specially suited to grab that customer’s attention. For example, potential customers can be shown new trailers or offers to convince them to buy, current customers can be kept up to date and shown the latest news, and lapsed players can be shown new features to try to win them back.

**CRM Best Practices:**

- Create a strategy to increase push notification opt-in. Without this authorized, you will be unable to send push notifications. For example, pre-permission windows that pop up and explain why opting in is best before a user sees the real opt-in permission window can increase opt-in rates.
- Identify what types of content, messaging, game types, and incentives user cohorts care most about and A/B test to optimize to your KPIs, whether it’s open rate, click through rate, engagement, or some other action.
- Time your notifications to coincide with certain triggers or events.
  - Activity-based notifications are triggered by actions the player does or other players do (ex: finishing a level, X days of not logging in, player interactions, daily resets).
  - Education campaigns keep players up to date on things that are not impacted by any of their actions (ex: trailer drops, new character introductions, pre orders going live, content releases).
- Give subscribers value for being loyal. You want them to feel special and validated for giving you extra attention. Otherwise, you risk them becoming bored and not reading notifications or opting out entirely. Sprinkle in bonuses to keep players interested, such as exclusive content, digital goodies, special codes.
- Ensure all content is high quality. Notifications without useful, fun, or informative content can annoy customers. You want to make sure that when the time comes to buy, users will have a good relationship with the brand and make a purchase.
Influencer marketing is a new form of social media marketing that helps brands quickly build trust with their target audiences, by leveraging the existing trust they have in influencers. It is especially useful in reaching millennial or Generation Z consumers who are more unreachable through traditional marketing channels due to low interaction or the rise in ad blocking. The use of influencers generates higher reach and engagement for brands since people are more willing to interact with influencers. For example, Ninja, a professional gamer has almost 14.9M Instagram followers, 1.7M Twitter followers, and 3M Mixer followers. Before quitting Twitch to move to Mixer, he had over 14M Twitch followers, which shows the amazing reach and popularity of gaming influencers.

Influencer marketing is typically not a direct to sales investment. Influencers help tell a story of a brand and explain how that brand fits into their lifestyle, rather than give a direct sales pitch. It is a longer-term marketing investment in brand image and user engagement and creates a brand voice. The most effective way to use influencer marketing is to identify a group of influencers who can produce on-brand content for your company and work with them over a period of time. The continued partnership shows the influencer is an authentic promoter of the brand, which is more believable than a one-time post.
GETTING STARTED IN INFLUENCER MARKETING:

1. Identify the specific audience segment(s) you want to target and what channels they frequent. YouTube and Twitch are the most popular channels for gaming.

2. Pinpoint a specific objective or message you want to push for the new campaign/game.

3. Conduct an automated data crawl to create a list based on type of influencer, keywords, hashtags, previous advertising partnerships, geographic location, age, gender, etc.

4. Manually vet and narrow the influencer list based on engagement rates, aesthetics, and content of the influencer's social media channels.

5. Ensure the content matches the image the brand would like to be associated with.

Depending on the objective of the campaign, find a group of influencers with overlapping audience bases or non-overlapping audience bases. Overlapping audience bases are more effective at driving sales because followers see higher frequency of the brand/product message. Receiving multiple messages from influencers consumers follow and trust shows more people are interested in the product, it’s trendy, or a really great product. Non-overlapping audiences work best when aiming for pure reach.

Depending on your budget, you can work directly with the influencer in determining the contract and deal terms or work through a full-service influencer marketing company. **The most typical influencer partnerships involve sponsored social media posts featuring the brand/product.** More well-known influencers with established fan bases can also be used to help with product development as they have expert knowledge of what their audience will like. Influencer input can be useful in the creation of new products, branding, and messaging. Brands can collaborate with influencers and have them work directly on marketing assets that can be used by the brand itself on owned or paid media. Brands can also partner with an influencer to host a live event or social media takeover.

Companies can also try to utilize influencers without paying or officially partnering with them, but these methods do not guarantee promotion. Top influencers can be given early access to games or exclusive content. Companies can also send influencer kits consisting of cool or unreleased gear that the influencer would be excited to share about with fans. The hope with these methods is that the influencer will like the product enough that they will willingly share about it with their fans, essentially becoming an unpaid promoter.

