



# Best Practices for Online Business Models

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## Overview

Digital businesses have no shortage of business models from which to choose. While it is critical to offer unique value to customers and continually generate revenue, the right business model accelerates the path to success. A solid business model enables digital businesses to not only survive downturns but also strengthens and grows businesses long term. It pays to carefully study, choose and implement the right business model for your market while being aware of and committed to identifying and tracking key business metrics.

Metrics are vitally important, as emphasized by Daniel James, CEO of Three Rings Design, "Make it simple, monetize early and spend one-third of your time on data analysis, it's that important."<sup>1</sup>

This paper defines the key terms for online business models and describes the most common types of those models, their pros and cons and the key metrics associated with each. In addition, to illustrate the different business needs and requirements of digital businesses, this paper explores the models and performance projections of two fictitious companies: Cloud.com, a Software-as-a-Service (SaaS) provider; and Ninja Pirates, a game startup.

Two other sections shed light on other factors that affect the selection of business models, including pricing, packaging, promotions and revenue recognition. Subsequent to that are best-practice tips, followed by an overview of the advantages, disadvantages and costs of developing billing solutions in-house versus using on-demand services.

The References section at the end of this paper points to a number of related articles around the topic of business models

## Glossary

This section defines some of the nomenclature used in this paper. Many of these terms are described elsewhere but might mean different things to different people.

### General

**Account Updater:** A service offered by best-in-class payment processors that provides updated customer account information from the card networks.

**Free to Play (F2P):** A gaming-industry term that describes the type of experience in which users can join and play for free with an option to purchase virtual goods or virtual currencies that enhance their game play or social perception.

**Freemium:** A free service with the option for certain or all customers to upgrade to a paid, premium version with additional capabilities or convenience.

**Microtransaction:** A payment for a small amount of money, also called a micropayment. Microtransactions are frequently aggregated together over a period of time or until a certain amount has been reached.

**Real Money Trade (RMT):** A mechanism by which users can convert virtual currencies to physical currency (real money). Before engaging in RMTs that involve currency conversions, be sure to consider and address the legal and fraud issues that might apply.

<sup>1</sup> See Bibliography on page 18

**Virtual Goods:** An item that exists as a database entry only. The value can be functional, social, or emotional.

**Virtual Currency:** A type of money in place of physical currency (real money). For example, users can earn virtual currency by signing up for a service, playing a game, or trading real money. In some cases, they can convert virtual currency back to physical currency through RMT.

### Metrics

**Average Customer Lifetime Value (ACLV):** The product of the customer duration and the average recurring charge. This is the key metric for subscription business models. For example, a \$15 monthly charge and an average customer lifetime of 20 months result in an ACLV of \$300.

**Average Revenue Per Paying User (ARPPU):** The average revenue per user for all the users who make purchases.

**Average Revenue Per User (ARPU):** The average revenue per user for all the active users of a product or service.

**Cost Per Acquisition (CPA):** The aggregate acquisition cost per user regardless of the acquisition channel (advertising, promotions, or affiliates).

**Cost Per Thousand (CPM):** The cost for displaying an advertisement to 1,000 users—a yardstick for determining advertising prices. Other related metrics are Cost per Click (CPC), Cost per Sale (CPS), Cost per Lead (CPL) and ACPM (App CPM).<sup>2</sup>

**Monthly Recurring Revenue (MRR):** The amount of monthly revenue that is highly likely to continue in the future. This revenue type is predictable and stable, thanks to subscription contracts and historical customer retention rates.

### Overview of Business Models

The business models described in this paper fall into four major categories: Subscription, Microtransaction, Indirect and Hybrid. The following sections introduce the business models, describe the common sub-models, delineate the related advantages and disadvantages and suggest ways to counteract problem areas.

