

CFA SINGAPORE INSIGHTS

By Alan Lok, Eunice Chu, Guruprasad Jambunathan, and Chan Fook Leong

## Play to win: investing in the mobile gaming sector

In this crowded and hyper-competitive market, learn to separate the performers from the non-performers

HERE'S a game you can play – the next time you're out, whether on the train or waiting in line at your favourite coffee spot, look around and count the number of people tapping and swiping on their smartphones as they gaze blankly at the latest mobile game filling their screens. Does it surprise you to see how ubiquitous mobile gaming has become?

Mobile games have been around for quite a while – 25 years to be precise. Leading the market back then was a game called Tetris, which you could only play on an electronic brick called the Hagenuk MT-2000 (we had to Google it too). Three years later, mobile phone giant Nokia preinstalled the hugely popular Snake on its devices – a watershed moment for the market. The launch of Apple's App Store in 2008 was another turning point, as it heralded the dawn of today's app-based mobile gaming era, which has led to a global industry worth billions of dollars.

### A growing multibillion-dollar juggernaut

If your preferred recreational mental challenges are restricted to the occasional newspaper crossword or a well-thumbed Sudoku book, then hearing that the global mobile gaming industry will be worth US\$68.5 billion by the end of 2019 (and forecast to hit US\$95.4 billion in 2022) might come as a bit of a surprise. That is until you realise that there are an estimated 2.4 billion gamers – over 30 per cent of the world's population. That's a lot of people with double chins and sore thumbs.

Such huge numbers can be attributed to several factors. One primary aspect is the sheer accessibility of mobile games. This is thanks to the rise of smartphone usage and low-cost, high-speed mobile bandwidth. They are also, for the most part, free to play, further lowering consumers' barriers to entry and giving rise to an age of hyper-casual gaming.

Another factor is the nature of the market itself – a fast-paced environment where the cream quickly rises to the top. Mobile games' shorter build cycles relative to personal computers or console offerings, plus a structure that allows the passive collection of large amounts of real-time feedback (big data), combine to create a situation where developers can rapidly iterate to bring new or improved versions to the market.

However, this accessibility also begs the question – since most mobile games are free to play, how does this equate to tens of billions of dollars in value for the industry?

### A freemium business model with a few big spenders

It is true that most mobile gamers – at least 95 per cent, according to some estimates – will never spend a cent on their amusement. But even such "freeloaders" can be monetised using the most common strategy on the Internet – advertising. The percentage of revenues derived from advertising vary from game to game, particularly the type of offering, but general estimates put it at 30 to 50 per cent. And although only an estimated 2.8 per cent of participants are classified as "big spenders", that is still over 50 million people according to leading



There are an estimated 2.4 billion gamers – over 30 per cent of the world's population. The global mobile gaming industry will be worth US\$68.5 billion by the end of 2019. BT FILE PHOTO

games and e-sports analysts Newzoo.

As such, even this small slice of users is enough to make direct spending on mobile games translate to 74 per cent of consumer app outlay. While some games require direct purchase or monthly subscriptions to play, most of this spending comes from in-app purchases which allow players to heighten their in-game experience through gaming options such as extra lives and other similar boosts. This freemium model has been enabled by tremendous improvements in encryption protocols which now make online monetary transactions both convenient and secure.

The business model is also adapting to the rise of e-sports. Previously limited to primarily personal computers, mobile games are now entering the fast-growing billion-dollar e-sports market. One example is Clash Royale, not only the mobile gaming world's top performer but one that has made a dramatic entrance into the e-sports arena with its successful tournaments and league features.

### Learning how to play the investment game

The numbers don't lie – mobile gaming represents a huge and growing opportunity for investors. The challenge lies in separating the performers from the non-performers – it is a crowded and hyper-competitive market where the winners reap the lion's share of the rewards while for the losers, it's unfortunately "game over" (for context, there are well over a million mobile games on the App Store and Google Play Store combined).

With that background information in mind, let's move on to understanding how to analyse a mobile gaming business.

### Defining the company's offerings

The first step is to establish the scope of its product and service offerings. Explore whether the company purely offers game apps or whether it is more diversified with non-game apps as well. From there, dissect its offerings further by both supported platforms and operating systems. Investigate the number of languages provided on user interfaces – this will give you a glimpse into its geographical strategy.

That level of segmentation is merely the beginning. You'll need to place the apps themselves into their own categories such as action, strategy, or puzzles for game apps and entertainment, fitness, dating, and the like for non-game apps. Even within these categories, you can always drill down further. Look at whether its offerings are single or multiplayer, and if they provide online communities or social media integration.

### Niche operators

As mentioned, this market is global, crowded, and ultra-competitive. But that doesn't mean there aren't any sub niches where lesser-known games can be profitable. Study the company's user base to get a more detailed picture of its customer demographic – which countries are they from and what languages do they speak? Is the business targeting a global audience or something more specific? Some games may also be more select not in the geographical sense, but in terms of their hardware requirements.

Once you have a clearer image of the firm's markets, analyse the competitive dynamics. Key data points to seek out include the top games in said space by number of installs, estimated usage levels, and unique points of differentiation. For the last point, one thing that will easily stand out is specific licensing, e.g. the use of characters from popular movies and TV shows.

### Generating interest

Mobile games compete squarely in the attention economy, meaning marketing and advertising play crucial roles in a game's success, particularly in its initial stages. When a game hits a critical point in terms of popularity, a positive feedback loop is created where new players participate simply because they have heard how popular it is. Features like public rankings and social media integrations can amplify this effect.