Influencer marketing is not typically used to drive direct sales. Therefore, measuring the return on influencer marketing is tricky. Companies may try to track immediate sales by providing affiliate links to influencers, but that does not measure the value an influencer creates for the long-term brand image. **Brand trackers that measure brand awareness, appeal, consideration, intent to purchase, and recommendation can be used to evaluate the impact of advertising over time.**
OFFLINE ATTRIBUTION

Types of offline advertising include billboards, live events (trade shows, conferences), direct mail, and print ads. The target audience for the gaming industry does not typically consume information through print or physical mailers, so these older marketing techniques are rarely used. If you have the budget, offline advertising can be great for legitimizing a broad, mainstream appeal for your game, but it is a large investment that is extremely difficult to measure the return on. There is no truly accurate method to tracking the number of impressions Out of Home (OOH) advertising earns over the course of its lifetime. Anecdotally, some placements are more valuable than others, such as a billboard in Times Square is much more impactful and will generate more impressions than a random bus bench. However, media-buying agencies and marketing attribution companies do have ways to estimate the return.

HISTORICAL DATA

Use a brand tracker to measure user perceptions over time. Analyze data before and after offline marketing campaigns to see if there have been any changes. Any changes cannot be directly attributable to the offline advertising because there may have been conflicting factors, but the tracker can give you a general sense of if it’s working or not.

CUSTOM URLS OR CODES

Provide different landing page URLs or codes so you can track which specific ad, location, channel, or message reeled in that user. For example, if Billboard 1 displays the signup code ABC while Billboard 2 has the code XYZ, you will know which billboard a user saw depending on what code they type in when they register.

GEOFENCING

Users who have downloaded certain tracking apps or allowed apps to track their location can be determined to have been in a certain area where a billboard or event is happening. Once that data is collected through their phone, users who were within the “geofence” of offline advertising can be assumed to be exposed to the advertising. Future purchase data or surveys asking about users’ perceptions and likelihood to purchase a product can then be used to compare responses between the exposed group to a control group who did not see the offline advertising because they never physically went to where the offline advertising was located. Any difference between the control and exposed groups, assuming statistical significance, can be attributed to the offline advertising.
Intellectual property, or IP, is a game’s brand or universe. IP can be owned by the developer (e.g., Battlefield is owned by EA) or licensed from a third party (e.g., Star Wars is owned by Disney but licensed by EA for game development). Developing and managing IP is important because a strong IP can contribute significantly to the success of a game. IP drives a lot of organic (i.e., non-paid) traffic, word of mouth, and increases the audience for a particular game. It also creates a strong stable of creative assets that can be used in marketing, such as characters, locations, and equipment (e.g., lightsabers = Star Wars). Building a successful IP from scratch is a great strategy if you can afford it, since it gives you full control over the IP and its usage. However, this can be very expensive, very time consuming, and very risky; many new IPs fail even after significant investment in development and marketing. Licensing an IP from a third party has the advantage of endowing you with a built-in brand, but obviously will require a monetary investment.

Licensing an IP involves coming to an agreement to use an existing IP (e.g., Star Wars) in an upcoming game. An IP holder will always want to be compensated for allowing a developer to use the IP as the basis of the game. There are multiple ways to structure such a licensing deal. Some of the most common deal structures are found on the next page.
IP LICENSING STRUCTURES

REVENUE SHARE:

In a revenue share agreement, the IP holder shares in the revenues generated by the game at some pre-determined split. For example, an IP holder might receive 20% of all revenues generated by the game. Given that revenues often do not represent profitability, revenue share agreements should be carefully scrutinized. For example, if your profit margin on a game is 15% and you sign a 20% revenue share agreement with an IP holder, the IP holder will benefit while you will become unprofitable.

PROFIT SHARE:

This is similar to a revenue share agreement, except the IP holder shares in profits after all expenses are taken out. This ensures that the game developer makes a positive profit on the game before the IP holder earns any money. As you can imagine, IP holders are wary of these agreements since if a game is unprofitable, the IP holder earns nothing for their IP. Additionally, under this structure game developers have an incentive to assign unrelated expenses to a game in order to reduce its perceived profitability, thereby lowering the amount of profits that must be distributed to the IP holder.