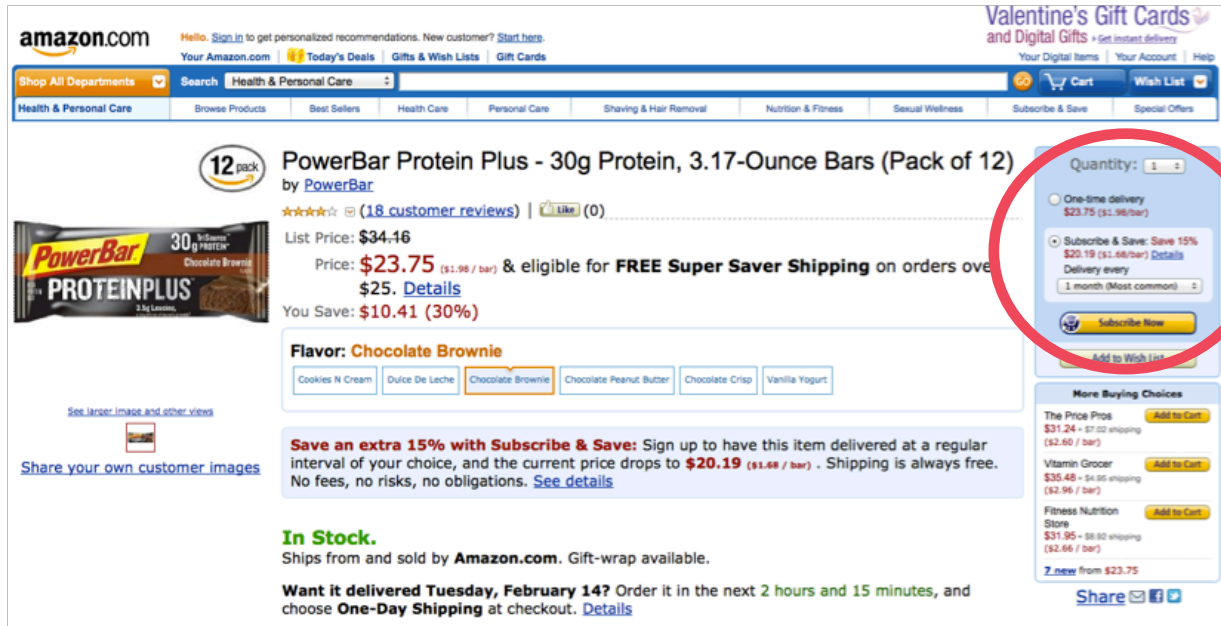
<sup>2</sup> See Bibliography on page 18

This table highlights the major advantages, disadvantages and key metrics of a few models and sub-models:

Model or Sub-model	Major Advantages	Major Disadvantages	Key Metrics
Frequent subscriptions	Predictable revenue	Higher cost barrier	ACLV and MRR
Infrequent subscriptions	Long-term and predictable revenue	Lower retention with higher cost barrier	ACLV and MRR
Freemium	No price restrictions and no need for free trials	Challenging pricing strategy since the majority of users do not pay	Percentage of paying users, ARPU and ARPPU
Microtransactions	Low cost barrier for purchases	Low margins since the majority of users do not pay and high payment costs	Percentage of paying users, ARPU and ARPPU
Virtual goods and virtual currencies	High acquisition rates and low cost barriers	Virtual economy management since the majority of users do not pay	Percentage of paying users, ARPU and ARPPU
Dual currencies	High acquisition rates, reduced conversion friction	Potential legal issues with RMT and low percentage of paying users	Percentage of paying users, ARPU and ARPPU
Advertising	Mass adoption with users assuming no costs	Dependency on market rate for advertising and no direct revenue	CPM and CPC
Offer-based	Mass adoption with users assuming no costs	Dependency on market rate for advertising and no direct revenue	ACPM, CPS and CPL

### Subscription Model

As a popular model for online content purchases, subscriptions stand to play an increasingly important role in our lives as more and more companies embrace online delivery over the Internet. Already, the offers range from PC protection and backup services to daily staples, such as detergent, socks and energy bars. See this example on amazon.com:



All subscriptions share the same basic tenets: Companies periodically charge customers for a product or service according to a predefined cost and schedule. The two major variations in the terms are:

- ▶ **Duration between charges** — The billing frequency affects how digital businesses retain and acquire customers.
- ▶ **Type of customer access** — This condition more directly affects pricing. For example, digital businesses that adopt a freemium model must balance the features and value between the free and paid versions.

### Metrics

All subscription models share the same key metrics, such as ACLV and MRR. To compute them, track the average customer duration, the average ticket price and, depending on the nuances of your model, the percentages of internal acquisition and trial conversions. Also, to efficiently acquire users, price the user acquisition cost (CPA) below the product of the ACLV and conversion percentage.

