Government Garage Sales: Online Auctions as Tools

for Asset Management



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IBM Center for The Business of Government

E-GOVERNMENT SERIES

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November 2004

IBM Center for The Business of Government

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FOREWORD

November 2004

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, "Government Garage Sales: Online Auctions as Tools for Asset Management," by David C. Wyld.

From the local police department to state governments to the Department of Defense, public sector executives across the nation are transforming the handling of surplus items from a drain on their budgets to a positive source of revenue. Government agencies are succeeding at selling both everyday items and high-end goods via online auctions, as well as creating new markets for out-of-the-ordinary public properties, such as school buildings and airports.

Professor Wyld lays the groundwork for this comprehensive and informative review on online auction sales by discussing the theory and practice of auctions, explaining how and why auctioning works, and why it is particularly effective when brought into the Internet age. He provides an overview of the size and scope of auctions and describes how government agencies are now using online auctions as a primary vehicle for proactively managing surplus.

The report presents five case studies of how online auctioning is now being employed: eBay and the Public Sector; the Department of Defense and Liquidity Services, Inc.; Bid4Assets—Taking Tax Sales off the Courthouse Steps; Property Bureau—Transforming the Police Auction; and the Demolition of Three Rivers Stadium.

The report presents a decision framework, or road map, that government executives can use in making decisions about the management of surplus assets in the public sector. Finally, the report presents a series of lessons learned. These lessons focus on the need to align the incentives of both multi-unit agencies and public-private partnerships to maximize the returns and overall effectiveness of online auctions.

This report presents a "good news" story about how government leaders across the nation are transforming the traditional "burden" of managing and maintaining unneeded property into an opportunity to derive significant revenue and to shift more of their focus and attention to their primary missions and operations, rather than the disposal of property.

We trust that this report will be informative and useful to government executives as they seek to better manage their assets and proactively shift to the online auctioning of surplus, seized, and forfeited assets.

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EXECUTIVE SUMMARY

"Buy low and sell high." This is the axiom upon which Wall Street and much of the American economy is based. Now it is axiomatic that a new "new economy"—one with substance and staying power—is being built upon this concept.

According to *Investor's Business Daily*, total online auction sales will double over the next four years, reaching over \$100 billion annually by 2007. Estimates are that eBay will represent at least half of this figure (Barlas, 2003). Late last year, Business Week heralded with a cover story the birth of "The eBay Economy"—a new "new economy" that has online auctions as its principal means of exchange. Public officials across the country at all levels of government are realizing what millions of people in America, and indeed around the world, have come to know as the central tenet of the "eBay Economy." Sergeant Dan Ford manages property for the Tulsa Police Department, which is now selling unclaimed and seized items online through Property Bureau (one of the featured case studies in this report). He put the proposition in a nutshell when he observed: "The great thing about the Internet is that something that almost has no value might bring in some money from somewhere" (quoted in Nasser, 2003b, n.p.).

Everyone hears about "secret" government auctions, "where \$50 Jeeps and \$1,000 Lear Jets are sold" (Weidenhamer, 2004a). While they may not be secret, such auctions can be great deals for those who do attend, as the supply of goods and lack of demand often do create situations where great deals can be had for the buyers. Such on-site physical auctions are also time- and labor-intensive for the

agency to stage, and with typically poor sales returns, most of the time they are money-losing affairs for government. Physical sales are thus a very inefficient means of disposing of surplus, seized, forfeited, and used assets. Today, however, there is a revolution occurring across all levels of American government. From the local police department to state governments and even the Defense Department, executives in the public sector are transforming their handling of surplus items from a drain on their budgets into a positive source of revenue.

Refining the front end of the supply chain in the public sector has received much attention lately, with agencies at all levels of government incorporating many of the e-procurement tools and techniques of leading private sector firms. However, while forward logistics has received a great deal of investment and consideration in the private sector, reverse logistics has been the oft-neglected part of the public sector supply chain.

Colonel Joseph L. Walden (2004) of the U.S. Army Command and General Staff College in Fort Leavenworth, Kansas, criticized government leaders for not realizing that they too are in the reverse logistics business. In fact, he found in a study of the Department of Defense that the size of the military's reverse logistics operations is bigger than *any* operation found in the private sector, even if these operations are not commonly thought of or labeled as such. Likewise, Wyld (2004b) found that governmental organizations can find far greater opportunities for operational improvements and financial gains from reverse logistics innovations than from the traditional, forward-facing supply chain.

Now, mimicking the best practices of reverse logistics found among leading private sector firms, government agencies are turning to online auctioning of the surplus goods they have stockpiled in their warehouses and yards. This "castaway stuff" comes in various states of operability and usability and with varying degrees of marketability and value (Wilder, 1999). However, public sector leaders are realizing that online surplus auctions can be an important element of solutions to remedy problems both with storage and carrying costs associated with what is often affectionately called "stuff" and with the nearly universal budget shortfalls faced today at the local, state, and federal levels. The online auction solution can thus be applied at the end of the governmental value chain to help the public sector better manage the disposition of these assets. Casey Coleman of FirstGov, the federal online portal, observed that online auctioning of government property represents a good deal for the taxpayer, as "not only does it raise money that can be used in place of tax dollars, but it also takes those items off our rolls so we no longer have to pay for the upkeep and maintenance on them" (cited in Wyld, 2004a, p. G27). Online auctions can thus be an important component of an overall asset management strategy.