MINIMUM GUARANTEE:

An MG agreement is similar to a revenue share or profit share agreement, except that a game developer guarantees a specific dollar value to the license holder. For example, a developer could sign a profit share agreement with a $10M minimum guarantee over the initial 12 months. In this case, if the IP holder only receives $9M after 12 months from the profit share, then the game developer must pay the IP holder an extra $1M to achieve the $10M in guaranteed profits. If the IP holder earns $10M or more in the first 12 months, the game developer does not need to spend any extra money.

ADVANCE:

An advance is an up-front payment that a game developer makes to the IP holder for the right to use their IP. This can be done in conjunction with any of the previous structures, or it can be done in isolation. If done in isolation, the advance will usually be higher than if combined with a sharing agreement. It is usually risky for a game developer to solely rely on an advance payment because the costs are guaranteed while the profits are not (e.g., if the game is unpopular). However, if a game is very successful, then a pure advance provides the highest opportunity for profits for a game developer, as all future profits are solely owned by the developer.
Stage gating is also an important concept to understand when it comes to licensing IP. Often, the IP holder’s primary concern is ensuring the health and continued brand power of its IP. As a result, they care deeply about the quality of the game being developed and will do everything in their power to ensure a high-quality product is released. Stage gating is a method by which they can accomplish this. Stage gating is a method of giving the IP holder a say in which game concepts are developed, and which are not. It functions somewhat similarly to the Venture Capital model of several rounds of funding based on achieving milestones. It involves the creation of an executive council or taskforce that is composed of members from the IP holder as well as the game developer. This taskforce makes the ultimate decisions on whether or not to greenlight game concepts. In the first stage, 10-12 early stage concepts are pitched to the taskforce. The taskforce chooses some subset of these pitches (e.g., 6 out of the 12) to move forward to the next stage. These concepts receive funding and are cleared to develop an alpha build or a playable demo that can be tested with users and focus groups in order to determine which concepts are the most promising. Based on the results of these tests, a smaller subset (e.g., 2 out of the 6) are moved forward and given more funding to develop a more complete build that can be further tested with users, or sometimes even soft launched in the app store under a different name to observe how it performs in terms of KPIs. Finally, a single game is selected, finalized, and released to market with the actual IP attached.

An important note about IP...

It is always safer to recycle IP than to develop new IP. This is true for both licensed IP (e.g., Star Wars) or original IP (e.g., Super Mario). Of the top 10 selling games in 2019, only one was based on a new IP. No secret there: shoppers tend to go with what they know, and are spending money on trusted and proven quantities – e.g. the well-known games they’re certain will deliver high-quality experiences. Creating a sequel to an existing game is always a safer bet because existing IP has a built-in audience and tends to be more profitable. Developing a brand-new IP tends to involve a lot of user testing, R&D, and marketing spend in order to acquire a large enough audience, which makes them less profitable. That being said, over time many IPs become stale and go out of fashion, so it is important to manage the balance of when to release a sequel and when to invest in the creation of a new IP. Additionally, building your own IP (vs. licensing someone else’s IP) can be the right approach if you have high confidence in it being a success. You will likely make a large up-front investment to develop the game and market it to an unaware audience, but all future revenues and profits will be exclusively yours. This is a much more profitable long-term approach than licensing a third-party IP.
Traditionally, most video games had a short period of 30 to 45 days during which they were at their most profitable. In turn, this provided publishers with a time-frame to measure a game's profitability. The industry is still shifting from sales as the primary indicator of success to a model that more accurately values repeat usership. More recently, subscription business models have started to gain popularity. In this chapter we will look at what mobile gaming studios can learn from the business model practices of AAA studios, which have embraced subscription and subscription-like business models.

The Evolution of Monetization in Gaming

Buy to Play (B2P) business models were common in which a customer purchased a game, which was extended by additional DLC modules sold separately to continue the original content. B2P price ranges typically from $20 to $60 for regular versions and up to $150 for a collector's edition version.

