Ten Metrics That You Can't Get From Your Conventional Billing System *and* Why You Can't (or Shouldn't) Live Without Them

Subscription businesses look and, for the most part, act like their conventional cousins. But they also generate much more data than conventional businesses — data that can be instrumental to enabling better management. Measuring and monitoring subscription data provides a wealth of information that subscription companies need to manage and monetize their businesses. Subscription metrics show managers where the business is heading long before conventional measures can.

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Ten Metrics

Overview

Subscriptions are a relatively new businesses phenomenon. Today, they are the delivery mode for everything from software to shoes and their use is prominent in both business-to-business and business-to-consumer markets. About the only limitation to subscriptions' further market penetration is the creativity needed to think up new business ideas.

Subscription businesses generate huge amounts of customer data, which can be used to provide useful insight into a company's performance. But abundant data, without analysis for specific measures and metrics, simply creates confusion where there should be clarity.

Like any business, a subscription company needs to know what's in the pipeline and whether there's enough revenue to satisfy creditors and investors. But the way subscription companies measure business activity is a bit different from the way that traditional companies do. A conventional product company might be able to get by with a general ledger and a standard billing system because it engages in relatively plain transactions. The wares of a conventional company fit easily on an invoice as individual line items or in the GL by a receivable.

But subscriptions don't fit well into that convention. The subscription company has to deal with quantities over time and the ability to change the subscription — even to turn it off — is a subscription hallmark. So, it should be no surprise that subscription companies cannot effectively use conventional billing processes.

Subscription companies and their business processes really are different, even if they compete with conventional companies for the same customers. This Beagle Research executive white paper explores three critical parts or areas of difference between conventional companies and those offering subscriptions including revenue, customers and products. Each has new metrics that provide insights into what subscription companies need to operate successfully.

At a glance: Differences between subscription and conventional approaches.

Conventional Business	Subscription Business
Purchase	Subscription
Units shipped	Customer relationship
Single transaction	Renewals
Disposable customer	Lifetime customer
Inflexible cycle	Business agility

Source: Beagle Research Group, LLC, May 2012

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Part 1, Deferred Revenue

The idea of deferred revenue may be already known and used within a company. For instance, a vendor might sell a service contract that covers a period of time and recognize part of the revenue each month. But deferred revenue is not a major part of many conventional companies' revenue streams. In contrast the subscription company deals almost exclusively (and somewhat surprisingly) with deferred revenue.

There is wide latitude in how subscriptions are constructed. Some vendors collect a fee on a regular basis (monthly, quarterly, etc.) while others will bundle monthly billings into annual contracts to reduce billing overhead. Regardless, the amount of revenue that a subscription company recognizes is typically the revenue generated by the current month's activity and not the monies collected for months in advance. Other subscription companies may invoice monthly but in either case the idea of recognizing recurring revenue comes into play. The ideas of deferred revenue and recurring revenue can both complicate billing and clarify how the business is operating.

Dealing with deferred revenue

Deferred revenue is a simple idea with several permutations and each has implications for management. Simply put, deferred revenue is money collected in advance for a service that will be recognized incrementally over time. For example, if a service costs one thousand dollars per month and a vendor bills and collects twelve months in advance (one of several standard practices) the vendor can recognize one thousand dollars as revenue immediately and eleven thousand dollars as deferred subscription revenue. Each month one thousand dollars in deferred revenue is converted to actual revenue and deferred revenue is reduced by the same one thousand dollars.

Also, a vendor and customer might agree in a contract to a multi-year relationship. In that case, the first year may be billed, collected and kept as deferred revenue and the remaining two years' worth of revenue would be considered unbilled-deferred revenue.

Recognizing recurring revenue

When deferred revenue is recognized on a periodic (frequently, monthly) basis, it becomes revenue in a more classic sense and it is important for a subscription company to measure and manage it. On a financial statement this would be discussed as Recognized or Monthly Recurring Revenue (sometimes called MRR). Similarly, for planning purposes some companies refer to annualized recurring revenue as ARR. Both MRR and ARR are subject to change due to customer churn or failure to renew (see below) so that neither is the simple arithmetic sum of all pledged revenues.

