

Managing in the Digital World: eBay Under Attack

You or someone you know has probably seen the phishing line. It comes in the form of an e-mail message from eBay on “stationery” that is an exact replica of the design eBay uses. The salutation says something like, “Dear eBay account holder.” That’s the first clue that the message did, in fact, not originate with eBay. (eBay always addresses account holders by their eBay user ID.) The message goes on to say that your eBay account will be canceled unless you send in some missing information, including credit card numbers and passwords. The scammer provides a link to a fake eBay site where you are asked to fill in the personal information. Don’t do it. It’s not from eBay; it’s from a scam artist hoping to get personal information that will allow him or her to steal from you. The scam is called “phishing,” and it has bedeviled eBay and its account holders for too long.

Since approximately 100 million people in 26 countries have eBay accounts, even a few responses to a phishing scam can be extremely profitable for crooks. In 2006, for example, six phishing scammers stole £200,000 (approximately \$372,000) from unsuspecting eBay users in London. The gang sent e-mails identifying themselves as eBay management and, as in the tactics described previously, needed the eBay account holders to visit the eBay Web site to provide missing information. The scammers provided links that closely mimicked eBay’s site. When the users signed on to the fraudulent site, the thieves stole personal information. The scammers then assumed the identities of the legitimate users and sold nonexistent products such as Rolexes and laptops. The thieves disappeared when the money arrived, and “winners” of the phony auctions were also losers.

eBay repeatedly warns users not to respond to such e-mail since the company has an internal messaging system to eliminate the need for sending most e-mail to its registered users. Still the scam continues. A variation of the “verify account information” scam sends victims to a valid Web site where they are then routed to a phony eBay site and asked to “verify” or provide account information. eBay phishing scams continue to increase despite the company’s best efforts to prevent them. (eBay admits it is becoming increasingly harder to tell phony phishing e-mail from legitimate eBay messages.)

One method eBay uses to help buyers and sellers separate legitimate users from criminals is a rating system that lets customers rate transactions as positive, neutral, or negative, thus establishing a feedback score. Feedback scores allow prospective customers to see a buyer’s or seller’s rating and thus choose whether to proceed with a transaction. eBay also offers a form of buyer insurance—up to \$500 in purchase coverage—at no additional cost. This

FIGURE 5.1

Many eBay customers are victims of phishing attacks.



service is available for those eBay users that conduct transactions through PayPal’s system.

As with all forms of Internet crime, however, eBay cannot offer absolute protection for its customers. For instance, in 2003 the Salt Lake City Police arrested a 31-year-old man who was accused of perpetrating one of the biggest scams in eBay history. Hundreds of customers complained that they sent \$1,000 to a company called Liquidation Universe for laptop computers they never received. Early in the investigation, police determined that the suspect scammed over 1,000 eBay customers to the tune of \$1 million in just a few weeks. eBay worked with the victims of the scam to help them get their money back, but the company does not reimburse customers for items not received. In other cases, crooks were offering counterfeit products—anything from collectables to software—on eBay; by the time a buyer finds out, the seller’s account is often closed. In fact, in 2005, over 16,000 entries offering pirated products were closed by the Business Software Alliance.

Unfortunately, since eBay is a popular, successful Web site, criminals who prowl the Internet will continue to target it. The best hope for honest users is that technology designed to thwart scam artists can keep up.

After reading this chapter, you will be able to answer the following:

1. What are the strengths and weaknesses of eBay's online auction model of electronic commerce versus a more traditional company Web site?
2. What are the various payment options for conducting business-to-consumer or consumer-to-consumer electronic commerce?
3. What are the threats to consumer-based electronic commerce?

Sources:

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Managing in a Digital World: TiVo

“You’ve got a life. TiVo gets it.” With that catchy motto, in 1999 TiVo Incorporated introduced a service that gave users unprecedented control over television viewing. Hate to miss that football game for your sister’s wedding? TiVo will record it for you, and you can watch it at your convenience. Are there certain shows you always have to miss because you work late hours? TiVo solves the problem again. On the TiVo Web site, the service describes itself: “Your TiVo® box, powered by the amazing TiVo® service, automatically finds and digitally records all of your favorite shows, every time they’re on. Every episode of your favorite series. Every Coppola movie. Every home improvement program. Even Dora cartoons! Whatever you choose. All while you’re out living life. Plus, only TiVo lets you watch your favorite shows any time, anywhere.”