With the introduction of massively multiplayer online (MMO) concepts, more and more games started to use a subscription business model as the game required an online connection to continuously make use of the publisher's servers. The average price for monthly subscription varied from $5 to $20. Some games required you to buy the game first but most of them became free-to-play at some point.

Game publishers were not satisfied with the decrease in revenues; most subscription-based games did not generate sufficient revenues to sustain themselves. AAA developers started to apply the idea of In App Purchases (IAP) from the mobile market. Initially, gamers were against this practice as some concepts such as Pay to Win were not respected in the PC/console gaming world. Only recently have there been more successful cases such as Fortnite that used IAP to sell cosmetics upgrades to gamers.

According to the 2019 Fortnite data, average spending for IAP among all players is $50–60, with 68.8% of Fortnite players surveyed saying they spend money on the game. This solidified the popularity of the Battle Pass, which usually costs $10–$20.

According to the recent data from NewZoo, Battle Passes and IAP are the fastest growing gaming segments while B2P and Pure Subscriptions have near-zero growth rates.
### Examples of Successful Business Models

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<th>Buy to Play</th>
<th>Free to Play</th>
<th>DLC/Premium</th>
<th>Season Pass</th>
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### Microtransactions in Mobile vs PC/Consoles

Some business models that use microtransactions in mobile gaming have elements of gambling. These business models didn’t face significant opposition mainly because of the free-to-play nature of most mobile games. On the other hand, when we talk about AAA PC/console games, the situation was different. Gamers opposed new methods of monetisation, which led to multiple controversies that pushed game publishers to rework their business models. The most vivid example of such a situation is Electronic Arts and its Star Wars: Battlefront 2 title, which had to revamp its business model after the beta test. IAP tend to be one-off purchases on in-game items, such as costumes, characters, weapons, and power-ups. Items that provide gameplay advantages to players, especially in multiplayer games, tend to be frowned upon, so IAP generally cover cosmetic items that have no gameplay impact. The one exception to this is purchasing new characters, which is generally accepted and is a widespread practice (e.g., League of Legends, Apex Legends).
HOW THE SUBSCRIPTION WORLD LOOKS TODAY

TRADITIONAL SUBSCRIPTIONS

First introduced in 1997 in Ultima Online, subscription business models were applied by many game publishers in their MMO projects. One of the "kings" of subscription business models is World of Warcraft, one of the few games still using a subscription business model with IAP injections to support ongoing revenue. Other MMO-projects decided to switch to a free-to-play model and some of them did that successfully. For instance, DC Universe gained 700% in revenue after the transition to F2P. Subscription business model can not guarantee stable cash flow to developers and publishers to successfully match gamers' constant need for new content and features.

SEASON PASSES

A season pass is the next step in the traditional DLC model. Publishers have started to sell season passes to grant access to current and upcoming DLC content for a reasonable discount. Basically, gamers prepay publishers for future content. This helps publishers subsidize the development of new content. Season Passes, for example, can be purchased for, say $50, and provide access to all new maps, characters, and weapons for a period of 6 months. Once the season is over, a new Season Pass is released that users must purchase in order to continue receiving access to content over the next 6 months. Overall, the business model looks like a win-win for both sides. However, some gamers criticize publishers by saying that DLCs are based on content that was already created but removed from the game in order to sell it separately. However, as the practice of season passes becomes more common, this criticism has abated.

BATTLE PASSES

The battle pass is the combination of multiple approaches such as season passes, IAPs, and achievements. For example, you pay $10 to unlock the battle pass. You get access to multiple tiers of free in-game content available when you level up your pass. To level up your pass you simply need to play the game and complete challenges. That rewards you with specific cosmetic items, weapons, and in-game currency. It is also possible to unlock the items without completing these tasks if you pay additional money. Battle passes became a must-have model for many modern games, especially 3D shooters such as Destiny 2, PUBG, Fortnite, and even mobile Mario Kart Tour. Some of them use battle passes in conjunction with loot boxes. One of the greatest features of the battle pass concept is not only getting more money but also promoting increased life-time engagement. Low and non-paying gamers keep game servers populated for premium gamers. All segments are happy and ultimately pay more and promote the game to other players.
Deciding what type of monetization to incorporate into your game (e.g., IAP vs. subscription vs. season pass vs. battle pass) is more an art than a science. Developers tend to experiment with different monetization systems and can add or remove systems over time as they learn more about their users' habits. However certain genres lend themselves better to certain types of monetization. Round-based multiplayer games that include a large stable of heroes tend to use IAP as a monetization function, whereas FPS games tend to prefer battle passes. Single player games often use season passes, since story content tends to be expensive to develop and can only be released in large chunks. Looking at other successful games in your genre can be a great starting point in identifying which monetization method to utilize.