Forecasting with recurring revenue

Recurring revenue can be powerful tools for forecasting and managing the business. Typically, the monthly, quarterly or annual goal is some number greater than the recognized recurring revenue. A key difference between conventional and subscription businesses, is that conventional businesses usually have to generate one hundred percent of plan from scratch each year. Subscription businesses usually have part of their revenue goal already in the bank due to deferred revenue. So subscription companies' revenue plans focus on increasing subscriptions and thus deferred revenue, which results in future recurring revenue.

Companies can construct other measures of revenue to help manage their particular business concerns. For instance, the year over year change in recurring revenue would be a measure of growth and, indirectly, of customer churn and renewals.

Part 2, Customers

The ebb and flow of customers into or out of a subscription service determines a subscription company's health. Because subscriptions can be cancelled with very little notice, it's important that a subscription company have clear visibility into customer use and satisfaction. A reduction in use is often an early warning that a subscription service is not meeting with success in a particular account and managers may wish to take action with specific customers to remedy the situation. Vendors need to track growth or contraction in units sold (e.g. seats per month or more generally units per month) as well as overall growth and contraction in the absolute number of customer companies using the service.

Total customers and total seats (units)

The number of paying customers subscribing to a service provides insight into growth of the customer base and hence the success of initial sales. Customers can mean companies using a service in a business-to-business situation or end users in a business-to-consumer scenario. In a business-to-business case increased use within an account (i.e. selling more seats) tells of penetration, which can be a measure of customer confidence in the solution.

In a business-to-customer situation companies grow by selling more product to the same people and by adding net new customers. Selling more seats to an established customer may be easier than selling net new business and measuring both customers and seats can tell managers a lot not only about how revenue is growing but also about reputation and customer satisfaction.

Customer churn rate

Churn rate is the percentage of customers who end their relationship with a company in a given period. One minus the churn rate is the retention rate. Most financial models can be written using either churn rate or retention rate.

Conventional vendors have little ability to know if or how often their customers use their products but subscription vendors can measure customer use and use-trends. A customer's use profile is an important tool for assessing satisfaction and predicting churn. There are three kinds of churn to consider, inevitable churn, avoidable churn and seasonality.

1. **Inevitable churn** happens when a customer out grows a service. For example, a subscription company offering children's clothing for infants up to toddler stage knows that its customer base is constantly churning and that it needs to always be recruiting new customers just to stay even. This company will also be very interested in metrics like customer lifetime value and value remaining in the relationship. These can be calculated in several ways based on time in the system and attributes of the products being purchased, for instance.

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2. **Avoidable churn**, as the name implies, happens when a customer decides to seek a different supplier and quits a service. Frequently a customer will give off signals such as decreases in the number of users or less average use by the group. Identifying fluctuating use patterns early can help a vendor to take proactive steps to keep a customer engaged and thus avoid this churn.
3. Churn need not be Boolean—all or nothing. A customer may experience demand **seasonality** and choose to increase or decrease a subscription based on business activity. A subscription billing system can provide the historic data that shows this trend and helps to forecast fluctuations in demand and therefore revenue.

Renewals

In simpler product-oriented company models customers may not re-engage until a product wears out. But subscriptions eventually reach the end of their service agreements with customers and need to renew the relationship in order to retain them. Naturally, the renewal rate can be calculated. Where the churn rate may be more influential for MRR, the **renewal rate** is a more interesting measure when calculating ARR. Renewals are best measured as a percent of total customers up for renewal (presuming that not all agreements are up for renewal at the same time or in the same year). So, renewals are a measure of the company's long-term viability and customer satisfaction.

Customer lifetime value

Calculating customer lifetime value can be challenging and there are several ways to do it depending on the business. The calculation takes into account the expected life of the relationship and the purchases during that time. Value remaining has other challenges.

A subscription company can know the average duration of a customer relationship (average time a customer remains engaged and paying for services) from historic renewals. For instance, if a company sells subscriptions to things that will be outgrown like baby clothes and it knows the age of the subscription, it can calculate the time left before a child might outgrow the service's products. Furthermore, product characteristics (such as sizes bought in this case) may also give an indication of the time remaining in the relationship.