### Benefits and Issues

Subscription models offer four concrete benefits:

- ▶ A predictable, regular revenue stream
- ▶ Higher ACLV than that of nonrecurring business models
- ▶ Greater customer inertia and a more committed customer base as it transitions from purchase to opt-out decisions
- ▶ More potential for upselling and cross-selling other products or services

You would usually run into a couple of challenges while implementing a subscription model. First, you must store your customers' credit-card information in compliance with the Payment Card Industry Data Security Standard (PCI DSS). Second, fraud rates are sometimes higher; especially since many fraudsters leverage free trial offers to verify credit-card information.

In addition, you should consider the following for subscription models:

- ▶ Whenever possible, automate your operations to manage the logistics of customer accounts, billing plans (product, price and billing frequency, which can grow exponentially as revenues scale) and order and customer status. Manually performing these tasks is not scalable and can be tedious, error-prone and overwhelming.
- ▶ Ensure that the customer terms and conditions clearly explain the purchase details and options for cancellation. Include the contact information for customer support.
- ▶ Minimize the payment options that require additional steps from customers to enable recurring billing since those options often result in lower conversion rates.

### Submodels

Three submodels apply to the subscription model: frequent subscriptions, infrequent subscriptions and freemium subscriptions.

#### Frequent Subscriptions

Frequent subscriptions are those that charge customers at least once quarterly and, more commonly, monthly or weekly. This submodel, which enjoys widespread customer acceptance, is popular for online sites that offer dating, news, music, gaming, video and both digital and physical services.

A key benefit of this submodel is that customer acquisition through payment-method-required free trials is a well-defined and successfully proven approach.

**Notable companies** that offer frequent subscriptions include Activision Blizzard, Amazon, Morningstar and The Wall Street Journal.

### Infrequent Subscriptions

Infrequent subscriptions are those that charge customers once every six months or longer. Many online content sites commonly offer a long-term subscription option, such as annual or even two- and three-year plans. This submodel offers three major benefits:

- ▶ Less transaction frequency, which results in a more manageable customer base
- ▶ Lower overall transaction volume, which creates a more manageable customer base
- ▶ Lower impact on profits from payment-transaction costs

Though similar to their frequent subscription counterparts in many respects, infrequent subscriptions face unique challenges, including the following:

- ▶ **Increased payment failures** — The longer duration in billing cycles means a higher likelihood that the customer's payment information has changed in the meantime. Be sure to research and build in the necessary retention mechanisms, such as billing retry logic and Account Updater, before adopting this submodel. Additionally, the higher prices in this submodel lead to greater customer abandonment compared to the lower-priced, more frequent billing approaches.
- ▶ **Reduced customer contact** — Infrequent customer communication might lead to delayed detection of and reaction to customer dissatisfaction. Overall, you end up collecting less data for trend analysis.

**Notable companies** that offer infrequent subscriptions include Symantec, Citrix and Adobe.

### Freemium

Freemium subscriptions, the newest type of subscription submodels, are adopted by digital businesses to attract a large user base and to monetize the most devoted group of users. These subscriptions for premium customers work much like frequent subscriptions but have the added aspect of supporting the users who choose a free version of the product. A major benefit is the elimination of free trials since acquiring paying customers involves only a simple conversion step.

Note two best-practice tips:

- ▶ Define a clear split between the free and paid versions and an upgrade path for users as their usage increases.
- ▶ Regularly track the internal conversion percentage.

Calculating the ACLV for freemium subscriptions is problematic because it depends on the conversion percentage of paying users. The F2P industry metrics, including ARPU and ARPPU, are relatively easier to compute and track. For details, see Metrics in the next section on the Microtransaction model.

Another challenge with freemium subscriptions is the task of updating and enhancing multiple product lines over time while maintaining a clear difference in value.

**Notable companies** that offer freemium subscriptions include DeviantArt, Flickr, YouSendIt, Skype and LinkedIn.

**Microtransaction Model**

Microtransactions are transactions that are less than a certain amount, usually \$5, enabling customers to purchase content or services on a piecemeal basis. This business model started to gain prominence around 2005 after an adoption by online gaming and service providers in Asia yielded positive results. However, microtransactions have not reached the same level of success in other geographical regions or vertical markets. In fact, they have a mixed reputation—from being heralded as the future of online business models to being derided as a source of frustration and confusion to users. Today, though Asia still remains the predominant region for microtransactions, they are widely in use by the F2P gaming industry worldwide.

