waterstone
MANAGEMENT GROUP LLC

Subscription Scorecard Metric Deep Dive: Cost of Customer Retention

Perspective by Waterstone Management Group

Andrew Loulousis, Manager
Aman Singh, Senior Associate

September 2016

Chicago | San Francisco
(877) 603-1113
www.waterstonegroup.com

Subscription Scorecard Metric Deep Dive: Cost of Customer Retention

At Waterstone, one of the most frequent questions that we field when helping companies implement or update their subscription-oriented measures is, "How should we calculate these metrics?" To help answer this question, Waterstone is developing a series of papers that explore various Subscription Scorecard metrics in depth. In this installment, we explore the different ways to calculate retention, the value of higher retention, and how to determine the cost of customer retention.

The Subscription Scorecard

To better gauge, drive, and predict the value of subscription businesses, Waterstone developed the Subscription Scorecard. This re-balanced scorecard is centered around the customer and takes into account the unique nature of the subscription model, where recurring revenue and growth drivers matter the most and non-financial-statement metrics have increasing weight.

The Subscription Scorecard

Within each of the four focus areas, there key metrics that should be tracked. This paper explores two of those metrics: customer lifetime value and customer acquisition cost.

Why Retention Is Important

In our previous paper Subscription Scorecard Metric Deep Dive: Customer Lifetime Value (CLTV) and Customer Acquisition Cost (CAC), we examined the cost and benefit of acquiring new customers. In that paper, we saw that a larger portion of a customer's value to a company depended on having a long and profitable relationship with that customer.

In the subscription economy, companies must ensure that they are retaining and maximizing value from their existing customers. As a result, SaaS companies need to enhance their understanding of what their retention actually is and how their spend should be allocated towards maintaining and improving that customer retention. The ability to cost effectively retain customers can be a testament to both the natural 'stickiness' of a business and a company's targeted investment, organizational, and operational decisions.

Before we delve into the cost of retention, we first need to understand how SaaS companies currently report on retention metrics. Companies determine and assess their retention measures in a variety of ways, depending on what aligns best with their business model. Some companies may focus on the number of customers churned, while others may focus on the actual dollar value retained. Furthermore, companies typically choose to measure these metrics over a pre-defined time period in order to reduce the statistical variance arising from a specific customer event, such as a user add or cancellation. In the following pages, we note the drivers of retention and outline three different ways to calculate it.

Method 1: Customer or Logo Retention Rate

We define customer or logo retention as the rate of renewal of customers over a given time period. For a given customer cohort, it will track the number of customers that still remain at the end of a given time period out of the total number of customers signed at the beginning of that period. This ratio is typically expressed as a percentage and usually ranges from 70% to 99%:

$$\frac{\#\text{ of Customers}_{\text{t current period}}}{\#\text{ of Customers}_{\text{t previous period}}}$$

For example, if a company signs 100 customers at the beginning of the year and 95 of them choose to renew their subscriptions at the end of the year, then the customer retention rate is 95% with a 5% churn.

As a real-world example, Carbonite is a publicly traded company that chooses to report its annual retention rate (96% in 2015[1]) on a customer basis. Carbonite specifies its calculation as "the percentage of customers on the last day of the prior year who remain customers on the last day of the current year, or for quarterly presentations, the percentage of customers on the last day of the comparable quarter in the prior year who remain customers on the last day of the current quarter."[2]

Methods 2 & 3: Dollar Retention Rate – Gross and Net

Dollar-based retention is defined as the recurring revenue at the end of a defined period divided by the recurring revenue for the same client base at the end of the prior period. Again, this is typically calculated on a monthly, quarterly, annual, and/or cohort basis.

Method 2: Gross Dollar Retention

Gross dollar retention or renewal rate is similar to the customer retention rate; it examines the total annual recurring revenue (ARR) dollar amount signed at the beginning of a given period against how much of it still remains at the end of that period. It is calculated as follows and is reported as a percentage, which typically falls between 70% and 99%:

$$\frac{\$\text{ Recurring Revenue}_{\text{t current period}}}{\$\text{ Recurring Revenue}_{\text{t previous period}}}$$

For example, if a company signs $500 in ARR from a cohort of companies at the beginning of the year and then renews $450 of that initial ARR at the end of the year, its gross dollar retention rate is 90% ($450 / $500).

