However, this approach is quite reasonable mathematically given that the future value of a customer is very small after 5 years due to retention rates and discount rates. Therefore, unless retention rates are very high or discount rates are very low, the infinite CLV approach is a good approximation.[21] To do so, use the following approach to calculate CLV—notice there are no *t* subscripts in this approach, which reflect the fact that it is summing across years.

$$CLV = \left(M_s\left[\frac{r_s}{1+i-r_s}\right]\right) - AC_S$$

Difficult to Assign Marketing Costs

Firms may also find it difficult to assign marketing costs to customers or segments of customers. One way to manage this is to do simple counts of marketing contact levels with the customer. Frequency of store visits, warranty claims, customer service calls, and salesperson visits can all be estimated by managers or front-line employees.

Using CLV to Invest in Prospects

In addition to providing information on which current customers to invest in, lifetime value approaches can also guide companies on investments in new customers or prospects. To do so, companies can compute the lifetime value of a prospective customer (prospect lifetime value (PLV)) for that segment. PLV shows the expected value per prospect of any acquisition effort.

PLV accounts for the fact that a company has not yet acquired this customer by including acquisition rate in the CLV equation. The acquisition rate is the probability that a company will acquire a customer. This helps companies decide the future value of a customer and directs resource allocation decisions.

$$PLV_s = (AR_s \times CLV_s) - AC_s$$

In this equation, PLV_S is expected lifetime value of a prospective customer, AR_S is the segment's acquisition rate or likelihood that a prospect will become a customer, AC_S is the segment's acquisition cost per prospect. Here, CLV_S is the segment's CLV (and does not include AC_S to avoid double counting).

As an example, AudioReader Inc. has introduced a new range of audiobook devices that are targeted at children between two to seven years old. There are about 500,000 such customers in their current region of operation. As a start-up, AudioReader has limited money for marketing initiatives at its disposal, and it needs to decide whether or not to invest in a new salesforce that will acquire these new customers with a probability of 5 percent (AR = 5 percent). The company has estimated the cost of training this salesforce as $1M, which equates to an acquisition cost of $2 per prospect ($1M/500,000 prospects). Assume the same discount rate of 10 percent.

The first step is to calculate CLV (AudioReader uses the infinite customer life approach and keeps acquisition cost out of the model as instructed). CLV = 100 × (60%/(1 + 10% − 60%)) = $120. The second step is to calculate PLV = (AR × CLV) − AC = (5% × 120) − $2 = $4 per prospect. Therefore, the total expected value of new salesforce = PLV × # of prospects or $4 × 500,000 = $2,000,000. All else being equal, AudioReader should make the salesforce investment, as the total PLV is higher than the investment required for the salesforce.

Use PLV to Guide Acquisition Cost Expenditures

The PLV calculation can also be used to determine the maximum a company should spend acquiring a new customer segment. Returning to AudioReader, the VP of Sales goes to the COO with this analysis to get the salesforce training budget approved, and the COO poses a good question—what is the maximum we should spend on customer acquisition? To make this determination, AudioReader should set PLV = 0 in the equation. Because CLV does not include AC, if we set PLV = 0 and solve for AC = AR × CLV, the company should spend no more than $6 per prospect in its go-to-market strategy (AC = 5 percent × 120 = $6), and its maximum overall customer acquisition budget should be $3M ($6 × 500,000 prospects).[22]

CUSTOMERS AS VALUABLE ASSETS

Customers have always been central to marketing, but the shift into a perspective where customers are an asset has become more prevalent, especially as digital tools enable data collection about and management of customers at scale. The hard decision of choosing investment in different marketing activities now extends to questions such as which customers to invest in acquiring and which to invest in keeping loyal to the business. The customer lifetime value model provides a strategic framework to understand how to value customers, as well as which levers to shift to gain the biggest value from customers.

KEY LEARNINGS

- Star customers both bring high value to and derive high value from the firm.
- The purchase funnel is a management tool that allows a company to sort its customers into different stages in the purchase process and monitor progress in moving customers through the process. It also enables firms to see when in the process they are losing customers, which can be used to improve customer progress.
- Funnel management problems like poor quality leads or slow movement of fine-grained data can often be solved by more coordination between marketing and sales, making sure funnel steps reflect observable customer actions, etc.
- Customer lifetime value (CLV) models can be used to calculate the long-term value of individual customers or segments of customers. Skillful use of CLV can guide customer management, predict and mitigate churn, account for and facilitate customer transitions, and lower acquisition costs.
- The CLV model can be adapted to calculating prospect lifetime value (PLV), which identifies the potential value of a future customer. Firms can use PLV to determine how much to invest in acquiring new customers by segment, as well as which new customers to prioritize when allocating firm resources.