Why the delay in wide acceptance of microtransactions? One reason is the relatively high transaction cost. For a \$20 monthly subscription fee, the total of the transaction cost, gateway fees and interchange fees is approximately 3 percent. For an average ticket price of \$5, the total would double to around 7 percent. See the following table.

Average Ticket Price	Gateway Cost	Percent of Interchange	Interchange Transaction Fee	Total Cost	Percent of Purchase Price
\$20.00	\$0.15	1.7%	\$0.15	\$0.64	3.2%
\$5.00	\$0.15	1.7%	\$0.15	\$0.39	7.7%

Nonetheless, for digital sales with very high margins, the microtransaction model remains viable. One way to lower transaction costs is to follow the iTunes model: Aggregate purchases up to a preset amount or time period for a higher average price. The disadvantage with aggregation is that the loss of very few valid transactions quickly offsets the savings generated by a higher average transaction price.

Another disadvantage with direct microtransactions is that customers are not as committed to the products as they are with subscriptions, resulting in less overall revenue and generally lower customer retention rates as customers continue to face new purchase decisions. On the other hand, the lower entry price usually leads to higher acquisition rates than those for other models.

One approach to promote continual purchases and retain customers is to enable them to store payment information on your site and to easily repeat purchases.

**Metrics**

The key metrics to track for microtransaction models are Average Revenue Per User (ARPU) and Average Revenue Per Paying User (ARPPU). Tracking them on a monthly basis gives you an excellent baseline for gauging success and marketing effectiveness. For the online gaming and virtual worlds, Ralph Koster<sup>3</sup> estimates monthly ARPUs in successful F2P models to be \$0.50-\$1.50 versus \$30-\$35 for monthly ARPPUs for subscription games. Ideally, the greater number of customers makes up the variation.

Also, as with freemium subscriptions, you should closely track the conversion percentage of paying users.

**Notable companies** that use this type of model include Apple iTunes and Amazon MP3.

<sup>3</sup> See Bibliography on page 18

### Submodels

Two submodels, virtual goods (usually accompanied by virtual currencies) and dual currencies, have evolved from microtransactions.

### Virtual Goods and Virtual Currencies

One of the first evolutions to the microtransaction model was the concept of virtual goods. Virtual goods are used in many ways, from enabling customers to personalize their appearance to enhancing their experience. The majority of implementations fall into one of two categories: those that enhance game play (functional) and those that customize appearance (social). Virtual-goods business models usually leverage virtual currencies as a form of aggregation—typically to entice customers to buy a larger amount of credit and purchase goods and products they want. Since transaction costs are a larger percentage for lower price points, it makes sense to offer incentives for large credit purchases. For example, if \$1 amounts to 100 credits, offer a bonus promotion of 600 credits for \$5. Here are a couple of issues to consider for virtual goods:

- ▶ **Pricing** — Figuring out the correct pricing requires just as much effort as in the physical retail world. Virtual goods are frequently undervalued; however, they can significantly boost revenue with careful price testing.
- ▶ **Customer Retention** — With virtual currencies, customers have incentive to spend their remaining credit, but the rate of retaining customers is often lower than that of subscription models. To boost retention, consider a premium subscription offer that grants not only credit but also additional content or features. Such an offer often generates smaller but predictable revenue that complements sales of virtual goods or currencies.

**Notable companies** that offer virtual goods with virtual currencies include Facebook, MySpace, IMVU, Hi5, Sulake and Gaia.

### Dual Currencies

As virtual-goods business models evolved into virtual currencies, the latter have also evolved. The current trend for F2P gaming and virtual worlds is a dual-currency submodel, in which you grant customers two currency types. The first type is purchased. The second, earned from using the product (for example, playing the game or spending time in the community). The result is a dichotomy in which customers who can afford the credit purchases and want to advance rapidly can buy the credits they desire and move ahead; those who cannot afford or do not desire credits and have free time can still earn them and achieve the same results as their paying peers.