One example of successfully transferring AAA concepts to the mobile world was PUBG Mobile by Tencent. They successfully integrated season passes to this title and plan to roll out new business models to other Tencent games.

"We are in the early stages of implementing season passes for several of our key titles, contributing to paying propensity within those games," Tencent explained. "Our data suggest that season pass spending is largely complementary to the existing item sales model, and also enhances player activity."
Subscription platforms are a newer phenomenon in the gaming market and kicked off a big discussion among the gaming development community. For the last five years subscription services achieved great results in some categories but came with their own difficulties. According to Deloitte's Digital media trends survey, 30% of US consumers pay for a gaming subscription service, and 41% play video games at least weekly. However, not all gamers are open to the subscription model.

**The Evolution of Subscription Models**

In 2017, Microsoft launched Xbox Game Pass. They started to provide their own titles and other 3rd party titles in a monthly subscription service. One of the innovations was including new releases at launch, day-and-date with traditional options. A few years ago, Sony had launched its cloud-gaming platform Playstation Now. These games could be streamed without having to download the game.

Game publishers and resellers have started to launch their services as well. One of the largest launches was by EA. It offered EA Access on Xbox One. EA Access includes discounts on EA games, a limited number of hours of pre-release play, and an access to a back catalog of games. Later expanded to PC, Access Premier added access to the newest games to play as soon as they are available to purchase. Later on, Ubisoft joined this direction with Uplay+ that gives access to their game library. Last year, mobile companies such as Google and Apple also launched their subscription services to offer a library of some popular games to their smartphone users.
## Subscription Platforms

<table>
<thead>
<tr>
<th>Platform</th>
<th>Description</th>
<th>Price</th>
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| **Apple Arcade**    | • Access to exclusive games  
                      • Catalog of more than 100 games                                                                                                                                                                          | Monthly: $4.99  
                      Annual: $49.99                                                  |
| **Google Play Pass**| • Catalog of more than 350 games and apps                                                                                                                                                                   | Monthly $4.99  |
| **Xbox Game Pass**  | • Xbox original content on day one  
                      • More than 250 games in all  
                      • Works on PC                                                                                                                                                                                              | Monthly: $9.99  
                      "Ultimate": $14.99/month                                        |
| **Playstation Now** | • Cloud gaming streaming to PS4/PC  
                      • 800+ games available  
                      • You often have to wait for new releases                                                                                                                                                    | Monthly: $9.99  
                      3 Months: $24.99  
                      12 Months: $59.99                                               |
| **Nintendo Switch Online** | • Access to multiplayer modes  
                      • Cloud saves for many of your games  
                      • Access to a library of NES games                                                                                                                                             | Monthly: $3.99  
                      3 Months: $7.99  
                      12 Months: $19.99                                               |
| **EA Access**       | • Access to a library of 240 games, 10 hours demo mode, and discounts  
                      • "Premier" membership for PC includes unlimited access to all EA games, including fresh titles                                                                 | Monthly (Basic): $4.99  
                      Monthly (Premier): $14.99  
                      Annual (Basic): $29.99  
                      Annual (Premier): $99.99                                        |
| **Uplay+**          | • Day one access to all new Ubisoft games with all add-ons and bonus content  
                      • Guaranteed beta access  
                      • Only for PC gamers                                                                                                                                  | Monthly: $14.99                                                                 |
| **Humble Choice**   | • Games from Humble available to the gamer, even after the subscription bundle changes  
                      • Humble curates a monthly playlist                                                                                                                                       | Monthly (Lite): $4.99  
                      Monthly (Basic): $14.99  
                      Monthly (Premium): $19.99  
                      Annual (Lite): $44.99  
                      Annual (Basic): $134.99  
                      Annual (Premium): $179.99                                       |
Positive aspects:

The biggest benefits for the developers and platforms is the consistent monthly revenue. In addition to that, it allows developers to quickly gather data about players' gaming habits, so they can make adjustments to and optimize their games.