Therefore, review the effectiveness of the company's marketing channels. Is it purely advertising, or are there referral incentives as well? What has been the firm's return on every marketing dollar spent – how do its user acquisition costs compare to its peers?

While marketing goes a long way, the product itself

is also obviously important. Dive deeper into its development and innovation strategies. Are updates addressing bugs and other performance issues being quickly released?

What about new features and other enhancements – is the company launching those on a regular basis? Without those, even popular games can quickly become obsolete – in a market where switching costs are practically non-existent, a strategy for tackling obsolescence and keeping things fresh is paramount.

### Understanding monetisation

The next step is to examine monetisation methods – how exactly is the company making its money? Begin by looking at its end-customers. Are its products directed to end-users, or are they licensing them as white label offerings to third parties?

If it is primarily a direct offering to consumers, then scrutinise how it charges for its products – free, freemium, paid with free trial periods, or paid? Make sure you get a comprehensive overview of all its revenue models, from subscriptions and advertising to licensing and sponsorships and even offline revenue streams like merchandising and events. The data harvested by the apps are themselves valuable – beyond providing aggregate insights, it could also be potentially licensed or sold.

### Gauging financial and operational metrics

Games may be frivolous, but a careful study of a company's financial and operational metrics is anything but. When you examine standard financial measures such as revenue, EBITDA, EBIT, and net margins, compare it with the growth in its user base – has the firm successfully used data analytics to increase its revenue per customer? Don't forget to also break down these figures by individual product, geographical market, and monetisation method, and then assess the trends in each area.

On the cost structure side, pay attention to R&D, marketing, staff, and distribution costs (e.g. commission charged by the App Store). Are there any components where the company may be either outperforming or lagging its peers (such as user acquisition fees)?

From an operational perspective, inquiry into its user behaviour is key. While top-line data, such as the number of installs and growth in new users, are certainly important, make sure to also delve into retention metrics like the proportion of active versus inactive users, average time spent on the app, and the time taken for users to go from active to inactive. Check whether any strategies exist to convert dormant users back into functioning ones and if so, review their effectiveness.

### Environmental, Social and Governance (ESG)

The main ESG issue concerning the industry is addiction. Mobile games can be highly enslaving, particularly among the vulnerable. Further, their addictive nature is rarely a bug, but often a deliberate feature.

Many of the aspects that hook people to mobile games, such as intermittent rewards, are conceptually no different from those used in the casino industry. However, unlike the latter, there are few restrictions in targeting under-aged consumers.

Therefore, when probing into ESG factors, find out whether the company or its games have come under any scrutiny or accusations over potential user addiction. See how the company plans to address such issues or if it restricts the usage of its games by age. The problem of mobile games addiction also ties into this new age of constant connectedness – social media addiction is another similar and arguably larger societal challenge.

### Long-term future of mobile games

Consumers are fickle, and the mobile games market itself changes rapidly. As such, it can be challenging to gauge the long-term prospects of a company or game. However, some things you can still study to provide yourself more insight on long-term trends include a firm's expansion plans into less saturated markets, e.g. those with lower per capita gaming app usage and spending. Its product innovation strategy can also reveal insights as to how the company might perform over the longer term.

That's the micro perspective. On the macro side, it's clear that mobile games aren't going anywhere. As our smartphones become more powerful, the variety of mobile games will only expand.

You don't have to play mobile games to see the opportunities in this sector. Use this framework as your guide for future analysis of this lucrative industry – why bother with in-game rewards when you can play the investment game and earn real dollars instead?

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GOLD REPORT

By Benjamin Lu

## Gold supported as global central banks adopt dovish stance

A weekly market summary, Sept 16-20

THE US Federal Reserve has lowered the target range for its key interest rates to 1.75-2 per cent (-25bps). The Federal Reserve Open Markets Committee (FOMC) members, though voting in favour of reduced US borrowing costs, have illustrated a fundamental divide over the need for future cuts. Rising economic uncertainties and a protracted Sino-US trade dispute have been cited as key threats towards global growth. Gold prices, though facing headwinds from renewed risk sentiments, remain supported over subdued global growth and monetary policy easing programmes by global central banks.

### What should investors look out for in the longer term?

US-China trade negotiations will be of key focus as both parties attempt to bridge core differences before senior-level talks take place next month (Oct 19). The 14-month-long trade rift between the world's two largest economies has undermined business confidence levels substantially whilst raising global trade uncertainties. Simmering tensions in the Middle East over recent attacks on Saudi Aramco will cement support levels for safe haven assets as investors deliberate heightened geopolitical risks. Gold prices will likely stay within range-bound conditions as markets search for fresh catalysts for the near term.

### Technical Analysis for Spot Gold (XAUUSD)

Strong support at key technical level of US\$1,480.00 (50.0 per cent Fibonacci Retracement Level) has raised the potential of a bullish trend reversal. Gold prices must break above US\$1,510.00 for a continuation of the positive trend scenario towards the next main station of US\$1,525.00. Failure to hold above key support levels of US\$1,500.00 and US\$1,492.00 will see market bears pressure price levels towards key trend line support of US\$1,480.00 (50.0 per cent). Sideways trading activities will likely envelope gold prices, should market forces fail to break out from key technical levels of US\$1,480.00 and US\$1,510.00.

**Weekly Market Assessment: Range-Bound**  
**Key Resistance Level (1): US\$1,525.00**  
**Key Resistance Level (2): US\$1,510.00**  
**Key Support Level (1): US\$1,492.00**  
**Key Support Level (2): US\$1,480.00**

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