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Netflix: The Customer Strikes Back

Introduction

Three years after earning his MBA, Hunter Keay was starting to make a name for himself at a leading investment bank when, in February 2012, some of his clients grew increasingly anxious about the value of their holdings in Netflix, Inc. (Netflix), the subscription-based media distribution company. Six months earlier, Netflix had announced a plan to split its on-demand video streaming and DVD mail delivery into two businesses and to increase the price of its most popular service. But in the face of near-universal criticism, Netflix had abandoned the plan within a month, only to lose 800,000 subscribers and half its stock value (Figure 11-1). Keay's clients who held Netflix wanted to know what remained of their investment.

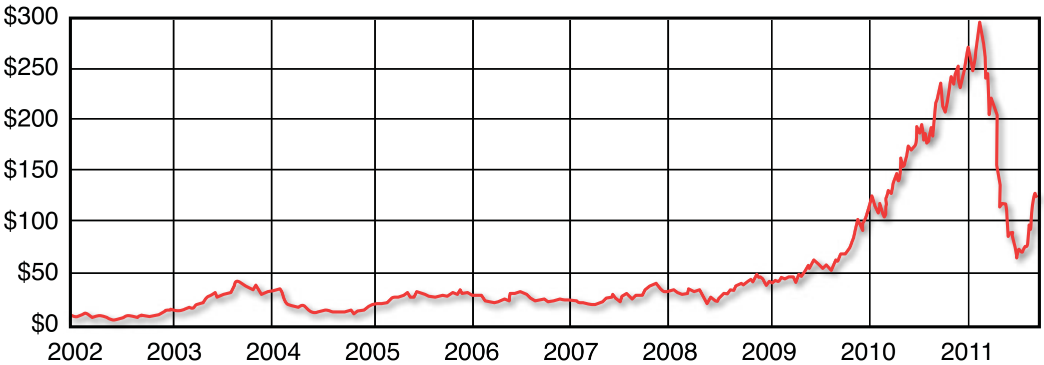

Figure 11-1 Netflix stock price and volume, March 2002 to February 2012

Source: Yahoo! Finance.

To determine a more accurate value of Netflix stock, rather than apply one of the standard methods favored by his firm, Keay was considering the use of *customer* *lifetime value* (CLV). He was not certain that the metric applied in this instance, whether the firm even considered it valid, or how CLV related to the more accepted methods. He was certain about one thing, though: New technologies were transforming the industry and the ways customers received video content. The question was whether "Netflix 2: The Sequel" would ever be as popular as the original.

An Industry Driven by Technology

The video rental industry has been substantially altered by technological developments outside the industry. Major milestones included the DVD by mail that could be ordered via the Internet, video streaming, and lately kiosks.

The Traditional Retail Rental Store

The advent of videotape, acceptance of the VHS cassette standard, and subsequent affordability of home videocassette players in the 1980s brought with them the proliferation of the movie rental business. By the 1990s, the majority of market share had consolidated to a few participants with similar business models competing on selection, price, and especially location. National chains, such as Blockbuster and Hollywood Video, grew by staking claims at strategic locations with adequate population density. By 1990, Blockbuster professed to have a store within a ten-minute drive of 70% of the U.S. population. Mom-and-pop video stores survived by finding locations the chains did not seek.

Movie rental required that a customer leave his or her home with the intention of renting, then make a spontaneous decision based on what was available. The cost of a video rental ranged from $3.00 per week for older movies to $6.00 per three days for new releases (allowing for weekend viewing when rented on Friday, the most popular day). Small mom-and-pop stores typically had a collection of a few hundred videos for rental; a Blockbuster store had about 2,500 titles. A store's video paid for itself after 13 rentals, so films with mass appeal were the norm; nearly 70% of all films rented at Blockbuster were new releases. Limited selection and stock-outs were a common concern, as was the relative convenience of store hours.

Late returns were a thorny problem: A movie could not be rented until it was back on the shelf, and a scarcity of titles might deter a customer from returning. So video stores charged late fees, which monetized the delay and encouraged the customer to return movies promptly. In reality, as one commentator noted, late fees called attention to customer failure, in the manner of "a disapproving librarian tallying up 35 cents in overdue fines while floating the unspoken accusation you were irresponsible on top of everything else."[1] When Blockbuster eventually dropped many forms of late fees, the move resulted in a charge to revenue of $400 million. The bricks-and-mortar value proposition was eroding.