As a real-world example, ServiceNow reports its retention metric on a dollar basis, excluding the benefit of upsells. Its gross dollar retention rate was 97% as of mid-2015.[3] ServiceNow calculates this retention rate by "subtracting our attrition rate from 100%. Our attrition rate is equal to the annual contract value from customers that are due for renewal in the period and did not renew, divided by the total annual contract value from all customers due for renewal during the period."[4] Other companies, such as Ultimate Software, report their retention metric similarly.

Method 3: Net Dollar Retention

Some companies may choose to report net dollar retention, which builds off of the gross dollar retention method. In addition to the gross renewal amount of the starting ARR dollar amount, this calculation also accounts for upsells, cross-sells, and other expansion revenues. This will generate the higher retention rate of all three methods and can often be over 100%.

$$\frac{\$\text{ Recurring Revenue (incl. Expansion Rev)}_{\text{t current period}}}{\$\text{ Recurring Revenue (incl. Expansion Rev)}_{\text{t previous period}}}$$

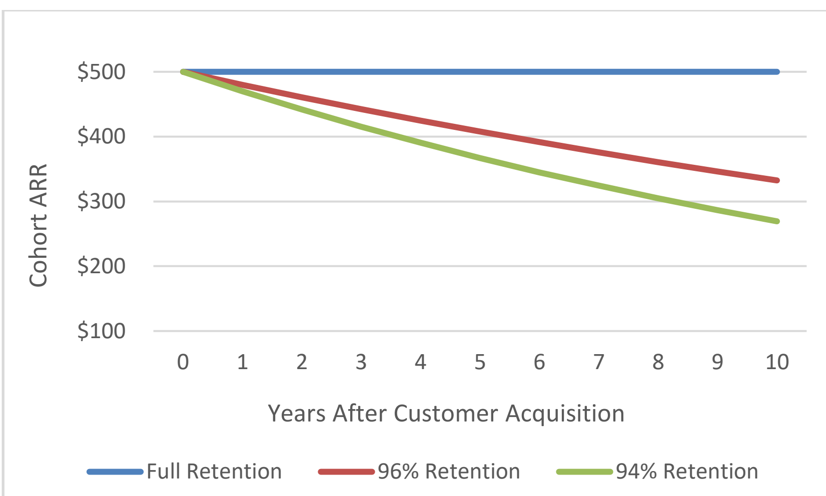
For example, if a company signs $500 in ARR from a cohort of companies at the beginning of the year, renews $450 of that initial ARR, and sells an additional $100 of new recurring revenue to those same remaining customers, then its net dollar retention is 110% ($550 / $450).

As a real-world example, Zendesk calculates its dollar-based net expansion rate by "dividing our retained revenue net of contraction and churn by our base revenue." Its retention rate was 123% at the end of 2015.[5]

Impact of Retention on ARR

To demonstrate the magnitude of impact that retention has on recurring revenue, we present a simple example: Let's say we have 100 customers within a cohort with an average ARR of $5M per customer for a total starting ARR of $500M. If we compare the difference between 96% and 94% gross dollar retention, we see the resulting year-by-year deviations in ARR retained below:

ARR Impact of Customer Retention Differences



After 1 year, the 96% retention has $10M more in ARR; after 5 years, the gap accelerates to $41M, and after 10 years, the difference grows to $63M in ARR. Cumulatively, those differences result in lost revenues of $131M over 5 years, and $408M over 10 years. The key lesson here is that a relatively small increase in customer retention can translate into a very large revenue opportunity over time.

Now that we can see the value associated with higher retention, it is important for companies to understand what activities are contributing to that retention value, how much these activities cost, and how to strategically invest in profitable retention.

Cost of Customer Retention (CCR)

One of the challenges with focusing on retention is understanding how much money is currently being invested (or should be invested) on retention efforts and what specific functions and activities throughout the customer lifecycle are actually driving customer renewals/expansions.

The cost of customer retention (CCR) represents all of the ongoing costs associated with retaining customers (and expanding within this installed base) for a company. Detailing which costs should be attributed to retention will vary by company maturity and operating model; however, we will highlight some general considerations and methods to help you determine the applicable costs for your business.

Cost of Customer Retention – Simple Method

$$\text{CCR} = \text{Account Management (AM) Costs} \times \text{AM Time Allocated to Retention Activities (\%)}$$

This calculation method focuses on the account management or sales activities directly related to retaining customers; typically, this involves communicating with customers, negotiating renewal terms, and executing the renewal transaction. Who performs these activities will vary by company; for example, it could be the assigned account manager, sales representative, or a dedicated renewals team.

The major drawback of this method is that it focuses primarily on sales activities and the renewal transaction, both of which only take place for a small part of the customer's relationship with the company; it misses many of the on-going investments that a company makes in building and maintaining a successful customer relationship and high satisfaction.