Thomas H. Stanton (2003b), a Fellow of the Center for the Study of American Government at Johns Hopkins University, stated that there is one central question that must be addressed by any government agency looking to engage in sales of public sector property: "How can the government assure that it obtains full value for any assets that it sells?" (p. 22). Today, the best way to assure that one is obtaining market value for an asset is to auction it off online. eBay is the largest online auction marketplace, but others, such as those profiled in this report, provide markets for specialty items that are growing as fast, if not faster, than the market leader.

Kambil and van Heck (1998) observed that the Internet and other telecommunications advancements were allowing "individuals and organizations to radically reengineer existing trading processes, enabling new forms of electronic commerce and markets" (p. 1). Government auctions of surplus items and seized assets are one such area that is being radically reengineered today. As Swope (2004) pointed out, while the vast majority

of things being sold through online government auctions are everyday items—office furniture, computers, vehicles—agencies are realizing value by "unloading a growing number of bizarre items, things like old fire trucks, scoreboards, and lighthouses." He goes on to say that "the only thing more striking than some of the oddball objects hawked online is the large sums people are willing to pay for them" (p. 16). According to Dr. Dale Rogers, professor of supply chain management and director of the Center for Logistics Management at the University of Nevada:

More people are willing to buy used stuff today, as used items can be more profitable than new to some folks in the supply chain. An auto dealer makes more money selling and servicing used cars than it does with new cars. The college bookstore makes more money selling used textbooks than it does new. So there's a fair amount of money to be made from the refurbishing/remanufacturing market because you can buy very low and sell higher (quoted in Andel, 2004, n.p.).

So, what we are seeing is a two-tiered system, where people are increasingly looking at governments both as *sellers* of common items in online auctions and as *suppliers* for a "bizarre bazaar" that is increasingly becoming mainstream on the Internet.

In this research report, the author presents findings from five case studies of the use of online auctions for asset disposition in the public sector. These diverse case studies include:

• eBay and the Public Sector

The largest online e-marketplace attracts state and local governments selling all manner of surplus goods, either direct or through intermediaries, including the state of Oregon, which itself has leveraged its expertise to become a facilitator for other government agencies to sell on eBay—keeping a piece of each transaction.

The Department of Defense and Liquidity Services, Inc.

The biggest experiment in public sector reverse logistics today, where the American military is transforming the way surplus is sold through an innovative public-private partnership.

Bid4Assets—Taking Tax Sales off the Courthouse Steps

The use of online auctions to transform the way local governments sell tax-defaulted property, dramatically improving the results of such tax sales.

Property Bureau—Transforming the Police Auction

The reinvention of the police auction, taking the burden of storage of seized and lost items away from local law enforcement while returning more revenue from online auction sales of a panoply of items.

• The Demolition of Three Rivers Stadium

The use of online auctions as part of a special, one-time event to offset costs to the local government and open up opportunities for citizens to buy sentimental and useful items through multiple channels.

These experiences demonstrate that online forward auctions can:

- Open up the surplus sales process to a much wider audience and promote greater visibility and transparency for the auction events.
- Create greater liquidity in the sales process through increased bidding activity among a wider group of interested parties, heightening the chances that the auction will culminate in the actual sale and disposal of the asset.
- Raise the final selling prices of surplus items being sold, often at price points that are considerably higher than historical returns on similar assets.
- Lower actual cost outlays, both in direct costs and hidden indirect costs, to agencies to carry out the sale of surplus.
- Move assets from being surplus items for the public sector into the private sector, where they can be better utilized and often create new value and opportunities through such sales.

This study proposes a decision framework for public officials at all levels of governance to employ to make key choices as to how to better manage their reverse logistics operations through the use of online auction techniques. It also speaks to the fact

that while this may be a new concept for many public officials, public sector organizations will likely find that they are replete with entrepreneurial individuals who can extend their online auction expertise in an entrepreneurial way to foster their agencies' sales of surplus, used, seized, and lost property via the Internet. Likewise, there are several large and many budding companies that can take on much—if not all—of the necessary functions for government agencies seeking to transition to online surplus sales. Finally, the report makes policy recommendations to align the incentives of both multi-unit agencies and public-private partnerships to maximize the returns and overall effectiveness of online auctions.

Introduction

The "Usual Suspects"

Too often, the public and private sectors use different languages. This often delays or prevents the transmission and adoption of best practices from the for-profit world to the world of government.

Chuck Martin (2002), CEO of the Net Future Institute, observed that today organizations "cannot afford to be excess in anything" (p. viii). In the private sector world, companies are realizing that their possession of excess equipment and inventories and handling of returned and used goods are extremely expensive propositions. In fact, one study pegged the costs of such operations at approximately \$35 billion annually in the United States alone (Kim, 2003). Thus, the private sector is focusing on the new, emerging idea of reverse logistics as a way of better managing its surplus. The concept can be looked upon as involving "the process of managing the movement of specific goods away from their typical final destination in order to maximize value or for proper disposal" (The IQ Business Group, 2003, p. 1).