The dual-currency submodel is another type of business model that allows for two groups of users: those who pay and those who do not. The same caveats of the virtual-currency submodel also apply: The revenue is unpredictable and depends on the perceived value from the virtual goods and currencies with respect to the overall user experience.

**Notable companies** that offer virtual goods with virtual currencies include Outspark, Sparkplay, Iron Realms, Nexon and Aeria Games.

### Advertising and Offer-Based Models (Indirect Models)

Advertising and its variant, the offer-based model, enable customers to “pay” by visiting sites, using products, clicking links, taking surveys, or signing up for other online products and services. Though straightforward and the least burdensome for end-users, both models depend almost entirely on the market rates for advertisements and lead generation.

### Benefits and Issues

Adopting both the advertising and offer-based models is very simple. For the users, the product or service is completely “free.” By browsing advertisements or signing up for offers from other companies, users can enjoy the product or service without making a purchase.

The virtual-currency submodel usually accompanies offer-based models, that is, users are granted a certain amount of currency in exchange for signing up. Most digital businesses do not rely solely on offer-based models, however. Instead, they build a hybrid system (see Hybrid Models on page 14) to entice purchases from those users who wish to avoid seeing advertisements or accepting offers.

Many digital businesses have found that the majority of customers who purchase additional currency do not bother to fill out advertising offers. Instead, those people prefer to pay directly through the offer provider. Since the major benefit of offer providers is connecting advertisers with consumers, transaction rates on direct payments are suboptimal.

A bigger deterrent of revenue growth relates to ownership of customer data. Typically, digital businesses host an offer page on their sites and are then remitted for the successful transactions without critical customer information being captured. That process makes direct communications with customers on promotions or new product capabilities nearly impossible and significantly limits growth.

### Metrics

Both advertising and offer-based models rely on the rate at which advertisers pay to display advertisements or to acquire leads. Advertising rates are defined by CPM, which refers to the number of unique page views. Online products, games and services can charge higher rates, but they usually attract less daily average unique users (DAUs) than online content sites. For example, an analysis on [compete.com](#) shows that Outspark, a very successful F2P gaming site, has averaged approximately 600,000 unique visitors per month 2011. However, in the same period, [Gawker.com](#), a news and entertainment site, has averaged nearly 2 million unique visitors per month.

Opinions vary on the metric for determining prices for offer-based systems. According to Andrew Chen<sup>4</sup>, the most common one is a form of CPM, sometimes called ACPM. Dividing the daily revenue by the number of daily unique users who visit the payment page and then multiplying the result by 1,000 compute ACPM. Ultimately, you must compare the ACPM to the two metrics for microtransactions: ARPU and ARPPU.

**Notable companies** that offer virtual goods with virtual currencies through offer-based systems include Foxit Software, Serious Business, PlaySocial and Rock You.

### Flexibility and Experimentation (Hybrid Models)

Many digital businesses adopt multiple business models and blend their various aspects. That practice is especially prominent in the gaming industry, where companies are experimenting to find the most profitable business model. Even though subscriptions generate steady revenue, some users do not want to commit to a subscription. Virtual goods and virtual currencies have the unique benefit of letting users pay as much as they want, but that payment ranges from zero to thousands of dollars.

4 See Bibliography  
on page 18

In many cases, combining models makes sense. Among the advantages are the following:

- ▶ Casual and infrequent users can play without purchasing and spend incrementally if they choose to do so—in essence setting their own prices.
- ▶ The most dedicated users are free to purchase as much as they want with no spending limits.
- ▶ A mid-tiered subscription offering that allows exclusive access and content provides an outlet for serious users without requiring multiple purchases.
- ▶ Layering advertising for nonsubscribers adds revenue and might attract users to upgrade to a paid subscription.

The challenge to such a hybrid model is simply implementation and execution. Any successful business model or combination of models must complement the value offered without sacrificing customer experience.

