Netflix is the largest online entertainment subscription service in the United States, providing more than 4 million customers with access to over 55,000 DVD titles (and more than 42 million DVDs in total). Netflix's basic business is renting DVD titles on a subscription basis, with different plans ranging from $9.99 a month to $47.99 a month. But how did Netflix build up a nationally recognized successful brand in a marketplace filled with established brand names such as Blockbuster, which has over 20 million customers and 40,000 rental DVD titles distributed through over 9,000 local neighborhood stores, and Wal-Mart, the world's largest and most efficient retailer?

Netflix started out in Los Gatos, California (in the heart of Silicon Valley and the San Francisco Bay Area) as a regionally based online movie store. It offered Bay Area customers a simple list of videos arranged by title and lead actor. Rentals were mailed out and renters were charged the usual late fees for failure to return within a week. Despite the simplicity of its business model and regional character, Netflix had gross revenues of over $1 million in 1998, but lost over $11 million. It was hardly an auspicious beginning, even though these first years demonstrated a market for online video rentals.

In 2000, Netflix changed its business model to that of a nationally based subscription model, entered into a number of relationships with Hollywood producers to speed up access to recent titles, expanded the functionality of its Web site, and changed its strategic marketing objectives toward becoming a nationally recognized online brand name. Unlike most neighborhood video rental stores at the time, Netflix changed from charging a fee for each video
rental to assessing a monthly service charge for unlimited video rentals. Customers rent as many videos as they want (with its most popular plan allowing a limit of 3 videos signed out at any given time) every month. For hard-core video fans, Netflix developed a $47 a month plan that allows eight movies to be checked out at once. Moreover, Netflix eliminated late fees—the single largest complaint of video store customers around the country. To fulfill orders on a national basis, Netflix established video warehouse operations in various metropolitan areas around the United States (now totaling 37) and entered into a long-term relationship with the United States Postal Service to ensure delivery within one or two days in most parts of the country at very low cost for high-volume deliveries. Netflix provides a pre-stamped mailer for postal returns, absorbing the cost by using revenues from sales of DVDs to some renters.

To build national brand awareness, Netflix used every method in the e-commerce playbook. Netflix marketed its service by purchasing pay-for-performance banner advertising from Yahoo, MSN, and AOL. It used search engine marketing and pay placement ads on major search engines and permission-based e-mail. It also developed an active affiliate marketing program where third parties can automatically download Netflix ads and logos, place them on their sites, and collect revenues for steering customers to Netflix. Netflix also entered into a relationship with Best Buy—an online offline electronics store—to place Netflix flyers offering a free 14-day trial of its service inside every DVD player Best Buy shipped.

On its own Web site, Netflix offered free trial periods and experienced conversion rates. Hollywood studios distribute their filmed entertainment to the video market six months after the theater release, to the pay-per-view (PPV) market seven months after theater release, to premium satellite and cable systems one year after release, and to general broadcast television and basic cable about two to three years after release. Rather than invest heavily in the purchase of DVDs from Hollywood studios, Netflix entered into a revenue-sharing arrangement with several studios, which allowed Netflix to purchase the DVDs below cost but to share the revenues from rentals with studios. In this way, Netflix was able to build a bigger inventory faster and with investment.

But building a brand also involves building a trusted high-value relationship with customers, a unique value proposition that the customer cannot obtain elsewhere even at a premium to receive. To build this relationship, Netflix enlarged its titles library from a few thousand to over 50,000 titles, providing customers ten times more titles than can be found in the typical large Blockbuster store (and adding customer value through the “library effect” described later in the chapter).

In an effort to provide personalized video rental advice, Netflix also added a recommender system to its Web site. Using its own customers as a knowledge base, Netflix asked customers to submit online reviews, comments, and recommendations on the videos they rented. So far, Netflix has gathered over 1 billion customer recommendations, which it then makes available to the entire online customer base—a valuable and unlimited resource. Using data mining techniques and a collaborative filtering tool similar to Amazon’s, Netflix is able to recommend to its customers new videos based on each customer’s personal profile of previous rentals and the rentals of other similar customers.
Netflix can tell customers who have selected one video, "Other customers who selected
this video also chose the following videos." Using the results from its data mining efforts,
Netflix sends e-mail to its customer base offering recently released videos that, given the
customer's previous rental history, might be of special interest to that customer.

