

## FROM A LENDER'S PERSPECTIVE"

*One in a series of occasional articles written to help companies improve their ability to raise efficient capital and to improve the business relationship with their lender.*

### **A key SaaS / "as-a-service" metric for recurring revenue businesses**

By: David Stang

"Something" (originally Software) as a Service (SaaS) business models are becoming more commonplace in today's marketplace as company executives and investors seek recurring revenues. Even Microsoft is selling its Windows product on a monthly recurring "as-a-service" basis as opposed to a one-time purchase. Many more industries and businesses are moving to this model as a way of building long term value and "stickiness" with their customers by providing ongoing value on a regular basis and charging for services on a monthly basis.

**A key metric tracked by Software as a Service companies that should be more commonly utilized by other recurring revenue businesses is the "CAC (Customer Acquisition Cost) Ratio".** The beauty of the CAC ratio is that it takes into account all the key measures of ARPU (Average Revenue Per User), gross/monitoring margin, customer acquisition costs, attrition and if present valued; the cost of capital. Note that this is a unit metric that measures the value of each incremental customer and admittedly ignores overhead and G&A expenses.

The CAC Ratio is calculated as LTV (Lifetime Value of customer) divided by CAC (Customer Acquisition Costs). LTV is calculated as [ARPU x Gross Margin] divided by the attrition rate. CAC are the total sales and marketing costs to acquire one customer or \$1 of RMR (Recurring Monthly Revenue). Clearly the greater the LTV / CAC ratio, the more valuable a business is.

**SaaS companies seek a LTV/CAC of > 3x.** That is, they seek to generate \$3 of lifetime gross profit from a customer for every dollar spent to acquire that customer. I believe this ratio will vary depending on the specifics of an industry and business. However, it is a very valuable metric to monitor and provides comparability versus similar companies and against previous performance. An example calculation for a typical residential security alarm customer:

$CAC\ Ratio = LTV / CAC$

$LTV = (ARPU \times Monitoring\ Margin) / Annual\ Attrition\ Rate$

$LTV = ((\$40 \times 12\ months) \times 80\%) / 11\% = \$3,491$

$CAC\ Ratio = \$3,491 / (30x\ Creation\ Cost\ Multiple \times \$40) = 2.91$

This figure of 2.91 is comparable to the desired SaaS CAC ratio of >3x. However, since the average life of a residential security alarm customer is much longer than a typical SaaS customer, the LTV should arguably be present valued. Assuming a weighted average cost of capital of 8%, the LTV drops from \$3,491 to \$1,800 and the CAC Ratio drops from 2.91 to 1.50.

**While the CAC Ratio is a robust calculation and takes into account most of a recurring revenue company's key metrics, it is not as relevant in isolation. This ratio becomes very useful as it is tracked over time and as it is calculated for future changes in the business (such as increasing ARPU and (hopefully) reducing attrition). This analysis is the topic for our next article.**

*David Stang is the Founder and President of Stang Capital Advisory LLC, a firm that assists companies in raising new and incremental capital and improves the relationship between companies and their financing partners. He has over 25 years of banking experience and ran Bank of America Merrill Lynch's Security Industry lending group for 10 years. He can be reached at [dstang@stangcapital.com](mailto:dstang@stangcapital.com) or 312-515-9249.*