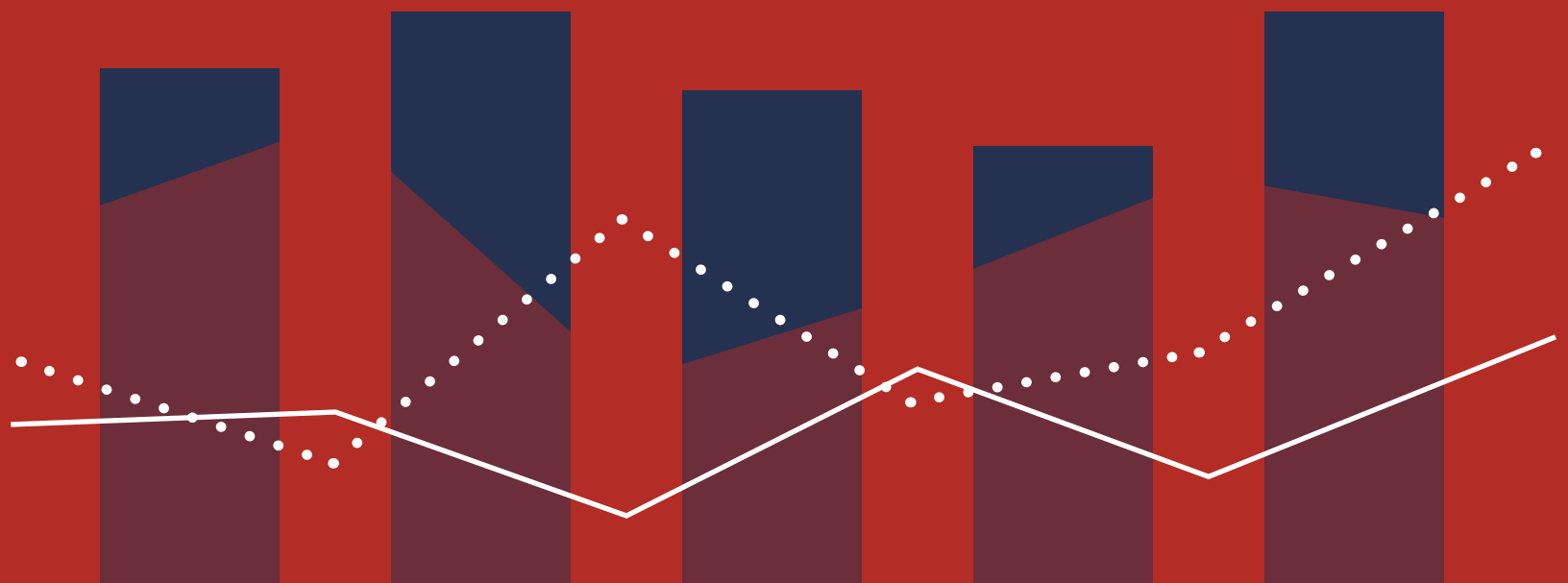


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# Selecting and Optimizing the Freemium Sales Model

P.K. Kannan, Xian Gu, and Hongshuang (Alice) Li | 2.14.2023

**Firms selling online content, mobile games, digital streaming, or software-as-a-service subscriptions can find it challenging to convert prospects who have not experienced their products prior to purchase.**

The freemium and free trial models allow customers to experience the content or services before they decide to buy.

In the freemium model, firms provide a basic version of a content or service line free of charge and an enhanced, premium version for a price. Customers can use the free version immediately, then upgrade to the premium option if they want enhanced features. On the other hand, a free trial offers a full product or service at no charge for a limited time, so customers can experience it and purchase it if they choose. In other words, the freemium model is feature/quality limited, while the free trial model is time-limited and, thus, a special case of the freemium model.

For example, Spotify uses the freemium model, offering an ad-supported free version along with a premium service with no ads. Dropbox offers a free version of its cloud service with limited storage capacity and premium versions with increased storage and additional features. Hootsuite, a popular social media management tool, LinkedIn and Skype

offer other examples of the freemium model.

Examples of free trial models include those offered by many video streaming and software-as-a-service providers, such as Netflix and Adobe. Newspapers like the New York Times, which provides 20 free articles per month before readers must pay for more, often use the free trial model, as well.