The most common hybrid blend of models occurs with advertising or offer-based systems along with either virtual goods or subscriptions. Here are two more examples:

- ▶ A software provider that supplements freemium subscriptions with advertisements for nonpaying users.
- ▶ A game that charges a subscription fee but that also sells virtual goods to capture additional revenue

### **A Few Facts**

Keep in the mind the following facts while evaluating whether or not to mix business models:

- ▶ Although over 90 percent of today's online payments are credit or debit transactions, other emerging payment options make up a substantial and growing portion of online commerce.
- ▶ The purchase conversion rate increases by 14 percent when three or more payment options are available. In fact, according to a survey sponsored by PayPal, just adding one alternative payment method can increase conversion by 14 percent<sup>5</sup>. On the other hand, there is a point of diminishing returns. Having too many payment methods likely will decrease conversion rates.
- ▶ Certain customer groups do not own credit or debit cards. To target those groups, you must offer other payment options.

A trademark of successful companies is continued innovation. Most companies go through several business models before zeroing in on the one that works best for their products and customers. Keeping an open mind and a close eye on customer and industry trends helps navigate the pitfalls of online commerce.

### Metrics

Tracking metrics is a significant challenge for companies with multiple business models. Those companies must carefully watch multiple metrics to evaluate each model's Return on Investment (ROI) and the effect each of the models has on overall user experience. Despite the additional implementation and monitoring efforts, however, multiple business models can enable you to meet the needs of several diverse markets and customer demographics while maximizing revenue. In addition, product solutions are available to lessen the difficulties associated with adopting and managing multiple models.

**Notable companies** that offer hybrid models include Funcom (subscriptions and virtual goods for Age of Conan), Electronic Arts (boxed copy and virtual goods) and Hot or Not (advertising and virtual goods).

### Fictional Examples

This section takes a look at how two fictional online companies evaluate business-model options and choose the ones that best fit their needs. (refer to the related spreadsheet for the background calculations)

#### Cloud.com

Cloud.com is a successful Software-as-a-Service (SaaS) provider that offers monthly subscriptions of storage and backup services, each comprising two versions: standard and professional. The products are called Storage Standard, Storage Professional, Backup Standard and Backup Professional. Cloud.com is evaluating ways to boost revenue and is considering launching a free product.

#### Financial Data and Conclusions

Currently, Cloud.com does not offer free trials of their products because the starting price is relatively low: The Standard versions start at only \$9.95 per month with no long-term commitments. Here is a snapshot of Cloud.com's current key financial data:

- ▶ The total number of subscribers is 15,000.
- ▶ The average customer duration is 15 months for Standard and 12 months for Professional.
- ▶ The current blended ACLV is \$181 across all products with a split of 85 percent Standard and 15 percent Professional.
- ▶ The MRR is just under \$200,000 for an annual total of \$2.4 million.

**Note:** To adjust the assumptions and model to fit your own scenario and analyze the results, refer to the Business Model Worksheet.

<sup>5</sup> See [https://www.paypal.com/au/cgi-bin/webscr?cmd=\\_additional-payment-overview-outside](https://www.paypal.com/au/cgi-bin/webscr?cmd=_additional-payment-overview-outside).

From the above data, Cloud.com draws three conclusions:

- ▶ The product catalog, price points and market penetration are not optimally structured to maximize overall revenue.
- ▶ The lack of a free trial is turning away some new potential users. Also, the users who do join leave prematurely after only a few months. That scenario impacts the accuracy of the customer-duration and ACLV metrics.
- ▶ The fact that each product tier features a large concentration of “power users” and “infrequent users” suggests a need for pricing optimization.

After studying the market potential, Cloud.com concludes that the overall market size is 500,000 customers, the bulk of which rests with casual, infrequent users. Cloud.com believes that capturing a 10-percent market share in the first year is a realistic goal.

### Freemium Offer

Cloud.com concludes that supplementing its current product lineup with a freemium offer will significantly raise its revenue. The terms are simple:

- ▶ The lack of a free trial is turning away some new potential users. Also, the users who do join leave prematurely after only a few months. That scenario impacts the accuracy of the customer-duration and ACLV metrics.
- ▶ Customers will be offered 1 Gbyte of storage space for free and subsequently charged a small amount for each 500 Mbytes of space that they consume.
- ▶ Customers will be able to share links and files for additional fees.
- ▶ Cloud.com will raise the monthly pricing for Standard to \$12.95 and that for Professional to \$39.95, which is projected to result in approximately a 20-percent customer attrition. However, from an analysis of its customer and product-survey results, Cloud.com projects a monthly ARPU of \$2.50, which would more than make up for the revenue shortfall from attrition.