Mike Ramsay and Jim Barton developed their TiVo business plan in 1997. The first TiVo “boxes” shipped to customers in 1999. A 2006 subscriber to TiVo’s service got the box, ranging from the basic model for free that records up to 80 hours of TV, through models that could record two shows at once priced at \$30 and \$130, up to the \$180 model that included a 40-hour TiVo box, DVD player, and DVD burner. Monthly subscription fees ranged from \$16.95 to \$19.95 and a three-year prepay option was also available. The subscription service allows users to select shows to record without knowing scheduled times.

TiVo is basically a simple computer with a hard drive recorder that incorporates the following capabilities:

- Automatically record your favorite shows whenever they are on; works with cable, satellite dish, or antenna
- A search engine to find and automatically record the shows that match your interests (by title, actor, director, category, and even key word)
- Easy home networking features that enable online services like Podcasts, Yahoo! Weather and Traffic, and local movie listings and tickets from Fandango
- Easy-to-use to-go features that let you transfer shows to your laptop or portable device or easily burn them to DVD
- Scheduling last-minute shows from the Web

TiVo makes TV watching an interactive experience in that you can pause the action if the phone rings, answer the phone, and then either return to the show exactly where you left off or fast-forward to the story where it is when you return. You can also do instant replay without missing a moment of the action.

The internal architecture of a TiVo box consists of a microprocessor, a video encoder/decoder chip, and an internal hard drive. The hard drive’s capacity initially was

FIGURE 3.1

TiVo allows consumers to watch television programming on their time schedule.



13 to 60 GB, which has steadily increased over the years to 250 GB. The new TiVo models have the capability to record high-definition TV, record from two channels simultaneously, burn DVDs of the content of the internal hard drive, and connect to Ethernet and wireless networks. Licensed manufacturers produce all the hardware, and TiVo provides the software that runs the hardware. The software is a Linux-based operating system and has frequent updates.

The variety of selections available to users include the following:

- You can select a genre of movies, such as comedy, mystery, or romance, and request that your TiVo record them.
- You can select only those shows for recording that have your favorite actor.
- You can select specific types of shows that have your favorite actor.
- You can drill down selections to include one person or item, such as recipes for asparagus.
- In addition, if you connect the TiVo box to your home computer network, you can play music from your computer on your TiVo system.

- You can view photos stored on your computer using TiVo. They are displayed on the TV screen, so everyone does not have to crowd around the computer to see photos.

TiVo has recently launched an online service called TiVo Central, which allows users to schedule the recording of any program by accessing the Internet from any location, regardless of the location of the TiVo box.

As with any successful new technology, other companies have imitated TiVo. Several cable TV companies offer digital video recorders (DVRs) to customers that can record programs for later viewing. To date, however, the competition does not offer the wide variety of services TiVo offers.

Rivalry affected TiVo's customer base, however, forcing the company to change its marketing plan accordingly. For example, TiVo no longer charges for the cost of the basic TiVo box with remote control—the price is included in the monthly subscription fee. TiVo has also joined with Comcast Cable Company to provide service to their customers. And in March 2006, TiVo struck a deal with Verizon Wireless that allowed Verizon cell phone users to program their TiVo recorders from their cell phones. In another venture called TiVoToGo, TiVo is providing software to users that will let them move recorded programming from the TiVo recorder to laptop computers. Furthermore, in the future TiVo may add an advertisement display feature since marketers have complained that TiVo users can fast-forward to skip ads. (This feature will undoubtedly raise the ire of some TiVo customers.)

TiVo announced a new service in March 2006 called KidZone, where parents could look for shows appropriate for their children and then separate that content from recorded adult shows.

Clearly, TiVo will continue innovating and changing its services to meet customer needs and preferences.

After reading this chapter, you will be able to answer the following:

1. What would your "business case" be to convince your family or roommates to purchase TiVo?
2. In what way was TiVo a disruptive innovation?
3. How would you forecast the future of TiVo in regard to the advent of on-demand video where any type of video content is available at any time on any device?

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Brief Case **For Sale by Owner: Your Company's Name.com**

They don't sell houses or land, but they do deal in Internet real estate, and most turn a handsome profit. "They" are called domainers, and the real estate they buy and sell consists of domain names. Although they keep a low profile and usually don't flaunt their success, domainers participate in a virtual land grab worth \$9 billion in 2006 and projected to soar to \$23 billion by 2009.

As you know, every Web site on the Internet has a domain name, also called a uniform resource locator (URL) or Web address. Domain names may or may not identify the business or person who owns the Web site. For example, *msn.com*, *yahoo.com*, and *google.com* are domain names that do, in fact, identify the Web site owner by name. Domain names such as *pty.com* and *xa2z7.com*, however, do not.