Sales/Account Management & Customer Retention

- Sales is typically the primary contact for establishing and maintaining customer relationships
- Amount of time spent addressing needs of existing customers (e.g., monitoring business value, negotiating/executing renewals transactions, handling other inquiries) versus time spent with new customers can be counted towards customer retention costs
- Retention-focused activities of Sales team will vary depending on the other functions that organizations utilize (e.g., in situations where a dedicated Renewal team exists, Sales is still likely to be involved in developing renewal strategies, etc.)

Analysis of Customer Retention Costs

Companies vary significantly with regards to the functions, programs, and tools they use to drive retention. Below, we have detailed some of the common elements across these three categories that may be tied to driving retention. Detailed descriptions of each cost category can be found in the appendix.

Additional Customer Retention Costs

Labor Costs	Programs & Training	Retention Tools & Tech
Sales/Account Management	Webinars	Customer Portal
Renewals Team	Workshops	Customer Health/Monitoring
Customer Relationship Resources	Training	Customer Success Platforms
Customer Success Program	Community Engagement	Campaign Management Tools
Relationship Marketing	Advocacy Programs	

Retention-focused labor activities extend beyond the point of renewal to encompass the entire customer lifecycle. Programs and tools are put in place to support these retention efforts across the lifecycle.

Companies should expand on the baseline cost of retention calculation method noted previously and apply the retention elements that are relevant for their business to yield a more accurate picture of retention spend.

Some key considerations for determining your cost of retention include the following:

- Allocating time/resource spend for retention doesn't need to be exact, but it should be thought out and consistent on an ongoing basis. It is also important to match all costs from a timing perspective.
- Some of these costs (in particular labor costs) may vary by customer segment/tier; in such cases, you may want to split out costs to get a more detailed picture of your retention spend. This granularity can be important when considering future investments.
- Customer retention costs should be considered to be ongoing/annual. There may be timing considerations for some of these (e.g., tools/tech may be a one-time fee or require larger upfront investments). However, on an annual basis, many of these costs (e.g., programs & training) will remain consistent. Labor costs may vary based on where an individual customer is in its lifecycle; however, in aggregate (for a more mature company), these costs should average out over time.
- You can choose to include separate expansion activity costs as well, but it is important to remain consistent in calculating and analyzing.

Cost of Customer Retention – Alternative Methods

Once you've developed the full view of how much your company is spending on retaining customers, you can determine the average cost of retaining one customer. To perform this calculation, we recommend the following:

$$\text{Annual Cost of Retention per Customer} = \frac{\text{Annual Cost of Retention (per previous calc.)}}{\text{Total \# of Customers}}$$

This calculation is usually broken out by customer segment, size, or product. Again, the annual cost of retention and total number of customers need to align in terms of the segmentation used (as would the lifetime value).

We use total number of customers because, inherently, your retention efforts are geared towards keeping every existing customer from the day they first start using your product or service. If needed, you can also extrapolate this annual cost to reflect the total cost of retaining a customer over its lifetime by multiplying this annual number by the expected customer lifetime.

Cost of Customer Retention Ratio (CCR Ratio)

It is important for companies to understand the value being driven by their retention efforts relative to the cost of those efforts in order to gain insight into current operations and inform future investments and strategy. The challenge of matching renewal revenue to the associated costs is that they often don't occur in the same quarter or even year. For example, if a new customer signs a 3-year contract at the beginning of Year 1, various retention activities, programs, and tools will likely be leveraged and maintained each year leading up to renewal at end of Year 3. If the customer renews, the 'rewards' of the ongoing retention efforts would be reflected in the renewal contract, with revenue being recognized after Year 3. As a result, the timing of the retention costs and the renewal revenue do not line up on a per customer basis.

In order to mitigate this issue, we look at normalizing the average renewal contract value per customer and the cost of retention per customer on an annual basis. This helps to align the revenue and costs on a per customer basis, setting things up for further analysis.

One method for doing so is designed to illuminate, on average, how much value are you deriving from your retention spend annually per customer. To do this, we take the gross profit of an average customer renewal contract (annualized) and divide it by the cost of retention per customer (annualized):

$$\frac{\text{Average Annual Renewal Contract (\$) x Gross Margin (\%)}}{\text{Annual Cost of Retention per Customer (\$)}}$$

This ratio tells us the amount of gross profit generated annually per customer for $1 of retention spend.

