Netflix

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Netflix, an online video rental company, offers its subscribers the largest selection of DVDs available for rental anywhere – more than 15,000 titles in all. In addition to carrying Hollywood's latest blockbusters, the service also maintains a vast inventory of classics, art films and foreign language features. It makes these films available to its customers on a subscription basis; for prices ranging from $13.95 to $39.95 per month (depending on the number of DVDs the customer has at any one time), customers enjoy unlimited access to these titles with no late fees and no due dates.

This unusual business model appears to be a winner. Subscriptions, and with them the company's revenues, have been growing at the rate of nearly 100% per year (see **Exhibit 1** for selected financials). And investors love the company: Following a successful IPO in 2002, which raised nearly $77 million, the market capitalization of the company has grown more than 400% to $1.6 billion.

Company history

After six years of running his venture, Reed Hastings sold Pure Atria Software for three-quarters of a billion dollars in 1997. He made a lot of money, but the sale left him without a job; he needed something to do. The founder and CEO of Netflix, likes to tell people that around this time that he rented *Apollo 13* and ended up paying a $40 late fee. "It was my fault in some sense. The movie was about three months late," admits Hastings. He claims that the experience led him to a better model for renting movies; "I realized immediately that [it was] a poor customer experience. It was also suboptimal for the companies, the retailers and the vendors."

Though this story effectively illustrates the value proposition offered by Netflix's subscription pricing model, it may or may not accurately portray the genesis of the company. Netflix began its online DVD rental service in April of 1998. At the time, DVD technology had only been available to the public for one year. Despite enjoying rapid adoption, only 400,000 households had purchased a DVD player by 1998. Local video rental stores, such as Blockbluster, could not justify carrying DVDs because few neighborhoods had a high enough density of households with players. Netflix sought to fill this underserved niche by aggregating DVD owners across the country into a single market.

The service thus began as an online version of a video rental store. Customers could choose from a selection of more than 900 titles – the largest library of DVDs available anywhere at the time. They would pay $3 to $4 per selection, plus shipping and handling, using their credit card (see **Exhibit 2** for a history of the company's pricing schedules). Netflix would then send the videos via the U.S. Postal Service with a pre-stamped return envelope (the negligible weight of a DVD, about one ounce, kept shipping costs each way down to the level of a single first class stamp). Customers could keep the videos up to one week before they would face late charges of $2 per week.

Netflix enjoyed strong support in its early days from the consumer electronics manufacturers that produced DVD players. These manufacturers hoped to drive player sales by pointing to the availability of content through Netflix. Early partnerships linked Netflix in 1998 to Sony, Toshiba and Pioneer, with Panasonic, Philips, Sharp, JVC, Kenwood and Mitsubishi following close behind in 1999. Though the terms of these agreements varied, consumers would typically receive a fixed number of free DVD rentals from Netflix with the purchase of a new DVD player. As a result of these partnerships, Netflix grew to 250,000 users before it even began using traditional advertising channels.

Though Netflix originated partially as a response to the low penetration of DVD players, the situation changed rapidly. Consumers adopted DVD players at a faster rate than any product in the history of consumer electronics. In five years, it had already reached one-third of all U.S. households, and forecasts put it on target for being in 60%-80% of all households by 2006 (with entry prices now below $50 it may happen even sooner). As the population owning DVD players has expanded rapidly, video rental stores have been quick to allocate larger and larger shares of their inventories to DVDs. As a result, Netflix could no longer expect customers to turn to them as the only source of rental DVDs; it needed to find new ways to compete with the local video store.

Pricing structures

Though Netflix mimicked video rental stores in its early pricing schedule, it began experimenting with the traditional pricing model for rentals as early as November of 1998. Its first experiments involved pre-paid discount bundles. Under this program, customers could pre-pay from rentals in groups of 10, 20 or 30 titles. Netflix benefited from receiving the revenue early (and from some of the customers that failed to use their entire bundles), while customers received substantial discounts – as much as 45%.

As video rental stores began to stock DVDs to serve the expanding population of households with DVD players, Netflix looked for news ways to differentiate itself from brick-and-mortar stores. In September of 1999, Netflix introduced its first subscription model, the Marquee Program. Customers paid $15.95 per month for up to four rentals. Each additional rental cost $3.98. The real innovation, however, came from the fact that the program eliminated due dates and late fees. Rentals exploded following the introduction of this program, tripling from 33,000 to more than 100,000 per week in just six months.