DVD by Mail

DVD mail service started to gain popularity in the early 2000s. The subscribing customer selected a movie on a website, and a DVD would arrive at his or her home in about one business day. The customer could keep the DVD as long as he or she liked, then mail it back to the provider in the envelope provided. By selecting multiple movies and arranging them in order of priority in an online *queue,* the customer could ensure prompt delivery of subsequent selections and always have something on hand to watch as opportunities arose. Subscription tiers were based on how many movies a customer could receive simultaneously and priced accordingly, starting at $7.99 per month for one movie at a time. (See Exhibit 11-1 for a complete pricing comparison.)

Video on Demand

Video on demand (VOD) was content distribution via an Internet-connected television, computer, or mobile device. The customer selected a movie from an online menu and, within seconds, the movie began streaming to his or her device. The customer could view the content as it was downloaded, rather than waiting for the complete file, which otherwise could take almost as long as the running time of the film. No exchange of a data-storage medium was required, so stock-outs and late fees were avoided, and a significantly larger and more eclectic catalog could be offered.

Kiosk Rentals

Movie rental kiosks were freestanding dispensers of DVDs located in high-traffic areas with extended—sometimes 24-hour—access, such as convenience stores, grocery stores, and fast-food restaurants. Redbox, the dominant player, founded in 2003, was originally funded by McDonald's. As of 2012, Redbox claimed to have rented 1.5 billion movies from 30,000 kiosks nationwide and to operate a kiosk within a five-minute drive of two thirds of the U.S. population. Its only significant competitor, albeit a much smaller player, was Blockbuster's "Blockbuster Express" kiosks.

Kiosks revolutionized the rental price point (about $1.00 per night per movie) and changed consumer renting behavior by eliminating the planning ahead required by DVD-by-mail services and the need to go to another location required by rental stores. Plus, 24-hour access freed customers from time constraints. Selection, however, was limited by two major shortfalls: the physical space inside the kiosk and delayed releases to kiosks by movie studios wary of cannibalizing DVD sales.

A New Range of Business Models

As content delivery methods increased, an industry participant could employ different pricing heuristics across different channels and different end-user content licenses. As such, revenue model, delivery method, and content licensing were dimensions by which each participant might be assessed (see Table 11-1).

In terms of revenue, a business was either pay-per-view or monthly subscription. Depending on the delivery method, the one-time fee of the pay-per-view model would entitle the customer to rent one DVD by mail or online streaming access for a finite time period. In the case of purchase, a one-time fee entitled the buyer to indefinite ownership of streaming content or of an actual DVD.

Table 11-1 Perceptual Market Map for the VHS and Digital Eras

	Revenue Model		Delivery Method		Content Licensing	
Before 2000 (VHS)	**À la carte**	**Subscription**	**Streaming**	**VHS**	**Rent**	**Buy**
Blockbuster	•			•	•	
Hollywood Video	•			•	•	
Video Update	•			•	•	
Local video store	•			•	•	
After 2000 (Digital)				**DVD**		
Amazon Prime		•	•		•	
Amazon Instant Video	•		•		•	•
Blockbuster	•	•	•	•	•	•
Cinema Now	•		•		•	•
DVD Café	•	•		•	•	•
Greencine		•		•	•	
Hulu	Free	Free	•		•	
Hulu Plus		•	•		•	

	Revenue Model		Delivery Method		Content Licensing	
After 2000 (Digital)	**À la carte**	**Subscription**	**Streaming**	**DVD**	**Rent**	**Buy**
iTunes	•		•		•	•
Netflix		•	•	•	•	
Redbox	•			•	•	
Vudu	•		•		•	

Source: Company websites.

Content was either delivered by physical DVD or streamed over the Internet from the service's website to the user's computer or ancillary television device, sometimes called a *streaming player.* Physical discs were still the dominant medium, but increased digital access was expected to continue (Figure 11-2). The downward pressure on physical discs was somewhat mitigated by the increasing popularity of kiosk rental systems such as Redbox. A user's right to content varied by service provider and plan, but generally fell into one of three categories: rental for a finite time period, outright purchase for unlimited personal use, or access to an entire online library from which content could be streamed.