Assuming that Cloud.com does attract 30,000 freemium customers in addition to their 12,000 subscribers (after a 20-percent attrition of the original 15,000), Cloud.com’s first-year annual revenue increase with a three-percent upsell conversion (from freemium to Standard) will be \$3.5 million, a 50-percent jump. Cloud.com may also be able to retain customers for longer periods with an offer of a free period. Overall, its blended subscriber ACLV would increase by almost 60 percent to \$284.

### Ninja Pirates

Ninja Pirates (NP) is a new, fully funded online game startup founded by a superstar design team that developed popular titles for other companies in the past. A new game is slated to be released in the NP brand in six to nine months on the NP site and the major social networks. Industry reviews of the prototype and expectations are high. The executive team has worked primarily on AAA titles with monthly subscription models and wants to evaluate virtual goods, virtual currencies and subscriptions as alternatives.

### Business Model

To determine the right business model for their target demographic audience, NP reviewed gaming industry trends and market research reports, as well as interviewed potential customers. Subsequently, based on its projected customer demographics and success in the marketplace, NP picked dual-currency microtransactions as its primary model.

NP plans to offer two types of virtual goods, those that will enhance game play (functional) and those that customize game characters (social). Customers can purchase functional virtual goods for in-game play with the virtual currency they have earned and social virtual goods with the purchased currency. NP will also host a secondary market, where players can trade goods and the two currencies in an open market, hence letting the player demand set the exchange rate. To limit fraud and legal issues, NP will not allow any form of cash-out or direct player-to-player transfers.

In addition, NP expects to have a subset of dedicated players paying more for access to special content and features. To meet those players' needs, NP will offer them a monthly subscription, complete with special zones, unique and custom functional and aesthetic goods and special designations for player profiles and avatars. This combination of models will enable NP to effectively monetize casual, infrequent users and steady-paying customers with no spending limits for the extremely dedicated customers.

### Projections

To compute the related metrics, NP assumed a 12-month run rate and calculated the averages. Here are the projections:

- ▶ **DAUs** — After taking into account its experience with past successes, NP believes that it will average 100,000 users per day in the first year and a growth rate of at least 40 percent for a \$16.6 million revenue in the second year. Those forecasts equate to approximately three million active unique users per month.
- ▶ **ARPU** — The monthly ARPU will be approximately \$0.25, which equates to an annual ARPU of \$3.
- ▶ **Number of Subscribers** — Only half a percent of all the subscribers will upgrade to the premium subscription at \$14.95 per month. That equates to a total of 15,000 subscribers and \$200,000+ revenue per month.
- ▶ **Monthly Revenue** — The total monthly revenue will be shy of \$1 million for an annual total of \$11.8 million.
- ▶ **Growth** — Assuming the company can increase their DAUs in the second year by 40 percent, it will generate an annual revenue of \$16.6 million.

Even though those projections do not take into account commissions that the social networks might charge and potential advertising revenue, the numbers are impressive.

**A side note:** Before deciding on the dual-currency microtransaction model, NP considered a straight subscription model at \$4.95 per month. With 100,000 subscribers (again, averaged across the first 12 months), the monthly revenue would amount to just under \$6 million. That is only half of the revenue projected in the dual-currency microtransaction model. The choice in this example is obvious: The potential reach of F2P gaming offers roughly twice the projected revenue.

### Pricing, Packaging and Promotions

Several of Vindicia's® Best Practice Guides suggest strategies for retaining customers. To grow your business, you must also continually acquire new customers. While experimenting to find the business model that best meets your needs, you should also assess your product pricing, its presentation and the promotional incentives. Long term, the result of this mix varies considerably and largely depends on the traffic sources, customer demographics, preferred payment types and price thresholds.

Remember that promotions, whose main goal is to attract users to your product or service, can also help determine optimal pricing. Similar to in-store coupons, online promotions are a viable means to temporarily test multiple price points.

Here are the common types of promotions by business model:

#### Subscriptions

- ▶ **Free Trials** — The trial duration can range from a few days to a full month, depending on several factors, including the subscription duration, average usage and customer demographics. As mentioned in **Vindicia's Best Practice Guides**, you should offer a payment-method-required free trial that continues unless a customer opts out
- ▶ **Multipliers** — If a usage component, such as downloads or metering, applies to the product, you can offer bonuses for signups.
- ▶ **Referrals** — Granting upgrades for referrals can be effective in acquiring new customers, especially in freemium subscriptions that offer the free version as a trial.