The competition has been slow to respond to Netflix's advances online. Wal-Mart
tried to compete for a time, but in May 2005, threw in the towel and announced that it
was giving up on the business and instead directing its subscribers to Netflix. Blockbuster
waited until 2004 to open an online service that is linked to its retail stores. It uses its
retail stores as shipping centers, and permits customers to receive online orders by mail,
but drop off returns to the local store. As of September 2005, Blockbuster had
approximately 1 million Blockbuster Online subscribers. It also announced plans to
invest heavily in the business with the goal of having over 2 million subscribers by the end
of 2006 and achieving profitability by 2007. Amazon, the world's largest online store,
has not yet entered the market, but is testing out a video-by-mail model in England and
plans to bring it to the United States once it develops the technology.

Netflix executives claim they are not worried, arguing the market will simply
ealrease as Blockbuster and Amazon expand their offerings. Currently, the market for
video rentals is about $8 billion, with only $200 million from online sales. Wall Street
investors are not convinced that CEO Reed Hastings is right when he claims that the
entrance of Blockbuster and Amazon will double the market for DVD rentals to about
20 million subscribers, producing about $4 billion in annual revenue. Blockbuster has
already started a price war by dropping its monthly rental fee to $15, as well as
dropping late fees. And the specter of video on demand looms on the horizon.
Nonetheless, in 2005, Netflix seemed to be defying gravity as it grew its subscriber base
by 75% in a single year, based on its strong branding which itself is based largely on its
selection, Web site effectiveness, performance, and strong customer service. It is
unclear if Blockbuster and Amazon can match all these elements of Netflix' strategy.
About the only sure thing in this video rental market is that a lot of retail video stores
will be looking for customers in 2006.

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SHOULD WEB BUGS BE REGULATED?

Images called “clear GIFs,” “Web beacons,” and “invisible GIFs” don’t sound too threatening. But when they’re referred to as “Web bugs,” Internet users begin to get a better sense of the true purpose of these devices. Web bugs come in several different varieties, but the basic idea is that they are objects (images or a tiny pixel) that are embedded invisibly on Web pages and in an e-mail that cause a part of the Web page (usually that image or pixel) to be retrieved by a completely different third-party Web site. As a result, the third-party Web site knows that you visited the original Web site, and they can know much more if they want to.

Marketers using Web bugs claim their sole purpose is to aid in collecting statistics about Web usage, including how many visitors a particular site has had, which pages on a site are most popular, and which banner ads are providing the best results. Search engine marketing and portal companies such as Google, Microsoft, and AOL use them, as do advertising networks such as DoubleClick. Canadian Web security firm Security Space periodically samples around 8 million Web pages from around 1 million different Web sites to identify the top bug-using sites and the top 100 Web buggers (the sites that are doing the bugging). In August 2005, the top buggers was Google syndication.com, followed by its parent, Google.com.

Web bugs are used to track billions of monthly advertising promotions. Without such data, advertisers argue, they would be unable to determine which marketing techniques to use. All information collected is anonymous—so they say—and, on its own, cannot be linked back to any particular individual. For that reason, advertisers claim Web bugs are innocuous.

So why go to the trouble of hiding them?

That’s what privacy advocates are asking. And what they’ve learned is that although Web bugs may have been designed to simply provide traffic counts, when combined with information from third-party sources, bugs can give marketers an all too complete picture of an individual consumer—right down to home address, online account balances, account numbers, and whatever else the user has entered into his or her computer.

When users visit a Web page with a Web bug on it, or read an e-mail with a bug inserted, unbeknownst to them, data about their online activities is forwarded to a third-party information collector, usually a marketing firm. Web bugs can report a user’s IP address, referring URL, and cookie information from a visit to a site, and from an e-mail can link an e-mail address to previously set cookie data. There are several different types of Web bugs. The simplest and most common bug is the clear GIF that works with cookies to transmit information to third parties about a user’s online travels. Truly insidious “executable bugs” can install a file onto someone’s hard drive to collect information whenever the user goes online; such bugs can scan a computer and send information on all documents containing keywords, such as medical or finance. “Script-based executable bugs” can actually take documents from a computer without notice. So while the majority of bugs may be used simply to track a user’s movements, there appears to be great potential for abuse.