The Xbox team shared that they have received feedback from partners that Xbox Game Pass gives smaller/independent titles and studios a better chance to succeed at launch, helping to create longevity for these experiences.

Creating a subscription platform is also beneficial to giant publishers, such as EA and Ubisoft. Gamasutra author Bryant Francis explains, "both Ubisoft and EA are so large, and have such huge portfolios, it sort of makes sense why they’d want to build out a subscription service for them."

Overall, F2P brought many low-quality games to game distribution platforms. Adding them to a curated bundle brings video game developers some freedom. Studios can start to focus on the game content and care less about marketing and distribution.

Concerns

Some gaming experts suggest that tangible games won't go anywhere any time soon. One of the reasons for that phenomenon is that gamers consume content differently than movies or music. The majority of gamers are dedicated to only a limited number of games, so a subscription service wouldn't benefit them. Strauss Zelnick, Take-Two Interactive CEO, confirms that: "the average American household spends 150 hours a month watching movies and shows and only about 45 hours a month on interactive experiences like video games. But those hours spent on linear entertainment are spread across dozens of different shows and films, while that 45 hours spent on games are likely to be only one to three titles."

Another concern is that revenue from subscription-based models cannot cover the cost to develop the products subscribers use.
CLOUD GAMING ATTEMPTS

Another technology that would benefit subscription platforms is Cloud Gaming. Cloud gaming enables users to launch games on remote servers and stream them directly to a user's device. It eliminates consumers’ need to buy hardware, while subscription services eliminate their need to buy software. However, most experts don't expect that cloud gaming adoption and growth rates will match subscription service rates in 2020-2021. Both Sony and Microsoft are focused on the next generation of consoles and are not ready to switch fully to the cloud. At the same time cloud-based game streaming is on the rise with several newly launched products such as Google Stadia, Nvidia GeForce Now, Microsoft xCloud, Blade Shadow PC, Playkey, Vortex, and EA’s own upcoming solution.

PC VS. CONSOLE GAMERS

There are several aspects that make subscription platforms successful for consoles but not PCs. According to the Deloitte Insights survey, gamers who prefer consoles are most likely to have a gaming subscription (63%) with over 61% playing at least once a week. Additionally, console gamers tend to value video streaming more than traditional Pay TV. Console-dominant gamers place a high value on gaming subscriptions and original content. They prefer having one subscription and one platform subscription fits their needs. These statistics explain the success of subscription platforms launched by Sony and Microsoft.

On the other hand, PC gamers are less likely to have a gaming subscription (20%) and they have very mediocre gaming utilization, with 50 percent playing at least once a week. Moreover, they feel more comfortable with multiple gaming subscriptions.
WHAT SHOULD MOBILE GAME DEVELOPERS DO?

Clearly, the subscription business model and its variations are getting more and more popular. Mobile game developers should consider this option to drive sales for their new game. There is also the added decision of whether you should launch your own in-game subscription or join a subscription platform such as Google or Apple.

As discussed above, subscription platforms are very successful in consoles but not so in PC gaming. Console gamers are locked to a single ecosystem and tend to prefer having one subscription for everything. They play more than any other category of gamer and see more value from subscription platforms. Finally, both Microsoft and Sony have the necessary spending power to get top game titles into their service.

PC gamers tend to be pickier about the new games they play. They usually purchase 2 or 3 games a year and are ready to pay a premium. PC gamers are not locked to a single platform, and only game publishers with the largest game catalogues can gain from the subscription model.

The mobile market has some positive aspects of console gaming and avoids some negative aspects of PC gaming. Mobile gamers prefer to play in one ecosystem and easily switch between new games. Moreover, low price barriers make it easier to discover new titles.