At a July 2002 event sponsored by the IBM Center for The Business of Government, Mitchell Daniels, Jr., then director of the Office of Management and Budget, observed, "Asset management is something else the federal government does a very poor job of doing" (cited in Lisagor, 2002, n.p.). Asset management, the concept that government agencies should recognize the vast real property resources that they hold and work to utilize and manage these resources in a proactive manner, has thus become a buzzword and focus of attention in the public sector today. It

has even been elevated to an item on the President's Management Agenda (The White House, 2004).

Often, governments will find that they do not possess accurate inventories of the resources in their possession and that a considerable portion of this property is either no longer useful or does not support the mission of the agency. Every government agency, whether it be at the city, county, state, or federal level, thus has surplus property—equipment, goods, vehicles, and so on. Warehousing and managing this surplus diverts funds that could be better used in other operations. Therefore, it becomes incumbent on government agencies to look for methods of efficiently disposing of this property to do a better job of asset management. While a considerable amount of government property that is surplus to one agency can be reutilized by another agency and exchanged through transfer programs, the most common surplus disposition technique is the public auction. As we will see in the next section, this traditional disposition method has significant limitations.

Historically, government auctions have been the province of the "usual suspects." Writing for *USA Today*, O'Neill (2003) accurately described these events as early-morning affairs that "few people know about or attend" (n.p.). Across the country, on a daily basis, the "usual suspects"—a group of somewhere between 10 and 100 buyers—will show up at a city's property storage yard or the county courthouse steps to participate in a live auction. With few people in attendance, there's little competition, and most items are bought "dirt cheap" (Rosenwald, 2002).

The results of such on-site auctions are basically a crapshoot for the agency conducting the sale, and often money-losing affairs. As James Barrington, town manager of Hampton, New Hampshire, put it bluntly, when it comes to auction results: "It depends what the bids are and who's there. One person could show up and bid a \$1 for the entire lot" (quoted in Cronin, 2004, n.p.). As a result, the financial returns of such auctions have been pitiful, often only cents on the dollar. For instance, the Department of Defense has historically recovered only a penny or two of the acquisition cost of military surplus through such sales (Squeo, 2003). Quite often, it will cost the agency involved more to catalogue the items and stage the event than they will bring in from such physical auctions.

Now we are seeing a move to put such auctions on the Internet. With this move, "gone are the days when visiting dusty warehouses and digging through bins of junk were the only ways to buy bargains from the government" (Enos, 2001, n.p.). Hasson and Browning (2001) commented that with the advent of online auctions of governmental assets, "many more citizens have access to property online than they do through the old approach" (p. 2). The bottom line, according to Brenda Grant, director of property utilization for Tennessee's Department of General Services, is that "selling online expands your audience.... We're getting better competition and better prices" (opinion cited in Swope, 2004, p. 16). Such auctions also provide better transparency, visibility, and accountability to the sales process. As Peter Elliot of the U.S. Marshals Service put it: "An Internet auction draws an audience from all walks of life, yet allows the community to monitor the auction from their home, office, or library" (quoted in Caniglia, 2003, n.p.).

"I Love Entrepreneurialism!"

Later in this report, you will read that the results of his county's first online surplus auction led Charles Jones, chairman of the Douglas County, Kansas, Commission, to proclaim: "I love entrepreneurialism!" (quoted in Fagan, 2004, A5). What we are witnessing today is perhaps the quintessential example of how the public sector is catching on to the movement of the invisible hand of capitalism to improve this historically overlooked area of the business of government. Sometimes the invisible



The Maryland Independence Source: Office of the Governor, State of Maryland (2003).

hand is guided by a top-level official, such as Governor Bob Ehrlich of Maryland, and sometimes it takes the entrepreneurial spirit of an employee like Mike Plott to get the revolutionary ball rolling.

Bottom-Up Entrepreneurialism

Sometimes the spark of entrepreneurial genius comes from way down deep in your organization—from guys like Mike Plott. Not familiar with that name? Well, Boulder City, Nevada's, Mike Plott should be the "poster boy" for the spirit of entrepreneurialism that is often needed to make government take the first steps into online markets. His story is chronicled in "What Happened to My Pocketknife?" on page 10.

Top-Down Entrepreneurialism

Sometimes the spark of genius does come from the top. When campaigning for Maryland's governorship, Republican Ehrlich vowed to sell symbols of "waste and excess," such as the state's yacht, airplane, and luxury boxes at Camden Yards. While market and contractual realities made the final two cost-prohibitive, in December 2003, now-Governor Ehrlich fulfilled that campaign promise to sell the state yacht, the Maryland Independence. The 112-foot yacht, a converted World War II-vintage submarine hunter for the Canadian Navy, could hold up to 35 passengers for corporate recruiting and other entertainment events cruising the Chesapeake Bay. However, it had become a liability for the state and a lightning rod for politicians, as the vessel cost the state \$230,000 annually in maintenance and operating costs (Nitkin, 2003).

