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CALCULATING SAAS COGS AND CAC

Interview: Deva Hazarika,
CEO and Co-Founder of Opstarts

OPEXENGINE SAAS BENCHMARKING COMMUNITY WHITEPAPER

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About OPEXEngine:

OPEXEngine is the industry leader in delivering financial and operating benchmarks for the technology industries, with a particular expertise in the metrics for subscription-based companies. OPEXEngine's member-based benchmarking community supplies the comprehensive data for the annual benchmarking.

OPEXEngine's benchmarking reports are key tools used by senior operating executives to support the budgeting, strategic planning and investment process. OPEXEngine has the most comprehensive database of financial and operating data for early stage and private companies, as well as for mid-sized public companies, many of which started benchmarking with OPEXEngine before completing an IPO.

In addition, OPEXEngine's On Demand, EDGR Financial Insights Reports deliver company and industry peer group reports in the areas of Valuation Comparisons, Revenue Comparisons, Cost and Expense Comparisons, Employee Productivity Comparisons, Profitability Analysis Comparisons, Working Capital Comparisons and Cash Flow and Balance Sheet Comparisons for any U.S. public company, created on the fly in minutes. For further information, visit www.opexengine.com.

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SYNOPSIS: Getting the Numbers Right

The importance of unit economics and the associated metrics (CAC, LTV, LTV/CAC ratio) is now well established for SaaS companies. However, accurately calculating the underlying components of these metrics is more complex than many companies assume.

Changing the methodology you use for these can result in unpleasant surprises in your key metrics, as well as losing valuable trends data. So the better a process you put in place for calculating SaaS metrics early on, the more value you will get from them over time.

In this whitepaper, we'll discuss ways to categorize a number of key areas that can have a big impact on your metrics:

- Customer Success costs
- Payment processing fees
- Implementation and onboarding costs

Best Practices

In addition to those expense areas, we'll discuss a few areas where companies often make mistakes early on when they start calculating SaaS metrics, plus give some tips and suggestions on ways to put a framework in place to help make your SaaS metrics calculation a consistent process over time as your business grows and becomes more complex.

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Introduction

The importance of unit economics and the associated metrics (CAC, LTV, LTV/CAC ratio) is well established in the SaaS world. Going from the 50,000-foot analysis to the ground level is what many of OPEXEngine's customers grapple with every day. And how you calculate your operating numbers has a real impact on your decision making and how you build value in your company.

Here's an example. If you think your Customer Acquisition expense and CAC ratios for a given product are better than they are, you might invest in riskier marketing programs (by risky, we mean that you are less confident of the outcome), because you think that even if the worst were to happen and the program didn't pan out, your overall numbers are profitable and you can take the risk.

The converse holds true as well: if you think your CAC is higher than it really is, you don't invest more and grow faster, because you think you are already spending too much. We see lots of companies in the market who are held back from growing as much as they might because they don't have the data and analysis to make good investment decisions.

All of this is NOT intended to hold anyone back from pushing the envelope on new programs or new investment to expand your products, markets or sales, in fact the opposite. Good data and analysis reduces your risk and can help you pivot or iterate more quickly to get better results.

Interview: Deva Hazarika, CEO and Co-Founder of Opstarts

To help provide some context and color around how to calculate two key components of the critical SaaS KPIs, Lauren Kelley, OPEXEngine CEO, talked to Deva Hazarika, CEO and co-founder of Opstarts, a SaaS application for planning and forecasting subscription businesses. Opstarts is an application designed especially for subscription businesses, typically private early to mid-stage high growth companies. Opstarts has worked with almost a hundred companies categorizing their expenses and revenues into key SaaS KPIs.

We asked Deva what are some of the most common issues he sees with customers calculating their Cost of Goods versus the Cost of Customer Acquisition.

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Lauren: Should Customer Success be a COGS or a Sales expense?

Deva: We commonly see three situations here.

Situation One - Customer Success is helping with both Sales and Support. Companies initially often just arbitrarily pick COGS or Sales for simplicity, but we advise them to split it 50/50 so the numbers don't get skewed incorrectly. Let's call this the blended model.

Situation Two - there is a dedicated support team focused on supporting customers (COGS), and Customer Success is focused and compensated based on upsells/renewals like a salesperson. In this case, Customer Success should be a Sales expense.

Situation Three - Customer Success is involved in the upsell/renewal process, but they are not compensated on revenue but on things like customer satisfaction, overall churn rate, etc. In this case, they should be COGS.

If you move from Situation One to Situation Two where you now have dedicated, i.e., separate, resources for both customer support (COGs) and dedicated upsell/renewal sales people, you may skew either COGs (GM) or Sales expense (affecting CAC) if you didn't initially allocate those expenses across both COGS and Sales expense buckets, at least in the initial phase of transitioning to a dedicated model.

Lauren: If you point this out in the analysis, it helps executives understand and not focus on unrelated things like blaming the increase in CAC (caused by going from allocating 50% to 100% of Customer Success to Sales) on poor sales productivity, a change in the market, etc.

Generally, customer success should be in COGS unless they are specifically tasked and compensated similarly to salespeople. Compensation plans will tell you about how it should be classified. Any kind of commissions and/or variable comp related to Sales makes it Sales.