It further modified the Marquee Program in February of 2000 by doing away with limits on the number of titles that a subscriber could rent per month. Customers could now order as many videos as they wished; the limits applied only to the number of titles that they could hold simultaneously. For $19.95 per month, a customer could have four titles at a time. When they wished to return one, they sent it in and Netflix would automatically send them their next choice. In October, they modified the popular $19.95 price tier to allow three titles at a time; Netflix also offered other subscription levels, from $13.95 to $39.95, that allowed subscribers to hold anywhere from one to eight titles simultaneously. Netflix automatically bills each customer's credit card at the beginning of each month.

Operations

Netflix, like other rental companies, obtains its DVDs from film distribution companies. It acquires these titles in one of two ways. Netflix sources recent titles through risk sharing agreements with distributors. Under these contracts, Netflix receives DVDs for little or no upfront fee, but shares a percentage (usually 30% to 40%) of the rental income garnered from it for the first 12 months following its release. At the end of the year, Netflix can either purchase the DVD or return it to the distributor. The company has entered into these agreements with more than 50 distributors, including Artisan Entertainment, Disney's Buena Vista, Dreamworks,, MGM, Sony (Columbia Tri-Star), Twentieth Century Fox, Universal Studios, USA Films, and Warner Brothers. Together these distributors account for the bulk of all new releases; in total, DVDs acquired under these agreements account for 80% of Netflix's inventory of DVDs. The company purchases the remaining 20% of the DVDs in its library outright.

These titles cover nearly the entire range of genres produced both in and outside of Hollywood. Netflix maintains a particularly large selection of features in the categories eschewed by the major video store chains: anime and animation, classics, foreign language and international movies, and independent produced films. Though it originally carried adult features, it quietly discontinued this category in 2001.

It distributes these videos from several regional centers. Originally, Netflix served the entire country from a single facility located in San Jose. It did not maintain a delivery fleet; it used the U.S. Postal Service. "The U.S. mail, with its 800,000 employees delivering to 100 million homes six days a week, is the ultimate digital distribution network," comments Hastings. Nonetheless, in its early years, customers might wait as long as five days to receive their selections. By 2002, the company added ten regional distribution centers in Atlanta, Boston, Denver, Detroit, Houston, Los Angeles, Minneapolis, New York, Seattle and Washington D.C. Each center can handle 50,000 DVD requests per day. The addition of these regional centers allowed Netflix to reach 90% of the country in one or two days through the Postal Service. Using proceeds from the IPO, the company added additional facilities bringing the total number of regional distribution centers to 22, lowering the shipping time to one day for 80% of subscribers.

This quick turn around helps Netflix retain customers. The company succeeds on its goal of a one-day turn around time in 50% of cases. Although reducing the time in transit has

increased shipping costs – because customers can borrow a larger number of titles each month – the reduction in churn rates (the proportion of subscribers canceling each month) has more than offset these costs. In 2002, the company experienced an average churn of 7.2%; by the third quarter of 2003, that statistic had declined to 5.2%, implying that the average time a customer maintained his or her subscription increased from 14 to 19 months.[1]

Netflix also keeps customers by keeping them satisfied. The company maintains a 24-hour customer service center in San Jose to correspond with its customers via e-mail (99% of all customer inquiries come in the form of e-mail). The representatives in this center aim to correspond to subscribers' questions in real time; the typical response goes out within an hour of the e-mail it answers.

Though quick turn-around and good customer service go a long way toward maintaining satisfaction, subscribers must also continue to want to rent titles. Maybe people will stop subscribing once they've seen all of the movies they had been meaning to. Netflix combats this risk with its CineMatch™ program. This propriety software recommends new videos to subscribers. A user begins by rating several movies. The program then compares these ratings to those of other users to suggest titles that the person might enjoy. The software can even combine the preference profiles of two users to recommend titles that both should enjoy. The user then consults these suggestions to select a large "Rental Queue" of titles. The program continues to learn and improve its recommendations as the user rates the films that they order and watch. Much of the value of this software comes not from its matching algorithms, but from its enormous database of ratings – more than 150 million.

Subscribers clearly appreciate this feature. Neil Hunt, VP of Product Development, notes that, "Somewhere in the vicinity of 40% to 50% of the movies that people rent from the site are in some sense mediated by data coming from the recommendation system." As a result, Netflix relies on a much larger fraction of its inventory to serve customers; 80% of rentals come from 2000 titles. Also, more than 40% of its rentals draw on movies released more than one year ago (vs. 10% for the typical video store).

To attract new customers, Netflix relies primarily on three approaches. A partnership with the Best Buy Group (including Best Buy, Sam Goody and Suncoast retailers), introduces people buying DVD players to Netflix from day one. The company also advertises both online and in traditional media. It uses both to drive customers to its most effective tool: the two-week free trial. Together, the free trials and advertising generate customer acquisition costs that have fluctuated between $28 and $35 per subscriber.