What Happened to My Pocketknife?

OK, so you forgot to pack your pocketknife in a checked bag, and now the Transportation Security Administration (TSA) screener has confiscated it at the security checkpoint at the airport. What happens to it? Unless you are at an airport served by one of the growing services that will ship it to you—for a fee—odds are, this is the last time you will see it. However, if this happens to you at Las Vegas's McCarran International Airport, it is very likely that your pocketknife will end up being sold on eBay.

Mike Plott is a part-time city employee for Boulder City, Nevada, where the Las Vegas airport is located. In late 2003, he read a news story that angered him, which reported that the TSA had been turning over the approximately 10,000 items confiscated monthly at McCarran International to be destroyed. Plott believed that he could make money for the city by selling these items on eBay; as he observed, "Theoretically, even junk sells" (quoted in Brean, 2004a, p. B2). He approached his boss, Boulder City Mayor Bob Ferraro, to see if he could market the items for the city on eBay. After Mayor Ferraro received TSA approval to take possession of items confiscated from Las Vegas-originating passengers, the mayor and Plott agreed to "test the waters" with the first shipment of items from the TSA, which came in 17 boxes, each weighing approximately 60 pounds (Brean, 2004a).

In his first two weeks of auctioning confiscated "stuff" on eBay in March and April 2004, Plott put in approximately 100 hours of sweat equity to sort, catalogue, and photograph the seized items and then post the items for sale on eBay, track the auctions, and mail off sold goods to their buyers. In doing so, he generated approximately \$4,500 for Boulder City. In this time, he sold 700 pounds of seized items. The most common items, such as nail files, scissors, knives, and clippers, were sold in lots. However, Plott discovered that TSA had confiscated a number of unusual and even potentially valuable items at the Las Vegas airport that could be listed and sold individually on eBay, including:

- A rifle scope
- · A Mikita drill
- A glass vase containing a floating candle
- A large "rodeo cowboy"-like belt buckle
- A six-pound Sphinx statue from the Luxor Hotel

He even sold several construction-grade staple guns, soldering irons, and circular saw blades (Brean, 2004b).

Because of the success of his eBay efforts, the Boulder City Council unanimously approved a compensation agreement to formalize its relationship with Plott in mid-April 2004. It calls for Plott to receive 50 percent of the total proceeds from the sale of airport-confiscated goods over the next year or retain the first \$100,000, whichever comes first. The city retains the right to review the program after the pilot year and either adjust Plott's compensation or turn the program over to a city agency. While the flow of goods and the "street" value of the merchandise will be uncertain, based on TSA statistics, Plott can expect to have 1,000 to 2,000 pounds of seized items to sort through and sell every month, although he expects the amount to spike "whenever Las Vegas hosts a gun or knife show" (cited in Brean, 2004b, p. B2). Plott is excited about his unique arrangement and his chance to help both himself and Boulder City, stating:

I had such an outstanding, successful start I overwhelmed myself. It just happens to be extraordinarily labor intensive, and it's actually a staggering amount of work.... Ironically enough, the harder I work, the less I will get. The more successful I make this program, the lower the percentage I will receive, and I'm OK with that. I'm not looking to make a killing (cited in Brean, 2004b, p. B2).

Plott believes that other communities will follow the lead of Boulder City to sell TSA-confiscated items in online auctions as a source of revenue—that cities will "start snapping this stuff up like water rights" (quoted in Brean, 2004a, p. B2). As for himself, he may be soon making enough to give up his other job as a security guard.

The state's Department of General Services selected The Advantage Group, based in Annapolis, Maryland, to market the yacht on eBay. This was not without controversy, as veteran yacht brokers questioned whether eBay was an appropriate venue for selling such a vessel, with one labeling it a scheme "dreamed up over a cup of coffee" (Nitkin, 2003, n.p.). Governor Ehrlich defended the state's sales strategy, stating: "Listing the yacht on eBay is an innovative and cost-effective way to maximize the *Independence*'s value in the e-marketplace" (Office of the Governor, State of Maryland, 2003, p. 1).

The Maryland Independence had an appraised value of between \$295,000 and \$375,000. Its sale was complicated by the fact that being of Canadian vintage, the buyer would be restricted from commercial use of the vessel. The yacht sold on December 18, 2003, for \$275,100. After the 10 percent commission, the state of Maryland received \$247,590. Critics pointed out that the

THE STATE OF CALIFORNIA Surplus Property Program is hosting the Friday, August 27th, 2004, \$:00 am-6:00 pm Saturday, August 28th, 2004, 8:00 am-noon 1700 National Prive, Sacramento, CA (Take the Truxel Road Exit off of I-80 and follow the signs) Restaurant Computer Equipment Laptops Sports Cards Office Furniture Tools Forklifts Free E-Waste We're even selling a MUSTANG! (the car, not the horse) Plan to attend outdoor FAMILY CONSUMER FAIR! For more information, please visit the Pepartment of General Services website at www.dgs.ca.gov Many items will also be available on eFay. The 998 seller IP is californiagoid2000. http://members.ebay.com/aboutme/californiagoid2000

Source: State of California, Department of General Services, http://www.documents.dgs.ca.gov/dgs/garage.pdf.

sale barely made a dent in the state's \$700 million annual deficit (Anonymous, "Talking Points," 2003). Yet Governor Ehrlich had turned what had been a drain on Maryland's state budget into a positive source of revenue for the state.