Multiplying the average duration of a customer relationship (or the estimated time remaining) by a customer's expected revenue (in dollars per month) gives an approximate measure of an expected lifetime value.

Some businesses may also be able to calculate expected penetration and expansion within the customer account over time and use this in calculating lifetime value.

Regardless, by analyzing customer billing data, a vendor can develop a great deal of customer information that can be used to help better manage any subscription business.

Value remaining

Measured as the **unbilled deferred revenue** (but under contract) plus the deferred revenue (i.e. revenue on the books), this measure — exclusive of churn and renewal rates — can provide a good approximation of future revenue. However there is also an issue of value remaining within the lifetime value calculation, which may extend beyond a contract period and thus this shows the importance of driving renewals.

Part 3, Products

Subscription businesses have greater agility because they have superior ability to create and bundle services that exactly meet their customers' needs. Too often, old style ERP based billing systems that were designed for manufacturing rather than services are unable to accommodate rapid configuration and bundling. Subscription companies are far less likely to say, "We can't make that product because our billing system won't allow it." So the benefit of subscriptions is twofold — the ability to understand customer need and rapidly configure some new offerings can be a strategic advantage for subscription companies. A subscription service with a subscription billing system can enable several measurable business characteristics that can drive top line revenue.

Business agility

A business can respond to new market opportunities by designing new products or by tailoring those that already exist. But products — especially in a subscription business — consist of more than the delivered item or service. Subscription products consist of the policies, procedures and business practices that are bundled with a product. Some people refer to this as "whole product". Often vendors are confronted with customer demands that extend beyond the actual product into the way a product is bundled and often, conventional manufacturing oriented ERP systems cannot adapt. The result is an opportunity deferred or lost.

Because subscription companies have greater latitude in how they bring together their whole products, many companies find they can respond to customers' tailoring demands through changes in marketing and packaging rather than whole new product development.

Business agility may be hard to measure but it contributes to customer retention and account penetration. Surrogate measurements for agility include new products brought to market per year and the time it takes to turn a customer request into a subscription service for sale.

Finally, in many cases subscription customers have the right to adjust subscriptions almost at will — changing the quantities and product mix. The ability to accommodate these requests is central to operating a successful subscription business and it is made far easier with subscription billing than with conventional ERP systems.

Definitions

Thanks to subscriptions there are now multiple new ways to look into a functioning business to understand its health but only if the company's managers have access to the data that is kept in the subscription billing system. Subscription billing system data combined with other data that a company captures can give a better picture of how a business is performing and give managers additional ways to fine tune performance.

Recurring Revenue

Monthly deferred subscription revenue - Churn + [(New deferred revenue)/12] – [Customer Churn]

Annual Recurring Revenue

Total value of contracts in place for the coming twelve months (both Deferred Revenue and Unbilled Deferred Revenue) – Net Attrition

Growth

[ARR * Retention Rate] + [Unbilled Deferred Revenue for forward 12 months] – [Projected Churn] + Planned Growth Rate * Last 12 months ARR

Customer Churn Rate

The historical average of the percentage of customers who leave a service on a monthly basis.

Retention Rate

1 – Customer Churn Rate

Renewals (as a percent)

Percentage of customers who annually renew their subscription contracts / customers up for renewal X 100

Customer Lifetime Value

Total expected purchases from a customer over the projected life of the relationship.

Value remaining

Net Present Value of Customer Lifetime Value – Value already received

Gross Attrition

The loss of existing customers and their associated recurring revenue for contracted goods or services during a particular period.

Net Attrition

The gross attrition plus the addition or recruitment of similar customers. For healthy companies this is a smaller number than the number of new customers. Net attrition can also be measured in dollars or in units rather than as customers.

Strategies Using Subscription Billing Data

The subscription billing system generates more data than conventional billing systems and you can use it to fine tune how to manage your business. Here are some suggestions.

Reducing Attrition and Churn

If you know which customers are up for renewal and your analytics can tell you which customers are most likely to leave, then you have the information you need to take action to reduce churn before it happens. If your company has multiple product lines each may have a different churn rate; the same is true for customers with different demographics.