Blockbuster strikes back

In the middle of July of 2002, Hastings remarked that, "One of the disappointing aspects in the latest quarter was the lack of competition from another major company... [a strong

[1] One can calculate average lifetime from a churn rate simply by dividing one by the churn rate (e.g., 1 / .072 = 13.9).

competitor] would give the entire space credibility." He didn't have to wait long for his wish to come true.

At the end of that same month, Blockbuster began to experiment with its own subscription model. Customers still go to the store to select and return videos, but the Blockbuster Subscription Pass allows members to keep two DVDs checked out for a fee of $19.99 per month (or three DVDs for $24.99 per month). Like Netflix's service, subscribers can rent as many films as they like in a month and do not need to worry about late fees or due dates. Following 18 months of testing, Blockbuster planned to rollout the program nation wide in the beginning of 2004.

Blockbuster is the 800-pound gorilla of the industry. It operates more than 8000 stores and has 50 million active accounts; 64% of the U.S. population lives within a 10-minute drive of an outlet. Each of these stores maintains an inventory of roughly 1000 titles, but more than 80% of revenue each year comes from a mere 200 titles. Most demand for a title at Blockbuster occurs in the first 90 days following its release (90% of all Blockbuster revenue comes from films released in the last year), so stores maintain deep stocks of the latest offering and only one or two copies of older titles. To minimize its inventory costs of carrying large numbers of copies of recent releases, Blockbuster has negotiated risk-sharing deals with distributors, whereby they share the rental revenue from videos in exchange for not paying to purchase each copy. In total, Blockbuster acquires 65% of the DVDs in its inventory through revenue-sharing programs.

Though it has tremendous scale and resources, it does not have the affection of its customers. More than 10% of Blockbuster's revenues come from the unpopular late fees, and the company has a history of running promotions that leave people unsatisfied. For example, in 2001, they offered a deal that gave customers a free DVD player with the purchase of 52 weeks of prepaid DVD rentals, for the price of $200. The fine print, however, stated that if the customer missed a week, Blockbuster would void all of their remaining prepaid rentals.

Going into 2004, Hastings wondered whether Netflix would be up to the challenge. He thought that they had a superior model that could fend off Blockbuster, but he also worried because Blockbuster brought not just its own considerable resources to the table but also potentially those of its parent, Viacom.

Exhibit 1: Selected financial data

	2003 (estimated)	2002	2001	2000
REVENUES				
Subscriptions	$271,130,000	$150,818,000	$74,255,000	$35,894,000
Sales	$2,352,000	$1,988,000	$1,657,000	-
TOTAL	$273,482,000	$152,806,000	$75,912,000	$35,894,000
COGS				
Subscriptions	$145,787,000	$77,044,000	$49,088,000	$24,861,000
Sales	$820,000	$1,092,000	$819,000	-
TOTAL	$146,607,000	$78,136,000	$49,907,000	$24,861,000
OPERATING EXPENSES				
Fulfillment	$31,347,000	$19,366,000	$13,452,000	$10,247,000
Technology (R&D)	$17,993,000	$14,625,000	$17,734,000	$16,823,000
Marketing	$48,353,000	$35,783,000	$21,031,000	$25,727,000
G&A	$9,937,000	$6,737,000	$4,658,000	$6,990,000
Stock-based comp.	$9,040,000	$9,831,000	$5,686,000	$8,803,000
TOTAL	$116,670,000	$85,342,000	$63,232,000[2]	$68,590,000
OPERATING PROFIT (LOSS)	$10,205,000	($11,672,000)	($37,227,000)	($57,557,000)
OTHER				
Subscribers	1,417,000	857,000	456,000	292,000
Trials (during year)	1,541,000	1,140,000	566,000	515,000
Acquisition cost	$31.37	$31.39	$37.16	$49.96
Churn	4.8%	6.3%	7.7%	N/A

[2] Includes one-time restructuring charges.

Exhibit 2: Pricing schedules

	Rental price	Shipping fees	Rental period	Late fees
Apr 1998 to Mar 1999	\$4 for first two \$3 for each additional	\$2 for first + \$1 each to \$5	1 week	\$2 / week
Apr 1999 to Aug 1999	\$3.49 each	None	2 weeks	\$0.99 / week
Sept 1999 to Jan 2000	\$15.95 / month for four \$3.98 for each additional	None	Unlimited	None
Feb 2000 to Sept 2000	\$19.95 / month for four titles at a time	None	Unlimited	None
Oct 2000 to present	\$19.95 / month for three titles at a time	None	Unlimited	None