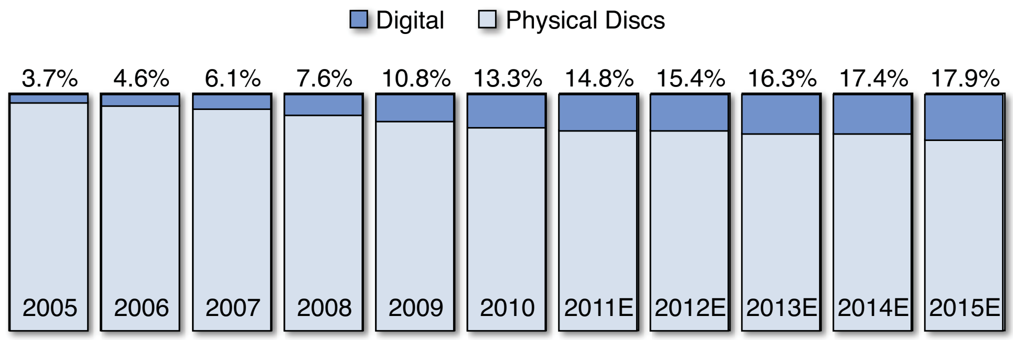

Figure 11-2 Digital streaming as percentage of content delivery, 2005 to 2015 (projected)

Source: Mintel/Digital Entertainment Group, May 2011.

Netflix: "Delivering Goosebumps"

Reed Hastings founded Netflix in 1997 in Los Gatos, California, after paying $40 in late fees to the local video store for *Apollo 13,* and later asking, "How come movie rentals don't work like a health club, where, whether you use it a lot or a little, you get the same charge?"[2] The key was to let people watch movies whenever they wanted.

The Netflix model was simple: Movies that consumers ordered from Netflix's website were shipped to their houses. Once consumers watched the movies, they returned them to Netflix in envelopes that were shipped along with the DVDs. Netflix claimed that it could ship videos to most customers in less than 24 hours.

Netflix's first innovation, in December 1999, was to eliminate late fees. Customers paid a fixed monthly fee of about $16, rented as many as four movies in a single order, and kept films as long as they wanted. Technically, the longer customers kept films, the lower Netflix's shipping cost per rental. Customer retention under this system, however, depended on customers renting more movies per month: the more rentals per month, the more value customers placed on the service. As Hastings stated, "If they [the customers] rent just two movies a month, they may decide it is not worth it."[3] This made Netflix's movie recommendation system extremely important: Good recommendations increased queue length, which increased retention, which increased customer lifetime value.

To expand its customer base and reduce its reliance on the most popular films, Netflix invested significantly in data mining technology. Netflix developed a simple but effective movie recommendation algorithm that compared each user's purchase to those of customers with similar tastes and then suggested films that were highly rated and unseen. These reviews, together with a catalog of close to 85,000 titles, held new releases to only 30% of rentals, and 95% of Netflix's titles were rented every quarter. Netflix was picking up revenue from a far broader distribution of preferences than a retail store could ever offer.

As the Netflix catalog grew, the recommendation system became simpler and more robust. In January 2000, Netflix introduced a new simple and accurate recommendation system called CineMatch. Each customer was prompted to rate certain movie genres and specific movies on a one- to five-star scale. The program found others in its database with similar preferences and then offered a predicted star value for each movie. As the customer rated more films, the accuracy of the data improved substantially. As Hastings stated, "Over 50% of our traffic comes via the recommendation system. It requires a lot of database work done in real time."[4] By 2007, Netflix had close to one billion movie reviews, with customers reviewing an average of 200 movies each.

CLV depended on the extent to which Netflix could leverage its large catalog by encouraging customers to rent more. Its target for per-customer monthly orders was five, the corporate average. Special promotions encouraged current customers to refer the service to friends and family; efforts resulted in an upward trend in customer retention (Figure 11-3).