! **Most early stage companies follow a hybrid or blended model. This makes sense because they are totally focused on new customer acquisition and don't have a lot of existing customers. Later stage SaaS companies at scale usually have dedicated personnel for customer support (COGs) and renewal personnel dedicated to Sales (OpEx).**

Lauren: Should payment processing fees be COGS or OpEx? If OpEx, should they be in Sales or G&A?

Deva: Most of our customers with monthly subscription revenues consider processing fees COGS, as they are an ongoing, repeated expense associated with the delivery of the service each month.

However, companies selling annual term contracts are split, with some considering it COGS and others considering it OpEx. For those considering it OpEx, most classify it a selling expense.

Another problem is if you are selling an annual subscription, you incur the payment processing fee upfront, but you need to look at your monthly unit economics. So, when calculating SaaS metrics for low-volume enterprise sales, you may want to allocate those fees over the lifetime of the subscription. Once you are doing enough volume that you have many of each level of subscription sale each month, this doesn't matter since the total amount of processing fees each month will be more consistent.

The bigger the deal, and especially when you are selling multimillion dollar deals that may have terms extending over several years, you have a big up front invoicing cost followed by the cost of collections. These typically go into G&A.

However, with one off big deals, the invoicing, payment processing, collections usually ends up in OpEx – Sales. If you have a blended model, with big deals as well as monthly, self service deals that you are putting in COGS, we recommend consistency and to put all the payment processing fees in COGS.

Lauren: Should onboarding and implementation costs be COGS or Sales expense?

Deva: This is one of the trickiest questions, as implementation often spans the pre-sales and post-sales process. In general, we recommend implementation work that is done as part of the pre-sales and demo process be a sales expense. Implementation work that is done after a customer has been signed should be COGS.

So for demos, proof of concepts and free trials - implementation costs for these are generally selling expenses. Getting customers onboarded successfully and up and running on the platform - implementation costs for that are generally COGS.

! **It is very tempting if companies are trying to hit a certain gross margin target, and they have a relatively high implementation cost (takes a lot of people to get a customer up and running) to call this part of the selling process. This often happens with very large deals, which is why the unit economics of very large deals is not often analyzed properly.**

Stakeholders may have a certain recurring revenue gross margin number they are targeting. Implementation costs and professional services costs (and related services gross margins) often are considered secondary to the primary SaaS recurring revenue business. But if the implementation and services costs are kept out of the analysis, you get two problems. One is that you aren't really looking at the total picture, and secondly, fast forward to when you are bigger and have more sophisticated planning in place, and put implementation costs into COGS (and impact margin, LTV and LTV/CAC ratio). Even though nothing has changed in your business, you've been reporting 80% GM on recurring revenues, and now your numbers show you are really at 70% recurring revenue gross margin when taking all parts of the deal into account. The earlier you put clear standards in place to follow, the easier things will be as you grow.

The key issue in determining where to put implementation costs is to ask when is the work happening, and if it is after the contract is signed, then put it into COGs.

Lauren: What are other common mistakes companies make in their CAC/COGS calculations?

Deva: The three common mistakes we see are:

- **Non-dedicated staff** - In early-stage companies, where execs/engineers/etc. might be performing sales and support duties that later will be performed by dedicated staff, these costs are often not counted as either COGS or CAC. VP of Sales who has his/her own quota. This artificially inflates margin and decreases CAC because later these roles will be performed by staff included in those calculations. Once a company is over $5M-$10M, you don't see this as much.
- **Indirect employee costs** - Companies often don't include the cost of employees like managers or VPs or admins who support the people directly providing the sales/support. It's important to include the costs of all team members involved. Another example is the CEO who closes most of the deals, but not included in CAC (sits in G&A).
- **Indirect expenses** - Companies usually include direct sales/marketing/support tech and program spend (advertising spend, helpdesk software) in CAC but don't include expenses like CRM systems also required for the team.
- **Not spreading costs correctly or averaging over an adequate time window** - companies often calculate CAC using cash basis expenses, which overstates costs when things like Salesforce annual subscription are paid and understates CAC for rest of year, and/or they calculate these numbers just looking at single month which can skew results based on when new employees are hired. Need to make sure that expense time window corresponds to the revenue time window. If you are using MRR, need to look at annual expenses ratably (especially one time payments like CRM) as well.

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Key Take-Aways

Here are a few general tips we suggest for companies getting started with SaaS metrics.

- ! Look at the metrics on a rolling window basis to avoid seasonality and spikes, rather than calculating the metrics only for a single month at a time.
- ! Make sure that you are looking at costs and expenses over the same time frame as revenues, and that you're properly allocating expenses like annual subscriptions over the entire period.
- ! Think about the impact that changing how you calculate or define an expense will have on your analysis. The direction various metrics are trending provides valuable insights into your business, but that requires consistency in calculation over time. You lose a lot of value in these metrics if you change the definitions or do things that skew them during your growth.

To get started modelling your SaaS metrics in a way that will provide valuable insights into your business, you must start with a properly allocated cost and expense basis. Correctly categorizing all the expenses going into CAC or COGS isn't as easy as it as you might assume. And changing definitions mid-stream can cause you to lose valuable trend data. That's one key reason how spending a little extra time up front to get good definitions and processes in place will pay dividends later.

Calculating these key metrics incorrectly can send your company down a path of bad assumptions and decision-making based on thinking your model is more or less profitable than it really is. But having a good process in place to generate accurate SaaS metrics can help you identify opportunities faster and take advantage of key indicators to optimize your business. That's what fast growth is all about.