Likewise, one of the challenges faced by actorturned-governor Arnold Schwarzenegger was how to maximize revenues for the state of California without having to go back on his pledge of no new taxes to solve the state's massive budget problems. Upon assuming office in late 2003, Governor Schwarzenegger ordered a complete review of the operations of state government. One of the focal areas in what became the 2,700-page California Performance Review was severe criticism of the state's asset management. The auditors found that the state's warehouses were full of excess property, some from agencies that had been eliminated years before. Additionally, the state was found to be doing a poor job of deriving any revenue from sales of confiscated and seized items.

In response to the findings of the California Performance Review, Governor Schwarzenegger issued an Executive Order, directing the state's Department of General Services to revamp the manner in which it managed and sold surplus and seized property. One of the major reforms was to leverage the online auction sales mechanism to work for the state, modeled after the state of Oregon's surplus operations (which are detailed later in this report) and taking advantage of the power of the eBay marketplace. While ongoing sales efforts were initiated, the governor gained national attention for his California Garage Sale, held August 27–28, 2004, at one of the state's warehouse sites in Sacramento.



In announcing the California Garage Sale, Governor Schwarzenegger proclaimed: "Eliminating surplus property is just one way we can work together to clean out the cobwebs of government. I am call-

ing on Californians to participate in this historic opportunity to help us eliminate the excess" (cited in Anonymous, "California Holds 'Garage Sale,' " 2004, n.p.). According to Fred Aguiar, secretary of the State and Consumer Services Agency, who

State for Sale

In January 2004, an anonymous seller attempted to auction off the entire state of West Virginia on eBay. The item description read:

You are bidding on the ENTIRE STATE of West Virginia. Please note that this auction does not come with governing rites [sic], nor the inhabitants of said property. You also may not change the state flag, bird, or so on. This is merely for bragging rights, or to hang a sign in your garage that says, "I own West Virginia." Also, please note, you will have every right to succeed [sic] from the union, but that has been tried in the past without much success.

The auction of the state of West Virginia drew 56 bids, with a high bid of \$100 million before eBay pulled the plug, since "obviously this buyer doesn't have the goods to sell," said Chris Donlay, eBay spokesperson. Amy Shuler Goodwin, spokesperson for West Virginia Governor Bob Wise, said: "As an eBay consumer myself ... that's a heck of a bargain!" This may be true, but even if the price were true, the sale would not even theoretically cover the projected \$120 million budget deficit West Virginia has projected for fiscal 2005.

Source: Associated Press (2004).

oversaw the operations of the garage sale event, the governor was clear in directing the agency to clear out the warehouse, directing him with the instruction: "If it's not being used, get rid of it" (quoted in Anonymous, "Bring Your Quarters: California Hosts a Garage Sale," 2004, n.p.).

California Garage Sale The California Garage Sale thus became the first thorough purging of the state's property warehouses in many years. The sales event was held simultaneously offline and online, via the state's eBay sales operation,

under the moniker "californiagold2000." The sale involved a wide range of items, ranging from tools to cars, and even a signed poster of the governor. According to Secretary Aguiar, the items were "priced to move," and while the final total on the auction is still to be determined, the state will save a significant amount by not having to warehouse and manage the excess and seized property sold through the event. The state now plans to hold similar offline/online sales events in the future to further clean out its closets and better manage the property in its possession.

Reverse Logistics and Public Sector Asset Management

The California and Maryland experience and the sale of confiscated items from the Las Vegas airport

are but a few examples that are representative of the revolution that is occurring all across American government. The size of the government surplus market is staggering, with literally tens of billions of dollars in surplus assets becoming available every year at every level of government, both in the United States and abroad. From the local police department to state governments and even the Defense Department, executives in the public sector are transforming their handling of surplus items from a drain on their budgets into a positive source of revenue. In doing so, they are mimicking the best practices of the private sector, where companies large and small are recognizing the importance of asset management and their reverse logistics operations for items at the end of their useful life within an organization.

According to Joel McGlynn (2003), a service area leader for IBM Business Consulting Services, governments should take a holistic, portfolio-based approach to managing their vast asset bases. This overall Total Life Cycle Asset Management (TLAM) approach can help public sector agencies to better manage their holdings of property to support their overall strategy and operations. McGlynn (2003) pointed out that governments have been particularly adept at and willing to adopt commercial best practices in acquisition, operation, and maintenance of their assets. However, this has not been true at the end stages of asset life, when decisions need to be made regarding the potential movement, modification, and disposal of public prop-

erty. He stated that these stages are often neglected and as such "represent a large potential for asset management improvement" (p. 11).

In the view of Thomas H. Stanton (2003a), a Fellow of the Center for the Study of American Government at Johns Hopkins, improved asset management gives government the ability to:

- Present a better face to the American public.
- Enhance their work environments.
- Increase their capacity to carry out their missions (p. 6).