FOR DISCUSSION

1. Create a purchase funnel for an organic farm that wants to sell its produce to local restaurants. What metrics do you recommend it use?
2. Perform a loyalty analysis of the automobile industry and the snack food industry. Rate key firms on attitudinal and behavioral loyalty. Take one firm in each industry and offer one suggestion for improving customer loyalty.
3. Using the AudioReader data, estimate its CLV when customer retention increases from 60 percent to 70 percent and 80 percent. In each of these scenarios, assess the value of increasing margin by 10 percent to $110 or 20 percent to $121.
4. Considering AudioReader's offering and target market, have a discussion about the company's most effective use of customer lifetime value tools? What would you measure and how would you use it to improve the company's performance over the long-run.
5. Imagine AudioReader's retention rate increases from 60 percent to 80 percent. What is its new PLV? How much should AudioReader now be willing to spend to acquire a customer?

BEST DIGITAL PRACTICE

Netflix Customer Loyalty Machine

Netflix has emerged as one of the most disruptive and successful on-demand video and media service providers over the last decade. Started as a mail-order DVD company in 1997, Netflix has succeeded by changing its strategies to keep pace with changing technologies. By 2015, Netflix had acquired a 52 percent share of all U.S. broadband homes and, in the process, put the behemoth brick-and-mortar retailer Blockbuster out of business.

Netflix uses a dual strategy of outstanding content and a powerful subscription model to succeed. At first, content came solely from movie and television production companies, including syndicated re-runs. However, in 2013, Netflix debuted its first original series, House of Cards, to great fanfare. It has continued to produce winners, including Orange is the New Black, Narcos, Making a Murderer, and most recently new episodes of Gilmore Girls. The company has also brought back award-winning shows, such as Full House. This content strategy keeps current customers engaged, as reflected in the fact that the average subscriber streams content for 2 hours a day—up 18 minutes over the prior year. It also continuously attracts new users to the platform.

Netflix acquires customers by offering a free one-month trial that can be canceled at any time. This strategy has zero cost to the company given the trial only utilizes Netflix's existing portfolio of offerings. For current customers, Netflix uses four strategies to improve the value it offers and the value the company is able to extract from them.

First, the low monthly subscription rate of $9.99 makes membership an affordable luxury for many customers. Of course, most people don't just sign up for one month. The average person is an estimated Netflix subscriber for 25 months, creating a recurring source of revenue.

Second, its "Watch Anywhere" option allows customers to watch shows on any device and even download them to use on computers or tablets, making it easier to watch Netflix on the go—thereby extending viewing opportunities to out-of-home, non-Wi-Fi settings.

Third, Netflix tracks customer engagement and uses this information to recommend new content to users based on their past viewing behaviors. This impacts customer retention of which Netflix has the lowest churn rate in the on-demand video sector. In 2015, just 5 percent of U.S. broadband homes canceled their Netflix accounts. This also includes customers who left after the end of a trial period so it is not a pure CLV calculation, which would not count customers until they had made a more formal commitment. Such a high retention rate offers a strong indicator of long-term cash flows for the company.

Finally, Netflix uses a tiered pricing plan that allow users to pay for the number of screens on which they want to view content—basic streaming for one screen is $7.99, standard streaming for two screens is $9.99, and premium streaming for four screens is $11.00. The multiple screen options allow people to join together who might not otherwise join individually. Subscribers can also add people to their plans easily by sharing access codes. This allows Netflix to gain access to new customers who might later join on their own.

Questions:

1. What actions to you recommend Netflix take to increase its customer lifetime value?
2. How can Netflix improve its prospect lifetime value?
3. What is Netflix's biggest competitive vulnerability?

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BEST GLOBAL PRACTICE

How Starbucks Rewards Reward Starbucks

In 2008, Starbucks launched its first loyalty program, aptly called Starbucks Rewards. The program is designed to operate on a prepaid system, in which customers load funds onto a Starbucks card and then use that card to purchase products. Since its inception, the program has been tremendously successful. A recent financial analyst noted that Starbucks had $1.2 billion in customer funds loaded onto plastic and mobile cards as of the first quarter 2016. This figure, which is larger than many banks have in