#### Microtransactions

- ▶ **Exclusive Content** — To target specific customer groups, you can offer unique or special digital goods.
- ▶ **Multipliers** — As in subscriptions, these are bonuses that reward purchases of virtual currencies, downloads, etc.
- ▶ **Referrals** — As in subscriptions, freemium and F2P sites with microtransactions can offer similar referral awards.

### Rules for Recognizing Revenue

Another factor to consider while determining your business model and pricing is revenue recognition. Generally accepted accounting practices (GAAP) recognize revenues when they are realized and earned (usually when goods are transferred or services rendered) - regardless of when they are paid for.

That rule might be challenging for some of the business models described in this paper. For example, revenue for infrequent subscriptions is only recognized when earned. Consequently, in the case of annual subscriptions, only one-twelfth of that revenue can be recognized each month.

Revenue recognition varies between virtual goods and virtual currencies, as follows:

- ▶ Assuming that you have no further obligations, if the virtual goods carry an expiration date, you should amortize the revenue over the life of the item. In case of continuing obligations, however, you should wait until after the expiration date.
- ▶ Because virtual currencies are usually purchased and then exchanged by customers for goods or services later, those currencies are similar to gift cards with a stored value. Hence, do not record the revenue until they are redeemed. Of course, if a customer with a balance purchases additional currency, you should record the revenue generated by the oldest currency first.

The related tracking and computations involved require a significant effort. Be sure to include them in your planning cycle early on.

### Best-Practice Tips

The business models for selling digital goods and services online vary substantially. Picking the right model for your business depends on your industry, customer demographics, product or service, and risk tolerance. Even though all of these models have pros and cons, they also share commonalities.

In general, regardless of model, keep in mind these four best-practice tips:

- ▶ **Iterate fast and decisively** — Rapid iteration involves reacting promptly to new or evolving market trends and to obvious signs that your strategy is not delivering the desired results. Regardless of whether iteration is aimed at staying ahead of the business or recovering from unsuccessful strategies, you can effectively complement the iteration with tools and access to key metrics that help make the right business decisions.
- ▶ **Identify and monitor metrics** — Always make this task a high priority. Determine the important and controllable metrics that apply to your business and put the processes and infrastructure in place to track them effectively. You can then make sound decisions and capitalize on them long term.
- ▶ **Gain insight into your customer base and purchase patterns** — Understand your customer needs and the motivations behind them. Regardless of your company's size, always stay in touch and engage in close dialog with your customers.
- ▶ **Add value to your products or services** — Keep usability in mind and continue to add features, capabilities and even new products to keep your customers excited about your offerings. Targeted promotions and perks can help drive this excitement, but the product must constantly improve.

### Billing Solutions: In-House or Outsourced?

While designing and building operational systems, many digital businesses spend an inordinate amount of time and effort reinventing the wheel, so to speak. They naturally and rightly focus on developing their product or service features as a high priority. Often, however, they also develop billing solutions in-house on the belief that they cost less than outside purchases and that the security risk is lower.

Those assumptions often turn out to be erroneous. Compared to a company's product or service features, billing solutions are a lower priority that requires conflicting reliability and flexibility and many digital businesses do not allocate adequate resources for them. Furthermore, digital businesses often lack in-depth expertise in the billing arena and end up with a less efficient and more expensive system than a best-in-class, off-the-shelf solution, especially if the latter is offered as a service with lower overall configuration and maintenance costs.

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#### About Vindicia

Vindicia is the leader in marketing and selling automation for the digital economy, managing 120 million customer accounts on behalf of its clients. Vindicia has processed \$4 billion in global revenues for clients through its CashBox solution. Its integrated marketing capabilities generated nearly \$75 million in annual incremental revenue. Clients include Activision Blizzard, Bloomberg, Encyclopedia Britannica, Groundspeak, Intuit, Mind Candy, Next Issue Media, Pearson and Vimeo. To learn more, please visit [www.vindicia.com](http://www.vindicia.com) or connect with us on Twitter (@vindicia), Facebook or [blog.vindicia.com](http://blog.vindicia.com).

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