Bugs enable marketers to know who’s online, which Web sites they’ve visited, where they’ve spent money, what their address is, and more. When the technology is used by a network of sites linked to a third-party, such as DoubleClick, consumer profiling becomes even more detailed, leading to a potentially significant loss of privacy.

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Use of Web bug technology has risen sharply. A report by Cyveillance found Web bugs on almost 20% of personal Web pages and over 15% of corporate home pages. Personal pages that AOL and Geocities (a company owned by Yahoo) allow members to create for free are a common source of bugs. Collecting information on consumers is nothing new, but the extent to which data can now be accumulated and combined to form very specific profiles of Internet users has led to calls for regulation.

The Privacy Foundation has issued guidelines for Web bug usage. The guidelines suggest that Web bugs should be visible as an icon on the screen, the icon should be labeled to indicate its function, and it should identify the name of the company that placed the Web bug on the page. In addition, if a user clicks on the Web bug, it should display a disclosure statement indicating what data is being collected, how the data is used after it is collected, what companies receive the data, what other data the Web bug is combined with, and whether or not a cookie is associated with the Web bug. Users should be able to opt-out of any data collection done by the Web bug, and the Web bug should not be used to collect information from Web pages of a sensitive nature, such as medical, financial, job-related, or sexual matters. The Privacy Foundation is also currently beta testing software, named Bugnosis, that notifies consumers when a Web bug is detected. If the program finds a possible Web bug, it alerts you with a sound and gives the user some details about the Web bug in a window. It also makes visible the Web bugs hidden on the page.

In an effort to address privacy concerns and build consumer trust online, an industry advertising group, the Network Advertising Initiative (NAI), released self-regulatory guidelines for the industry. The NAI renamed Web bugs as "Web beacons" and requires online firms to notify customers of Web bug usage whether in e-mail or on Web sites, state the purpose of their use, and disclose any data that could be released to third parties. The NAI also called for users to be given a choice (whether opt-in or opt-out) of any release of personally identifiable information (PII) to third parties, and to provide an opt-in choice for any release of information related to PII. These restrictions do not apply to the Web site itself (agents). In addition, the NAI provides a capability open to all Web users to opt out of online advertising networks collecting non-personal information on them. However, for this to work, users need to have a cookie downloaded to their browser that will inform the networks not to collect information on this user.

There are also technology solutions that depend on the browser or e-mail provider. For instance, Microsoft retooled its Hotmail service by adding a feature that allows users to block Web bugs placed inside e-mail messages. A similar option is now a part of the Outlook Express and Outlook e-mail programs. Mozilla's Thunderbird e-mail program also allows users to prevent incoming e-mail from displaying any images, hence blocking reports back to third parties. However, this kind of protection would be impossible for ordinary Web pages which depend on images. Indeed, images are at the heart of the Web.

Currently, Internet users are not protected by government regulation against Web bugs. Most users probably have no idea that Web bugs are in use, how to adjust their browsers to block Web bug images, or how Web bugs are used to track their movements on the Web.

THE LONG TAIL: COLLABORATIVE FILTERING AND RECOMMENDER SYSTEMS

Recommender systems automate the process of collecting and distributing recommendations from other users.

The software enables users to rely on feedback from other users with similar tastes or buying habits in order to find what they are looking for. This software is called generically "collaborative filtering" and there are many different types of collaborative filtering software. Software programs developed by Firefly, Digimine, TripleHop Technologies, and NetPerceptions are among the best-known, with companies such as Epinions, TiVo, Netflix, J.Crew, Barnes & Noble, and Amazon relying on such technology to provide Web site visitors with product and service recommendations. Epinions uses a relatively simple system in which it collects feedback and ratings from members—tens of thousands of them—on everything from shampoo to chain restaurants to cars and then makes the opinions and rating available to anyone looking for guidance.

Netflix and Amazon's recommendation engines that suggest additional book and movie titles for customers to consider use a more sophisticated approach to produce personalized recommendations: "readers who liked this book also purchased the following books..." Netflix and Amazon report that over 60% of their sales result from their recommender systems.