Domainers trade on the fact that many businesses, organizations, and celebrities want domain names for their Web sites that clearly identify the site's owner and are, therefore, easy for Internet surfers to find. A domainer might buy the domain name "*fordmotorcompany.com*," for instance, and then try to sell it to the Ford Motor Company; that is exactly how the domain-buying business operated in the 1990s. Buy a name, hold it, and wait for a buyer who wanted it to make an offer. But when pay-per-click advertising was developed, the game changed. Currently, domainers can profit most by renting advertising space on the domain names they hold to marketers. Here is how the domainer makes his or her profit from renting ad space:

1. Buy and hold a general domain name, such as "*candy.com*" or "*cellphones.com*." (The financial wisdom in buying such domain names became apparent to domainers when they realized that many Internet surfers conduct searches simply by entering a search word or term followed by *.com* in the URL address box of their browsers.) Alternatively, domainers buy domain names that represent common misspellings of popular domains (such as *amazo.com*), hoping to benefit from Web surfers' typos.

2. Direct Web traffic to a middleman, called an aggregator, who designs a Web site and then taps into Yahoo!, Google, or Microsoft's advertising networks and lists the best-paying clients. When a searcher enters the domain name, such as "*cellphone.com*," the "*cellphone.com*" Web page comes up, with a list of cell phone Web site URLs.
3. Each time a searcher clicks on one of the URLs listed on the domain name's page, the search engine owner (Yahoo!, Google, or Microsoft) or advertiser pays the domainer a fee.

Renting domain names is a secondary market for domainers that can bring in hundreds of dollars per day. The key to this market is not necessarily search engine traffic—rather, it is type-in traffic or user-directed navigation because millions of Internet users type what they are looking for directly in the address bar of their browser, such as "*candy.com*." (*Candy.com* was recently sold for over \$100,000 and makes a profit of \$1,000 a week for its owner.)

Figures are not available for this type of URL type-in traffic since the larger search engines, such as Yahoo! and Google, do not disclose how much of their revenue comes from domain name rental. Experts report, however, that as much as 15 percent of Google's and Yahoo's revenue may come from per-click advertising.

Domainers could face a loss of revenue if, as has been suggested, Google, Yahoo!, and Microsoft cut out the domainer in the middle and serve Internet browser type-in traffic directly. But until that happens, domainers are raking in the cash.

Questions

1. How do you feel about domainers? Is it an ethical business?
2. Discuss the pros and cons of having Google, Yahoo!, MSN, and others "cut out" domainers as middle men in the Web search process.

Source: Paul Sloan, "Masters of Their Domains," *CNN Money.com* (December 1, 2005), http://money.cnn.com/magazines/business2/business2_archive/2005/12/01/8364591/index.htm

But with the plethora of new information technologies and systems available, how can you possibly choose winners? Indeed, how can you even keep track of all the new breakthroughs, new products, new versions, and new ways of using technologies? For example, in Figure 3.17 we present a small subset of some new information technologies and systems, ranging from some that are here now and currently being used to some that are easily a decade away from being a reality. Which one is important for you? Which one will make or break your business? Does this list even include the one that you need to be concerned about?

case 1

Netflix

Remember the old brick-and-mortar movie rental services? You drove to the physical location, scanned shelves for your movie of choice (too frequently, it wasn't in), paid the clerk, and left. The flick was due back in 24 hours (usually three to five days max), or you were billed a hefty late fee. In some cases, forgetful customers answered the door to find a police officer asking why they hadn't returned a rental movie.

Movie rental stores still exist, of course—Blockbuster may come to mind first—but now there are alternatives. Pay-per-view is an option for cable and satellite dish TV subscribers, but choices are limited to the services' picks and are available only after movies have been offered as rental DVDs and videos for 30 days. Since customers are not always satisfied with limits inherent in these options—late fees, unavailability of newer films, short turnaround times, and so on—it had to follow that someone would come up with the idea to offer a click-based online movie rental service.

Enter Netflix in 2002, the first and now the largest online movie rental service. As of 2006, Netflix offered 5.2 million subscribers 65,000 movie choices. The term “subscriber” is the key to Netflix's unique idea. Movie aficionados subscribe to the Netflix service by paying a monthly fee based on the number of movies they want to rent each month. For \$5.99 per month (the lowest-priced plan), customers can rent two movies per month. Fees continue upward as the number of movie rentals per month increase, with the top fee set at \$23.99 per month—four DVDs out at a time and unlimited rentals per month. For all plans, postage is paid each way, the U.S. Postal Service handles mailed DVDs both ways, and there are no late fees. When one movie is returned, a second is mailed from a list of preferences the customer sets.