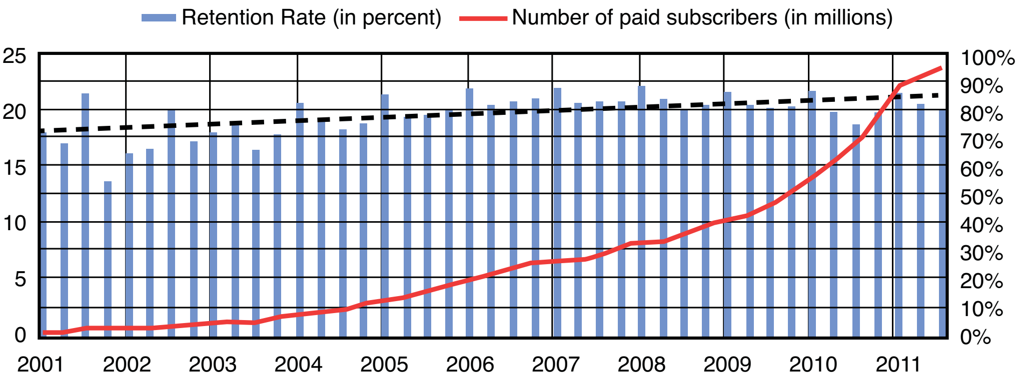

Figure 11-3 Paid subscribers and retention rate, March 2001 to December 2011

Source: Netflix Q1earnings report, 2012.

Conclusion

Keay asked his analyst to compile the financial data required to calculate CLV at Netflix, but a considerable amount of work lay ahead. Was CLV an appropriate approximation of firm value in this setting? Does CLV track with market capitalization, discounted cash flows, or other traditional firm valuation techniques? How sensitive was CLV to various operational and strategic changes? And what role might be played by changes in technology? With such a public call on a volatile stock at this point in his young career, Keay could not afford to miss.

Endnotes

1. Tara Lemmey, "Push the Positive for Customers," *BusinessWeek*, September 13, 2005.
2. Chris Taylor, "The Movie Is in the Mail," *Time*, March 18, 2002, 67.
3. Alan Cohen, "Netflix: DVDs at Your Door," *PC*, February 19, 2003.
4. Cohen.

Exhibits

Exhibit 11-1 Pricing Comparison (Per Month Unless Otherwise Indicated)

	Netflix	Amazon Prime[1]	Blockbuster	iTunes[2]	Redbox[3]
Rental Subscription					
2 DVDs/month, 1 out at a time	$4.99				
Unlimited DVDs					
1 out at a time	$7.99		$9.99		
2 out at a time	$11.99		$14.99		
3 out at a time			$19.99		
À la carte (VOD only)			$3.99	$3.99	
Unlimited VOD	$7.99	$6.58			
Unlimited VOD + DVDs					
VOD + 1 DVD out at a time	$15.98				$1.00
VOD + 2 DVDs out at a time	$19.98				
VOD + 3 DVDs out at a time	$23.98				
VOD + 4 DVDs out at a time	$29.98				
Purchase (à la carte only)					
VOD			$15.99	$14.99	
DVD			$14.99		

Source: Company websites.

1. Includes digital books and free shipping on items purchased from Amazon.com.
2. Per movie.
3. Per movie per night.

Assignment Questions

1. Using the case data and the customer lifetime value formulation provided in Chapter 10, "Customer Lifetime Value," estimate the lifetime value of a Netflix customer for each quarter.
   a. Use the $CLV_{alternative}$ formula in Chapter 10's "CLV with Initial Margin" section and assume a 10% annual discount rate.
   b. In the customer lifetime value formula, you will need to compute retention rate. In the data, you have information on the total number of customers (or subscribers) per quarter and the number of new subscribers (out of the total number of subscribers) per quarter. For example, in June 2001, Netflix had 306 subscribers, and out of these 306, 88 were new subscribers. This information can be used to compute retention rate. The retention rate per quarter is the percentage of subscribers in the quarter who were also subscribers in the previous quarter. For example, the retention rate in June 2001 is equal to the percentage of customers in June 2001 who were also subscribers in March 2001.
   c. You will have to make a decision on what constitutes revenue and variable costs for Netflix to compute the margin (M).
2. How do you expect industry changes and technology advances to affect Netflix? Are these expectations validated by the trend in Netflix's customer acquisition, customer retention, customer revenue, and CLV?
3. Are Netflix's customer metrics a good indicator of its market valuation? Do CLV metrics move with more standardized valuation techniques?
4. How should Netflix react to these technology changes and new entrants? Which company is a bigger threat to Netflix: Redbox, Amazon, iTunes, or VUDU? Why?
5. Should Netflix consider selling DVDs? Why? How would it affect CLV?