Stanton (2003b) believes that sales of government assets and surplus are an important component of an overall asset management strategy at the neglected back end of the governmental supply chain. If such sales are accomplished through well-designed mechanisms, governmental leaders can

turn the burden of managing and maintaining unneeded property into a chance to derive significant revenue and an opportunity to devote more of their focus and attention to their primary mission and operations. The National Research Council (1998) cautioned that some public sector leaders could be tempted to take the "fire sale" approach to sell items today that will be needed to fulfill their agency's mission tomorrow, which would be an example of poor public stewardship. However, if such property sales are conducted in a purposeful manner, consistent with the holistic management of public assets and surplus items, these sales can contribute to an effective asset management strategy.

Kambil and van Heck (1998) observed that the Internet and other telecommunications advancements were allowing "individuals and organizations to radically reengineer existing trading processes, enabling new forms of electronic com-

The Blue Angel Jet on eBay

Wanna buy a Blue Angel? In February 2004, one of the more unusual eBay auctions took place, in which a former Navy Blue Angel F/A-18A jet was offered for public sale. The seller was Mike Landa of Landa and Associates, based in Washington State. Landa's firm typically offers telecommunications equipment and aircraft parts. The jet, which originally cost the Navy \$18 million, was described as the ultimate "big boy toy," as it would have taken a deeppockets collector to buy and operate the jet, which consumes approximately 1,300 gallons of JP-5 jet fuel for every 30 minutes of flight (Germanotta, 2004). Landa attempted—ultimately unsuccessfully—to sell the former Blue Angel Hornet jet (to be assembled, painted, and reconditioned to flight status) to an anonymous government contractor for approximately \$10 million (Freedman, 2004).



How did Landa come into possession of the jet? The FBI and the military were curious to know, visiting Landa soon after the jet offering went up on the eBay auction site. Mike Blankenship, spokesman for the Blue Angels, confirmed that the aircraft was indeed formerly used by the Blue Angels, having been retired in 1994. Normally, such aircraft are "demilitarized," having their military markings and sensitive electronics removed. This particular F/A-18A jet had never been "demilled" or cut. According to the Department of Defense, aircraft are not typically sold to private parties. Typically, such surplus aircraft are either cut and stored in the desert or leased or lent to museums, with reselling and export of the jets prohibited. Somehow this particular jet "slipped through the system" (Lozare, 2004, n.p.).

Landa's eBay store, where he has a superior feedback rating from over 400 transactions, is also selling an F-16 Fighting Falcon fighter and two Russian MiG- 29s (Germanotta, 2004). While this is certainly not a laughing matter for the Pentagon, Landa's site offers an individual with the money to do so to have, in effect, their own private war games—not a comforting thought in the times in which we live.

merce and markets" (p. 1). Government auctions of surplus items and seized assets are one such area that is being radically reengineered today through the use of online auctioning.

When we think of online auctions for government, the first images that come to mind are the headline-grabbing events that have nothing to do with actual surplus sales by the public sector. For instance, in just the past six months, we have seen both New Zealand (Anonymous, 2003, "Government for Sale—One Day Only") and the state of West Virginia allegedly for sale on eBay (see "State for Sale" on page 12). We have also seen potentially alarming government surplus sales occur, such as the Blue Angel aircraft that ended up being sold through eBay (see "The Blue Angel Jet on eBay" on page 13).

In this report, we will explore how online auctioning is being employed as an essential part of the solution to the significant reverse logistics and asset management problems of the public sector. We will lay the groundwork in Auction Theory & Practice 101, exploring why and how auctioning works and why it is particularly effective when brought into the Internet age. We will provide an overview of the size and scope of the reverse logistics conundrum for private sector firms—and how similar, and perhaps even more complex, issues are present for governmental agencies dealing with assets that have reached the end of life in the public sector supply chain. We will see that online auctions have become a mainstream option for proactively managing surplus. We will then explore five case studies of how online auctioning is being employed across government to better manage the public sector's reverse logistics operations. We will then offer a decision choice framework on how public sector executives should approach online auctions and a concluding discussion on the policy and strategic issues that can be advanced through the effective employment of the forward auction solution to reverse logistics.

Auction Theory & Practice 101

Introduction

In the view of Oxford economist Paul Klemperer (1999), "auctions provide a very valuable testing ground for economic theory" (p. 228). As such, auction theory stands as a success story for the field of economics, as it has both practical applications, making for better auctions, and theoretical implications (Klemperer, 2003a). In this section, we provide an overview of the auction concept and some of the principal concerns in auction design and function. We also examine some of the nuances of auctions in the online environment.

The History of Dynamic Pricing

According to *The Pocket Oxford Dictionary*, fourth edition (1942), an auction is a "public sale in which articles are sold to the highest bidder." As Moschella (1999) points out, the derivation of the word "auction" is from the Latin *auctio*, which literally means "an increasing."