Web-based recommender systems have the ability to create huge markets for niche products that have very little demand, and have also created a new marketing phenomenon called "the Long Tail." For instance, in 2002, Amazon's recommender system recommended a book by Joe Simpson called Touching the Void to purchasers of Jon Krakauer's best-selling book Vanish into Thin Air. Prior to this recommendation, Joe Simpson's 1988 book had gone out of print and demand was near zero. After the recommendation, Random House rushed out a new edition and the paperback ended up on the New York Times Bestseller List. In 2003, a movie was made based on the book.

The Long Tail is a colloquial name given to various statistical distributions characterized by a small group of events of high amplitude and a very large group of events with low amplitude. Think Hollywood movies: there are big hits that really hit big, and thousands of films that no one ever hears about. It's these non-hit misses that make up the Long Tail. On the Internet, where storage and distribution costs are near zero, marketers are finding that the demand for these "misses" has more revenue value that the total revenue derived from selling the big hits. Of course, this is not true of Wal-Mart or physical stores where storage and distribution costs are high, forcing them to stock only big hits.

The problem with all those misses in the Long Tail is that few people can find them because they are—by definition—largely unknown. Hence, in their native state, the revenue value of low-demand products is locked up in collective ignorance. Here's where recommender systems come into play: consumers can be guided to obscure but wonderful works by other consumers using recommender systems.

Recommender systems use historical data on user preferences or behavior to predict how new users will behave. Memory-based systems use the entire database to make predictions and model-based systems use past data to build a model of consumer behavior and then apply the model to new consumers. Using a similarity
metric, which is a means of segmenting the user base, a subsegment of users are selected whose behavior or preferences are similar to the user seeking recommendations. An average purchase propensity for a specific product by members of that subsegment is calculated, with a recommendation made based on that average.

In many cases, recommendations are made based on past purchasing behavior of the user, which may or may not reflect the needs or preferences of the user today. The ability to narrow down the list of potential options, however, makes the information-gathering process more efficient and, for many users, very helpful.

When Mike Kellogg of Chicago shops at Amazon.com, Amazon's recommender system knows that Mike loves Wilco, a folk/rock band, and offers him CDs with a similar sound. But recommender systems have their weaknesses. When Anne Heilman of Iowa City visits Amazon, she is likely to get recommendations about wedding flower girls and flower girl books, and even more recommendations on baby books. Anne is not interested in any of these things, but the system remembers that she once visited Amazon and bought a gift for a friend's seven-year-old daughter who was scheduled to be a flower girl in the friend's wedding. Another story of computer-based filtering gone mad is a woman called only "Molly" who bought a single trashy novel on Amazon, and now is bombarded with ads for more trashy novels.

These experiences are reflected in the findings of a Forrester Research study that found that 7% of online consumers often purchased recommended items, 22% found them valuable, but 42% said they were not of interest. These findings conflict with the experiences of well-known recommender systems such as Amazon's, but also may reflect a certain reticence among the general Web consumer population to trust recommender systems.

One solution to these problems turns out to be human beings in the form of editors. Online music stores hire music analysts to chart new groups and identify new genres that otherwise would never make it into filtering systems. Another solution is to ask consumers to establish their own profiles. Mike Kellogg loves everything about Bob Dylan and has edited his profile to ensure he receives recommendations about Dylan. The same feature allows gift givers such as Ann Heilman to alert the system that it should ignore her current purchase and not put it in her profile.

To some extent, these common-sense solutions to include human experts and the customers themselves fulfills the original intention of collaborative filtering, which was to let the consumer, and consumers as segmented groups, shape the nature of ads they receive. But business considerations often enter the mix as well. Sharp managers of inventory want to make sure that overstock items are highlighted in recommendations and out-of-stock items are removed. But software developers argue that such manipulation reduces trust in the system. Amazon has decided not to let business considerations alter its collaborative filtering system.
INSIGHT ON BUSINESS

ZOOMERANG AND THE POWER OF ONLINE FEEDBACK

Young single Americans overwhelmingly choose wine on the all-important first date. And the wine they choose overwhelmingly is Australian wine. Why? Because over 64% typically associate Australia with fun, adventure, and excitement, according to the Australian Wine Bureau (a trade group). These statements are based on an online survey conducted by Match.com (the dating site) and Zoomerang, one of the leading online survey firms.