Retention Profit Ratio Example

	Year 1
Renewal Avg Contract Value (ACV) Gross Profit	
Avg ACV ($M)	**$5**
Gross Margin %	80%
ACV Gross Profit	**$4**
Avg Annual Cost of Retention per Customer ($M)	**$1**
CCR Ratio	**4**

You should have a ratio that is greater than 1, showing that you are profitably retaining customers on an annual basis. It's typical for companies to reach or exceed a ratio of 3x. If your company is below 3, then we would suggest digging into your customer retention efforts across the entire customer journey to ensure you are performing the right activities and investing wisely. If your ratio is high, typically over 10x, then you should ensure that all retention activities and costs are being allocated correctly.

Key Considerations for CCR Ratio

- Some of these cost categories may also function as revenue drivers (e.g., training); in such instances, need to make sure the associated costs are accounted for (if not already part of COGS/GM%)
- Costs may differ by customer segment/tier; in such cases, it may make sense to split out the calculation accordingly, e.g., (ACV for Tier X * GM for Tier X) / Cost of retention for Tier X
- Upsell/x-sell may be reflected in renewal contract value; need to ensure alignment with costs (e.g., it is okay if you are attributing costs that are inherently tied to both renewals and expansions)
- Does not highlight overall effective-ness of renewal spend given it is done on a per customer contract basis

This approach can and should be adjusted for your company and will vary based on factors such as customer segment, products, etc.

One adjustment that companies make is to re-calculate the gross margin % used in order to remove any retention costs that are included in the costs of goods sold (COGS) and would thus already be accounted for in the gross margin %. For example, if the Customer Success team is included in the product COGS versus Sales and Administrative costs, it should be pulled out when calculating the gross margin % to avoid double counting.

Companies also need to be cognizant of the term of a renewal contract versus the original contract term. The longer your initial contract, the longer your renewal term should be in order to recoup the retention costs accrued and investment made in building the customer relationship over the initial term. For example, let's compare a 3-year initial contract and a 1-year initial contract both renewed for 1 year. The total retention costs accrued over the 3-year contract would be greater than the retention costs for the 1-year contract for the same renewal gross margin, resulting in a lower cost of customer retention ratio for the 3-year contract.

Conclusion

The guidance above serves as a starting point and reference for companies seeking to gain further insight into their retention efforts and opportunities. As companies scale and become more mature, one would expect more emphasis and spend to be allocated towards retaining customers. Gaining visibility into what activities contribute to retention and how they should be accounted for is a challenging exercise that can vary significantly by company depending on factors such as operating model, organizational structure, strategy, and maturity. It is important to have a clear understanding of these costs and to be methodical and consistent in capturing them. Doing so allows companies to further analyze the relative value a company's overall business (or cohort, product, geography, etc.) is deriving from retention efforts and use this information to inform future decisions – such as what segments to focus on, what the budgetary mix for acquisition versus retention should be, etc.

In future installments of the Subscription Scorecard Metric Deep Dive series, we will highlight other metrics that can help you better manage, inform, and drive your subscription business. To ensure you receive them, be sure to subscribe to our quarterly newsletter, Waterstone Currents.

Waterstone Management Group helps technology companies and investors create measurable value by identifying and capitalizing on disruptive growth opportunities and driving excellence in Services, Cloud, and Customer Success performance. Should you have any questions on this topic or wish to learn more about the Subscription Scorecard overall and how it can be used to maximize Customer Success and drive corporate value within your organization, please contact:

Andrew Loulousis, Manager
(312) 508-6175
aloulousis@waterstonegroup.com

Aman Singh, Senior Associate
(312) 508-6181
asingh@waterstonegroup.com

[1] Carbonite, Inc. FQ1 2016 Earnings Call, May 3, 2016
[2] Carbonite, Inc. 424B4, October, 2011
[3] ServiceNow, Inc. Q2 2015 Earnings Call, July 29, 2015
[4] ServiceNow, Inc. 424B4, June, 2012
[5] Zendesk, Inc. Q4 2015 Earnings Call, February 16, 2016

Appendix

Labor Costs

These are functional labor costs that are designed to capture the resources that engage in retention-focused activities throughout the customer lifecycle. These can range from whole teams with a dedicated retention focus (e.g., Customer Success) to designated individuals within a broader team who execute on targeted retention activities (e.g., Relationship Marketing).