Identifying target customers is step one. Next you may wish to consider promotions or renewal incentives, which you can tailor to the specific needs of certain groups. For example, if customers want to leave your service because of a deficiency, you might have an opportunity to change a product based on customer feedback. Adjusting the subscription product mix is much easier than changing a conventional product and a subscription billing system fosters business agility that makes all this possible.

Increasing Cash

Every customer objection is not a request for a discount and vendors who routinely offer discounts when a customer presents a request or a problem, miss opportunities to improve the customer experience and improve their cash flows. Subscription companies have two issues affecting cash flow that the billing system can help resolve — converting freemium customers to paying customers and converting short term (monthly) subscribers to long-term agreements.

Freemium customers may be particularly susceptible to new product offers. Monthly subscribers and freemium users may each be amenable to discounts for longer-term commitments.

The Freemium Model

Subscription companies use the free approach as a low cost method of sales and marketing. The idea is that customers who try the product will convert to a paying subscription because the product is irresistible or impossible to give up once in use. However, many subscription companies never actually plan how to convert their freemium users and end up with tens of thousands of users of their products and infrastructures with no revenue benefit.

Some vendors have converted their indefinite free use to free trials thus forcing the issue. Others have simply announced an end date for all freemiums. Regardless of the approach a significant number of free customers will go away without purchasing, but that has to be expected. Nevertheless, some number of free customers will convert and when they do, you may need to have incentives in place which is easily done through subscriptions.

Long Term Agreements

As customers grow in their use of a subscription service their needs may also become more sophisticated. Renewals or developing long term agreements may depend on catering to these customers' growing sophistication. Vendors seeking to sign these customers to long term agreements can include specific incentives such as bandwidth, storage, response times or policy adjustments such as discounts or price guarantees. Subscription systems enable vendors to tailor their services to these and many other specific requirements.

Increasing ARR

Many companies do not rely on annual recurring revenue (ARR) as a measure but those companies seeking to maximize it may start by segmenting their customers by demographics or other characteristics. For example, a company that offers multiple channels such as self-service or enterprise use may find that customers within these groups may act more alike than customers in the combined group.

Self-service customers' profiles might include low dollar purchases. These may primarily be small companies and they may prefer not signing up for long term agreements.

Enterprise customers may have more complex requirements, prefer some live customer service and they probably spend more annually and are accustomed to annual budgeting. It is important for subscription companies to know the demographic differences and to make relevant offers. Subscription billing system data can often uncover these and other differences and enable managers to design optimal strategies.

Conclusion

Subscription business is not a new phenomenon — for instance, customers have been paying monthly fees for auto loans and cell phones for many years. Paying over time for life's necessities is even more common and installment lending covers most of what people buy. But subscriptions are a new and different way to deliver products as a service while keeping the deliverables affordable. Subscriptions also offer the customer benefit that they can be changed and terminated with little notice. Therefore vendors have to stay abreast of changes in customer use and deportment or risk nasty surprises.

These aspects of subscriptions make them different from conventional installment payments and open up new ways to do business. These changes generate both challenges for businesses using conventional billing systems and opportunities for vendors seeking to know more about their customers.

The avalanche of data generated by a modern subscription business and stored in its billing system can provide a business with more measurable information that conventional billing systems cannot. This information is available to any business that chooses to take advantage of the subscription paradigm.

Subscriptions are different enough from conventional business to cause all vendors to investigate them in detail. We recommend that all of our vendor clients consider how subscriptions can open up new lines of business opportunities and assess how these lines of business should be managed.

About Zuora, Inc.

Zuora's subscription commerce and billing platform changes the way subscription businesses manage and sell to customers. Enterprise leaders and high-growth companies alike use Zuora's multi-tenant cloud platform to launch, scale, and monetize their subscription services. Zuora's applications work where traditional ERP applications fail: Subscription pricing, quoting, orders, billing, payments, and renewals. Built from the ground up by SaaS industry veterans from salesforce.com, PayPal, and Netsuite, Zuora services innovative customers like Informatica, Tata Communications, Box.net, Ning, GigaOm, Xplornet, Ustream and Reed Business Information. To learn more about Zuora, please visit www.zuora.com.