Overall, that means that for the majority of mobile game developers, it is beneficial to be included in a subscription platform. Inclusion in such a subscription service provides elevated marketing and visibility. Additionally, since gamers are locked to a single platform, subscribers are more likely to see, try, and play your game if it is part of a service they subscribe to. There are a few examples when the creation of your own platform is better, such as mobile AAA titles with a strong brand or IP.
In 2018, Raph Koster, a veteran game designer assembled a data set of over 250 games covering the last several decades and wrote a very insightful article on key trends in game development costs and prices. The chart below demonstrates reported development costs such as salaries and overhead costs excluding marketing spend.

The numbers are evidence that every ten years, development costs go up by 10x. At the same time, the ratio of cost per byte is going down. Since 1995, game distribution size increased 122x while costs rose by only 22x. Thus, game developers became six times more efficient at creating content. This trend also holds true for indie game development. It costs the same to make AAA games and small mobile games in terms of megabytes. Overall, the price to create a successful game went up at all levels. Currently, even indie games may have budgets ranging from $5M to $20M.

Drivers of Increased Game Development Cost

Development teams are massive. Teams include coders, specialist engine developers, artists, animators, level designers, sound engineers, lighting engineers, writers, voice actors, multiplayer designers, and more.

Better graphics also leads to higher costs. While character creation used to take ten working days, now it may take hundreds of days. What used to be considered a high quality model with 256×256 textures now requires hi-res 4096×4096 textures.

Expectations for game quality are also constantly increasing. Average review scores in key genres are growing, and it is becoming more expensive to compete with new game titles. In addition, thanks to Twitch, YouTube, user reviews, social networks, and general word-of-mouth, games are judged very quickly and the public's opinion can be formed within a few days to a few weeks of launch.
HOW TO DECREASE COSTS

Access to high quality universal game engines can help control costs. For instance, Unreal Engine is free to get started with, charging a 5% royalty only when a game passes $3,000 revenue per quarter. It costs $0 to use for the development and release phases, and it eliminates the need for multiple versions of the same engine for cross-platform development. Finally, team efficiency is better; it is easier to recruit proficient staff and collaborate with studios who also use the same engine.

Another innovation is the Early Access concept. It enables game developers/publishers to sell a game while it is still being developed. Gamers are usually notified about the stage of the development and should expect missing content and various bugs. Early Access is a replacement of alpha or beta tests. Releasing a game in Early Access helps set context for prospective customers and provides them with information about your plans and goals before a "final" release.

KEY PRICING TRENDS

F2P Price Revolution

Overall, the market has observed a decline in purchasing power; players pay around half of what they used to in the 90s. In addition, most distribution channels require you to provide discounts or bundles, pushing the price down even more. On average the current blockbuster game usually costs $60. That's the base level price. There are special editions and limited editions, which provide gamers with additional in-game content or perks. By offering a season pass and/or downloadable content, publishers can charge more.

On the other hand, big F2P titles don't have a $60 price tag but make up for it in volume. Total Fortnite revenue for 2018 is estimated at $2.4B. The average Fortnite player who coughs up money spends $84.67, according to a new study by financial services company Lendedu. Nearly 70% of players buy digital items. Across all players, spending and non-spending, average revenue is $58.25.

WHAT DRIVES LIFETIME REVENUE IN MODERN GAMES?

**STRONG COMMUNITY**

It drives retention, and retention drives revenue. This is the most “affordable” tool to drive revenue. At the same time successful community strategy is not as easy to implement. In some cases it may cost millions of dollars to hire a team and organise events.

**USER-CREATED CONTENT**

Similar to user generated content in media but with some nuances. Usually, user generated content is thought of as user created weapon skins, maps, and game mods. Sometimes creators receive a share of revenue. However, some games allow users to create their own game experiences. One of the most successful examples is Roblox that 100% consists of user-generated content. "We're very bullish on user-gen, and we're 100 percent committed to it, in that every single game or experience in Roblox is created by our users," says Baszucki.

**PLAYER SKILL / SPORTS-LIKE GAME DESIGN**

Gamers are enamored with the idea of competition-based games. This can be accomplished with leaderboards or through the implementation of multiplayer. It allows gamers to effectively create content for themselves by playing against each other.

**DESIGN SYSTEMIC CONTENT RATHER THAN STATIC CONTENT**

Gamers demand the constant evolution of game ideas and new content. New business models such as season and battle passes utilize this idea to keep gamers engaged.