Auctions have been an integral part of commerce throughout history, having been traced as far back as 500 B.C. (Davidow, 2000). In point of fact, the history of commerce has been primarily based on flexible pricing. Tibbetts and Bernstein (2000) note that over the centuries, auctions have been the preferred method for auctioning everything from brides, slaves, war plunder, assets of the bankrupt, natural resource rights, and even government appointments. In fact, the very concept of a "fixed" price for a good or service is, in historic terms, a relatively recent development. As Cortese and Stepanek (1998) noted: "A couple of hundred years ago, when a person went to the cobbler to order a

pair of shoes, they negotiated the price face-to-face. It wasn't until the arrival of railroads and canal systems, which allowed products to be distributed widely, that uniform prices came into being" (p. 75). Thus, fixed pricing can be considered to be a rather recent phenomenon, necessitated by the mass market.

Today, auctions fall under the broader heading of dynamic pricing—where pricing is allowed to vary based on market conditions, sales channel, and the buyer's needs. Dynamic pricing was formally defined by Bodow (2000) as "a system that adjusts the value of goods in response to short-term changes in the market (p. 16). The stock market, the futures market, airline and hotel pricing through yield management, and, yes, eBay are all representative of dynamic pricing. Technology is making the market model, where bid and ask prices can be matched to make an ideal market, possible in many, if not most, areas of business (Wyld, 2000). Dynamic pricing is certainly a big part of today's pricing equation (Ericson, 2001). With the rise of the Internet, in a way, we are going back in time to where the market determines the price (eBreviate, 2002a). Now, online auctions are moving us into what Harden and Heyman (2002) project to be a "new era of negotiated pricing," where "everyone expects to haggle" (p. 219).

The Characteristics of Auctions

First, there are important distinctions to be made between the direction of the auction in question. Based on the work of Geraint (2001), a distinction must first be made between reverse and forward

The First Government Auction

Vernon Smith (2003), the 2002 Nobel Prize winner for his work in experimental economics, notes that auctions are ancient in nature. In fact, the practice dates back to when the conquering Roman armies would auction off the "spoils of war" they captured to provide pay for the soldiers in the Roman Legion.

The practice reached its height in Ancient Rome in 193 A.D., when the Praetorian Guard actually auctioned off the Emperor's Throne. There was spirited bidding between two senators, Didius Julianus and Titus Flavius Sulpicianus. Didius Julianus was the winner, bidding to pay 25,000 sestertii to each Praetorian guardsman. Factions of the Praetorian Guard rebelled, and several legions marched on Rome. The Senate declared Septimius Severus to be emperor, and Didius Julianus was beheaded by members of the Praetorian Guard, less than a month after he "won" the auction.



Source: (Anonymous, "Roman History, Coins, and Technology Back Pages—The Throne of the Caesars: Didius Julianus—Emperor A.D. 193," 2003).

auctions. These types can be defined in the following manner:

- Reverse auction—an auction, used for procurement, in which suppliers bid progressively
 lower prices in real time while the auction is open for the right to supply a good or service.
- Forward auction—an auction, used for the sale
 of a good or service, in which participants bid
 progressively higher prices in real time while
 the auction is open for the right to purchase
 the item in play.

The type of auction used for asset disposition is known as a *forward* auction. This type of auction is a bit more familiar to most people, as they follow the format whereby prices are "bid up" by competing bidders for the items being sold at auction (Wyld, 2003).

The major auction formats are shown in the box on page 17. Which of these is the best format? Maybe none of them are. This is because a central tenet of auction theory is what is known as the Revenue Equivalence Theorem. This concept holds that:

- 1. All standard and most non-standard auction mechanisms will prove to bring equal returns to the seller.
- 2. Buyers are largely indifferent between the various forms of auctioning (Klemperer, 2003a).

This theory holds that all of the primary types of auction formats will, on average, yield the same results over the long term. As Hal Varian put it, "The Internet is the greatest medium in the history of economics for testing all manner of hypotheses about which auctions work best under what circumstances" (quoted in Schrage, 2000, p. 91).

Economic research has consistently upheld the validity of the Revenue Equivalence Theorem. Thus, for the most part, all forms of auctioning will yield generally the same expected results, given the condition and nature of the item and the range of participants (Klemperer, 2003).

The most critical aspect for sellers to consider is how to ensure the widest number of bidders, and hence the highest level of competition. Here economic research has shown that in doing so, sellers' returns from the auction (in economic terms, their "surplus") will be maximized (Peters, 2001).

The Major Types of Auction Formats

Over the years, various types of auction formats have evolved. The major forms of auctions—used both in the offline and online environments—are briefly outlined as follows:

English auction (ascending-price)—bidding begins at a relatively low price and gets pushed up as bidders compete more intensely; buyers bid up the price by anonymously bidding against one another.

Yankee auction—a multi-item version of the English auction (which involves only a single copy of an item). Winners are determined by ranking bids according to the highest bid price, then by the largest quantity, and lastly, by the earliest bid time. Participants can specify whether they will accept a partial quantity or not.

Dutch auction—the auction begins with the auctioneer setting a high starting price (one at which no one is expected to bid); then the price is gradually lowered until bids are received.

Reverse auction (descending price)—the buyer sets up the auction to receive bids from suppliers; suppliers anonymously bid down the price of fulfilling that order.

First-price sealed bid auction—each bidder independently submits bids, and the object is sold to the bidder with the highest bid, who then pays that price for the object.