So, when should firms select the freemium model over other strategies, and how can they optimize the model's effect on their performance?

## Selecting the Freemium Model

The freemium model is most effective when the marginal cost of an additional user is low—ideally zero, as is the case for digital goods like e-books and movies. Firms with high additional user costs must find ways to monetize their free users. Some firms, such as Spotify, monetize free customers through advertising. Mobile games monetize them by selling features through in-app purchases.

Lambrech and Misra (2016) examine whether firms can benefit from adjusting the amount of content they offer for free when they use both advertising and paid subscription monetization strategies. The researchers find that firms should offer more free content during periods of high demand. They find the policy is especially optimal when consumers are heterogeneous in their valuation of online content varying over time.

Some firms move away from the freemium model once they have acquired enough customers. For example, they might transition to a time-bound free trial model, usually allowing immediate access to all their service/product features so customers can experience the premium value proposition. Li (2022) uses granular data from a leading software-as-a-service firm that provides prospects with free trials to examine the impact of various marketing touchpoints, different types of message content, and the frequency and variety of free-trial usage on consumers' subscription decisions. The study shows that frequent free-trial usage can encourage conversion, but conversion rates decrease when users explore an increasing variety of products.

Datta, Foubert, and Van Heerde (2015) find that the average customer lifetime value of free trial users can be significantly lower than that of customers acquired through other channels, highlighting the importance of targeting when using the free trial model.

## Optimizing the Freemium Model

Significant marketing literature has documented sampling strategies'

impact on repeat purchases. However, the research has not addressed prospective consumers' uncertainty when purchasing a new content or service. The freemium model allows firms to attract users without spending on ad campaigns or a traditional sales force. Companies using the model often offer referral incentives, which are more appealing for free products or services. And with modern social networking, word-of-mouth is a more powerful driver of new customers than ever before.

The freemium model's main objective is to grow a firm's user base, then convert the users to paying customers. If the firm is unable to convert an adequate fraction of its free users to paying customers, the model fails. Pauwels and Weiss (2008) examine the impact of marketing actions on moving consumers from free to premium products/services and highlight the challenges in optimizing such a move.

The conversion rate from free to premium upgrades for most firms range between 2 – 5 percent. While a low conversion rate may indicate a firm's premium version does not add significant value and/or the free version offers too much value, a high conversion rate may indicate the free offering does not attract as much attention as it should (Kumar 2014). The optimal strategy is to attract high traffic and a moderate conversion rate. Chica and Rand (2017) provide methodologies for forecasting premium conversions and increasing their number through targeting and reward policies.

A firm can differentiate its free and premium options on many dimensions, including features, usage level, and

user characteristics. For example, a firm's free version could have a significant response time delay—acceptable for a patient user but not for an impatient user, who would be more likely to upgrade. Li, Jain, and Kannan (2019) examine how free version feature quality and other design parameters affect premium conversions. The researchers show that an appropriately designed free version can act as a complement to the premium option, rather than being a substitute. Specifically, they find that higher-quality free content can drive sales of popular premium content.

Focusing on design, Gu, Kannan, and Ma (2018) investigate extending premium product lines to spur demand for the existing version. In a field experiment focused on online book sales, the researchers found paperback titles accompanied by an additional premium version, either in e-book or hardcover format, achieved greater sales than titles without an additional premium version. Analyzing individual choice data in extended product line settings, the authors find both a compromise and attraction effect, leading to an increased free-to-premium conversion rate. The optimal design of free trials is mainly focused

on the length of free trials. Wang and Özkan-Seely (2018) develop a theoretical framework and suggest that firms can signal a higher quality of the paid products via a longer free-trial window.

## Summary

The online environment provides firms opportunities to experiment with the freemium and free trial sales models. For example, many video streaming services launched using the free trial model. As the concept of streaming became well known, they stopped providing the trials, instead allowing customers to purchase and then cancel their services at any time.

While the freemium and free trial models can be effective marketing and sales tools, the major streaming services' latest strategy shows that they are necessary only when customers are uncertain about a new product or service feature. Once customers understand a product/service category's value proposition, either through experience or word-of-mouth, firms can replace their freemium and free trial models with traditional acquisition models.

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