- **Renewals**
  - Can be a designated team or existing functions responsible for developing account renewal strategies and formally executing on renewal transactions and negotiations. Depending on the organizational structure of a company, the Renewals team may work directly with Sales and Customer Success.
- **Customer Relationship Resources**
  - Responsible for strategic planning and associated proactive customer engagement. Activities can include executive business reviews, aligning product roadmap with customers' business goals, providing additional resources to maximize product value, etc. These activities may be captured by another team (i.e., Customer Success) depending on the organization, and the title of these resources can vary. Examples of this function may include account managers who focus on sales opportunities for upsells and cross-sells, proactive relationship managers who are monitoring adoption, health scores, etc., and support functions that focus on escalations and making sure customer requests are handled properly.
- **Customer Success**
  - Program designed to ensure customer value is being delivered post-sale. This organization generally has a dual mandate: drive retention and adoption. It achieves these goals through a variety of programs, touchpoints, and reviews designed to maximize the customer experience. This group can include Customer Success directors, managers, and operations (i.e., sub-team that performs supporting Customer Success activities such as development of collateral, delivery of scalable processes/activities, etc.). Note that while Customer Success also has responsibility for upsell and cross-sell, depending on the maturity of the company, one can assume that the bulk of its activities are retention driven; oftentimes, Customer Success managers (CSMs) identify expansion opportunities while the Sales team will execute.
- **Relationship Marketing**
  - Marketing function focused on maintaining and enhancing existing customer relationships with an ultimate goal of retaining these customers and expanding within an account via targeted marketing outreach. An example of a relevant activity is an email campaign to existing customers to provide supporting onboarding resources, communicate best practices, and highlight new releases. If marketing does perform these activities, it may be

reflected by either designated resources as part of the broader Marketing department or by a separate Relationship Marketing team. However, these activities can be performed by other functional resources/teams (e.g., Customer Success, Training, etc.) depending on the company.

Programs and Training

These are direct costs associated with programs and training designed to support customer retention. These can be reflective of specific initiatives or can be used to support resources in their customer retention efforts.

- **Webinars**
    - Costs associated with setting up webinars for customers to utilize on demand or through virtual instructor-led courses. These webinars are often associated with supporting resources on a customer portal and are typically not monetized. They can include topics such as best practices for product usage, new features, etc. in order to drive adoption.
- **Workshops**
    - Workshops can cover a variety of topics to help support customer retention. Depending on the topic, they can be delivered by a variety of functional resources (e.g., Product Manager for a technical product deep dive, Training for ‘train the trainer’ sessions, etc.).
- **Training**
    - Training costs may be wrapped into other retention cost categories such as workshops and webinars, or can be reflective of the labor and material costs associated with designated training programs/education paths. Many companies sell training credits that can be redeemed by customers for specific topics (i.e., companies may recommend education paths based on products purchased and business needs). Companies can also offer other programmatic training such as adoption enablement (time to value/rapid implementation), accreditation programs, and others. These ultimately help enable customers in their use of the products and support overall customer health, leading to higher retention.
- **Community Engagement and Advocacy Programs**
    - Community engagement can include programs/initiatives designed to facilitate customer interactions and enable opportunities to address issues, drive loyalty, etc. Some of these initiatives can include peer-to-peer sessions, end-of-year conferences, and loyalty/rewards programs. Furthermore, many companies also offer advocacy programs designed to drive loyalty, develop customer insights, and promote referrals. Costs associated with these initiatives can include set-up fees, campaign management, etc.

Retention Tools and Technology

Technology and tools directly enable and support retention efforts, ranging from proactive identification of customer needs to driving scalable processes to engage with all customers. The costs associated with these tools can vary, but would likely be in the form of software/hardware subscriptions or licenses. There may also be incremental costs for things like hosting, support, maintenance, integration, and resources who manage these tools (if not captured in the labor costs above).

- **Customer Portal**
  - Customer portals are often offered to customers as a hub for on-demand resource access (e.g., online training, community forums, key announcements, etc.).
- **Customer Health/Monitoring**
  - A customer health/monitoring tool (e.g., dashboards) serves to provide visibility into renewal risk and product adoption/usage. These can take the form of stand-alone technology offerings or custom tools (e.g., excel spreadsheets) that aggregate and analyze relevant information. Existing CRM/incident management and reporting/analytics platforms may also be leveraged.
- **Customer Success**
  - Customer Success-specific platforms may be used by CSMs to manage the post-sale customer relationship (e.g., customer health scores, key actions/playbooks, reporting, etc.).
- **Campaign Management**
  - Tools for one-to-many communications (e.g., email campaigns) are also likely to be utilized in customer retention efforts. These costs may fall under a specific organization, such as Marketing, but a determination can be made on how much it is being used for retention versus customer acquisition to properly allocate costs.