The best way to get to know your customers is to sit down over a cup of coffee and discuss your product and the buying experience. But how do you do that with thousands or even millions of customers online? Before the Web, conducting market research was a time-consuming, often arduous task. Creating and conducting a survey, for example, could take weeks, if not months, to complete and finalize results. Once the survey was created, it would need to be printed and then mailed. Analysis of the results would take a team of experts more months. But the Internet has changed all that. Fortunately, the reach and immediacy of the Web has made online surveys virtually instantaneous and far less expensive than traditional phone or mail surveys. One company even provides such survey services for free.

Zoomerang.com, a product of MarketTools, Inc., was one of the first online survey tools launched, in September 1999. Zoomerang enables users to choose from dozens of pre-built survey templates, edit as needed, distribute the finished product to a pre-selected list of recipients, or use Zoomerang’s consumer panel and collect responses—all online. Whether the need for a survey is personal, such as gathering input from family members regarding a proposed family reunion or collecting ideas for wedding gifts from friends, or business, such as implementing a new customer satisfaction survey or developing an advertising performance study, Zoomerang has a wide range of already-created surveys ready to be issued.

Zoomerang has a limited service called Basic Membership that is free and allows you to receive a report on up to 100 responses per survey, with a limited analysis capability. Zoomerang’s zPro is a professional-level survey tool that licenses for $599 a year and allows companies to ask an unlimited number of questions per survey and comes with extensive data analysis capabilities.

Vermont Teddy Bear Company sells stuffed bears. It uses Zoomerang to conduct customer surveys on new product designs. River West Brands revitalizes dormant brands, then licenses them to manufacturers. It uses zPro, coupled with Zoomerang’s zSample service, which provides a set of targeted survey respondents, and allows River West Brands to select the exact demographics and behavioral attributes of survey respondents they require to obtain the research results they need. Mitsubishi Motor Sales of America uses Zoomerang’s zPro to collect consumer feedback on new programs it would like to introduce. Levi Strauss also uses zPro to collect employee feedback about corporate benefit programs on its corporate intranet. Over 1,000 employees used Zoomerang to respond to its annual benefits feedback survey. Office Depot, arguably the world’s largest office supplies provider to business, used Zoomerang in 2005 to launch its branding effort “Taking Care of Business.”

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Zoomerang does have competitors. A company called SurveyMonkey offers a professional subscription that comes close to Zoomerang’s zPro but costs only $19.95 a month. Nevertheless, Zoomerang has emerged as the market leader in the rapid collection of consumer feedback on the Internet. It has launched over 1 million surveys, with over 27 million responses recorded. Zoomerang counts over 25% of the Fortune 500 among its clients and has performed online surveys in over 200 countries.


Personal interviews offer an opportunity to gather more in-depth information on a topic. In some cases, personal interviews are used as a second phase of a research project, following initial information gathering by survey. In-depth interviews with a target market segment can yield more specific answers to issues and questions brought up in the survey research phase. However, the amount of time required to gather information and the low response rate are both disadvantages; it is more difficult to convince someone to participate in an extended interview than in a short survey.

Focus groups, like personal interviews, allow researchers to gather more specific responses to questions and to probe some issues more deeply. However, focus groups are less structured in order to allow participants to voice their opinions and feelings. Focus groups generally consist of 8 to 12 participants who are members of a particular market segment or target market. A third-party facilitator leads the group in expressing opinions and stating preferences regarding products, services, or other issues. Online focus groups typically run for one hour and have participants log into a chat room, where opinions and ideas can be expressed within a group. The advantage of focus groups is that many views and opinions can be learned in a short period of time. However, more extroverted individuals can overshadow more timid participants so that only a few opinions are heard. This concern is less of an issue online because participants cannot see each other and feel more confident expressing themselves through typing.

Observation is another traditional market research method. Observation involves simply watching consumers as they make a purchase, or while they engage in some activity that is being studied. Online customer tracking is the Internet equivalent to observation. It, too, involves simply observing—rather than interacting with consumers as they navigate a Web site and consider various purchase options. Using cookies and other session monitoring tools, Web site marketers can easily collect data on consumer preferences, dislikes, and challenges in order to improve future experiences at the site.