Soon after Netflix's inception in 2002, Blockbuster, the nation's largest movie rental chain, and Wal-Mart, the

largest business in the United States, began to offer in-store subscription services similar to Netflix's model. By 2006, however, Wal-Mart had dropped its movie rental subscription service, and Blockbuster's subscription service was losing money.

Netflix's extraordinary and, therefore, popular service has outpaced competitive movie rental services, including pay-per-view because it personalizes a customer's movie rental experience to a degree not possible before. This personalized service asks the customer to rate up to 40 movies. From this information, software called Cinematch creates a profile of each customer and a “queue” of recommended movies. If, for example, a customer liked “Troy,” he or she may also like “Alexander,” and that movie will be included in the customer's queue. Netflix's Cinematch system allows customers to tap a wide database of movies, many of which they may not have been aware of at all since it will move to the next movie in a customer's queue if a more recent and popular listing is not immediately available.

Another strategy employed by Netflix is the “friends” feature, which allows subscribers to share and recommend movies to one another. Although not a unique idea to the Internet, this creates online communities of Netflix customers that further drive the business. Netflix is not without critics. It turns out that the service “rewards” customers with the fewest monthly rentals and “punishes” those with the most rentals in terms of popular movie availability and promptness of shipping. This policy is spelled out in the company's Terms of Service, published on the Netflix Web site:

In determining priority for shipping and inventory allocation, we may utilize many different factors, including without limitation, the number and type of DVDs you rent through our service, the subscription plan you select, as well as other uses of our service by you.

For example, if all other factors are the same, we give priority to those members who receive the fewest DVDs through our service.

According to the Netflix site, when you add a popular movie that is currently unavailable, you are added to the queue. There is an assumption by the customers that the queue is linear, meaning that the first customer to request the movie would be the first customer to get the movie—or first in, first out. In reality, the priority service equation selects customers on the basis of their profitability. With shipping being the major cost for the online movie distributor, customers who cost the most in terms of shipping may not receive popular movies first.

What does this mean for the customers? If you are a customer who uses the service infrequently, then you are highly profitable for Netflix since your shipping costs are low. Therefore, your selections are prioritized. The customers who use the service frequently or what Netflix would deem “overfrequently” are seen as not as profitable and therefore do not receive priority.

In 2004, this policy caused a “frequent” Netflix customer to sue the company in a class action lawsuit titled *Chavez v. Netflix, Inc.* The plaintiff in the case, Frank Chavez, claimed Netflix's claims that a subscriber could rent “unlimited” DVDs each month and receive them in “a day's time” were false. (Chavez had attempted to rent hundreds of DVDs a month but sued when he found he could not.) Although Netflix denied any wrongdoing, they settled the suit in 2005. Chavez received \$2,000, and his lawyers got over \$2.5 million. Certain Netflix customers who joined the class action suit were upgraded to a higher plan for a short period, and Netflix instituted a limited try-the-plan-for-three-months-free offer.

Although some customers have expressed dissatisfaction, Netflix customer numbers have increased rather than decreased.

Questions

1. Can local video stores survive in the digital world? Contrast their evolution with that of local bookstores. What is similar? What is unique?
2. Forecast the future of Netflix in regard to the advent of on-demand video where any type of video content is available at any time on any device.
3. Discuss whether you believe Netflix's terms of service are fair.

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case 2

e-Enabling the Air Transport Industry: Valuing Information Systems

In its early years, airlines were primarily carriers of airmail, and their primary customer was the U.S. government. Consequentially, the air transport industry grew to be heavily regulated. The U.S. government has started deregulating the air transport industry in 1978, opening up the market for a large number of new entrants, especially for carriers in the low-cost niche. The global market, however, has remained highly regulated. Typically, routes that airlines can fly between two countries are negotiated in a bilateral fashion. These agreements dictate which routes an airline can fly, where its planes can land, and where it could pick up or drop off passengers—"not exactly an open market," according to Phil Condit, Boeing's former Chairman and chief executive officer. Another factor adding to these complications is that people in one country usually are banned from owning an airline in another country because of the strategic value of the aircraft.

In addition to federal regulations, the International Air Transport Association (IATA) set a number of different standards for many "below the wing" activities. Most notably, IATA created the Passenger and Airport Data Interchange Standards (PADIS) to govern almost all aspects related to passenger air travel. For example, PADIS regulates standards for reservations, electronic ticketing,

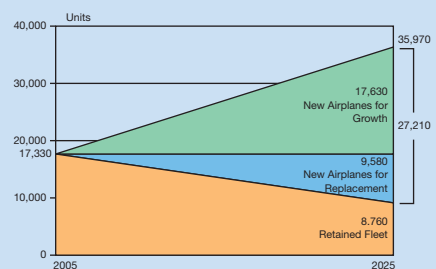
check-in, airport/airline communication, and baggage handling, ensuring that passengers can travel on one ticket with different airlines or that they can check their baggage through the final destination regardless of their carriers.

Despite the overall regulatory environment, the deregulation of the air transport industry in the late 1970s has led to the formation of a large number of new airlines, especially in the low-cost segment. Suddenly, both new entrants and established airlines had to reduce operating costs in order to survive in this new competitive environment. Shortly after the deregulation, several established airlines started struggling for survival. Pan Am, founded in 1927, had to file for bankruptcy in 1991, giving in to the pressure of low-cost competitors. Likewise, TWA filed for bankruptcy for three times before being acquired by American Airlines in 2001.

After deregulation, the air transport industry has seen increased competition because of both existing airlines and new entrants; however, most customers do not have an alternative to air travel because of both speed and convenience factors when compared to other means of transportation. Air travel is especially advantageous for business travelers, where other forms of transportation such as automobile or rail cannot be considered a

comparable alternative. Although every traveler has experienced a drastic decrease in convenience due to increased security measures following the September 11, 2001, terrorist attacks in the United States, most travelers still do not have an alternative to air travel. According to Boeing, air travel demand could fluctuate widely in the short term, but forecasts showed a steady growth in demand in the long run. Between 2005 and 2025, the world's fleet of commercial aircraft (regional jets or larger) was forecast to double and total almost 36,000 airplanes. In addition, to the over 17,000 airplanes needed to sustain the growth, about 9,600 new airplanes are needed to replace retired and converted

Additions and Removals of Commercial Aircraft 2005–2025.



Source: Boeing Market Overview (2006) http://www.boeing.com/nosearch/exec_pres/CMO.pdf (accessed August 23, 2006)

airplanes, for a total of more than 27,000 new airplanes (see Figure).

An important factor influencing the demand for new aircraft was the airlines' operating structure. While traditionally most airlines have relied on a hub-and-spoke model, more and more airlines are now trying to serve more nonstop markets by offering more direct routes between smaller cities, thus reducing the dependence on hubs. Whereas the traditional hub-and-spoke model was expected to still have some use for intercontinental routes, switching to more nonstop routes was seen as a growing market. For the airlines, this departure from the hub-and-spoke model translated into a need for smaller aircraft in order to be able to offer more direct connections. Especially high-fare customers were seen as sensitive to convenient arrival and departure times, and this would more than offset the additional costs incurred by airlines in order to add these additional flights.

While Boeing expected twin-aisle airplanes to dominate the long-haul,

transoceanic markets, the global regional markets was expected to be served primarily by single-aisle aircraft, which were forecast to make up 75 percent of the world's fleet by 2023. Because of replacements of the current fleets, single-aisle airplanes were expected to dominate future aircraft deliveries. Hot spots for economic growth, like China and Southeast and Southwest Asia, were believed to further contribute to an increased demand for new aircraft.

Boeing's primary customers, the airlines, however, were becoming increasingly fickle. On the one hand, analysts forecast steady growth of passenger volumes. On the other hand, Boeing could not be sure that an airline would be willing to purchase further products and services once a contract had ended. In addition, some of Boeing's customers had filed for bankruptcy protection, creating further uncertainty for Boeing.

While several "legacy" carriers struggled in the years after September 11, 2001, a large number of low-cost

carriers entered the market. With a completely different operating structure, these carriers could be profitable despite overall losses of the airline industries. In addition to eliminating traditional sales channels, these airlines would reduce costs by decreasing turnaround time at the gate or using only one aircraft model. For Boeing, helping their customers reduce their operating costs could be an important way to aid their survival and, ultimately, a reduced number of lost customers due to factors such as bankruptcy.

For Boeing's executives, e-Enabling was regarded as the "silver bullet" to deal with the situation. The products and services of the e-Enabled Advantage program could help the airlines increase their efficiencies, which would ultimately help them survive. In addition to that, the products and services would help to differentiate Boeing from Airbus, an important aspect in times when the differences between the different aircraft became more and more blurry.

Questions

1. How does the e-Enabled Advantage program help Boeing obtain a competitive advantage over its rivals?
2. Use Porter's five-forces model to analyze the commercial air transport industry. Compare and contrast this to an analysis of the aircraft manufacturing industry.
3. Create a value chain for the commercial air transport industry and identify several ways that capabilities of the e-Enabled Advantage program can provide benefits.

Sources: <http://www.iata.org/whatwedo/standards/padis>, retrieved October 1, 2006
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