Second-price sealed bid auction—each bidder independently submits bids, and the object is sold to the bidder with the highest bid. However, the winner of the contest pays a price equal to the second-highest bidder's bid. This type of auction is commonly referred to as a Vickrey auction, named for the Nobel Prize-winning economist who developed this method.

Absolute auction—no minimum bid amount is set.

Reserve auction—a specific, minimum amount is set for a successful bid.

Spot market auction—a seller must have an item in his/her possession before a sale is made.

Forward market auction—a sale can occur before the seller actually has the item on hand.

Sources: Klemperer (2003a); Phillips, Menkhaus, and Krogmeier (2001); Vernon L. Smith (2003); and Wyld (2000).

Generally speaking, if you increase the number of participants, you will increase the returns on items put out to auction. The Internet has been categorized as being "the greatest technological revolution for auctions since the microphone" (Voth, 2001, p. e6). This is because, as Voth (2001) goes on to say, "Any auctioneer will tell you that if I get more people to come, I get more bidders, and I get higher prices" (p. e6).

However, the principal benefit of auctioning is increased liquidity, as opposed to simply increased participation. Liquidity is not simply having your auction items viewed by more people—whether in a physical or virtual sense. Rather, it is increasing the number of qualified buyers who are viewing and potential participants in the sale of the item (Harden and Heyman, 2002). As John Dixon, president of an Atlanta-based auction firm put it bluntly,

"The most important reason for selling at auction is the fact you can sell it immediately and get cash in hand" (quoted in Ray Smith, 2003, p. B8).

Information Asymmetry and **Optimism**

Commenting in *The American Economic Review*, Crawford and Broseta (1998) observed that much of the reason that auctions provide beneficial outcomes is the fact that participants are optimistic actors. In an auction event, the final price point, where equilibrium and market clearing is achieved, comes as a result of the interplay of the bidders' interest and the learning that inevitably takes place during the course of the event from the bidders' observations of each other's positions. Research has shown that even when auction participants have differing levels of experience and knowledge

regarding an item going out to bid, auction mechanisms create efficient markets that achieve higher prices (Cason and Friedman, 1996).

In the public sector, information on items is of critical importance. Indeed, research has shown that competition and clearing prices are maximized when private sector bidders on items of import at government auctions have complete information on the subject of the auction. Indeed, by withholding information, the government can actually *reduce* competition in public auctions (Dana and Spier, 1994). Stanton (2003b) observed that for any public sector asset sale to be successful, the government must squarely address any market uncertainty. In instances where bidders have uncertainty over the condition, operability, and salability of the asset in play, the prospective buyers will bid low out of concern for the quality of the item.

Auctions are environments where there will be asymmetrical information and thus motives among the bidders, all of whom have their own presumed knowledge regarding the item up for bid and their own unique motive and value calculation for the auction. Dasgupta and Maskin (2000) hold that auctions are efficient to the extent that they are a mechanism that directs goods to the buyer that values them the most, based on their own evaluation of the available information. The key word here is "values," for an individual's personal value equation may differ if he or she has private information that differs from that of the other bidders, who have only the common information about the item at auction.

When one bidder has exceedingly insightful knowledge of the true worth of an item and can profit from buying it at auction and then taking action on it, this is known at the "winner's blessing." An example of this was given by Weidenhamer (2004c), who recalled a past physical auction experience where this scenario occurred:

At one of our auctions we sold a large and rather unattractive ingot of metal. The bidding started at \$2.50 and ended at \$15.00. The winning bidder had once worked in the mining industry and, unlike the other bidders, knew he was bidding on an ingot of 80 percent pure silver. He sold his purchase several days later for 100 times what he paid for it. While this level

of profit from individual knowledge is unusual, it is exceedingly common for auction bidders to resell their purchases for 10 times what they initially paid (n.p.).

Dasgupta and Maskin (2000) provide the example of auctioning mineral rights for a piece of land. If speculators were bidding without any geological survey of the land, they would all be bidding on a level playing field. However, if one bidder had in fact commissioned a geological survey of the tract's potential oil and gas holdings, then he or she would be operating at a distinct advantage, having an entirely different value equation in mind for the bidding based on this private information. Yet, other bidders may learn or at least suspect the type of private information held by this bidder; if so, this private information enters the realm of common values, leveling the playing field by heightening the value equation of all bidders for the property.

Winners and Losers

Coy (2000) defined the "winner's curse" as being "what people suffer when they win an auction by overestimating how much something is worth and therefore bidding too much" (p. 124). Klemperer (2003b) believes that the concept of the so-called "winner's curse" is alive and well in most types of auctions. The winner's curse theory works like this: When an item is auctioned, a large percentage of bidders are initially interested in buying at the starting bid. As the bidding continues, there are fewer and fewer people interested in making the purchase. Bidders drop out when the level of bidding exceeds their perceived value of the item. The last bidder is the person with the highest valuation of the item. If a bidder has an inflated idea of the actual value of an item, he or she will be the last person bidding and pay too much. The theory says that every winning bidder is the person who knew the *least* about the true value of an item; therefore, the winner of the auction always pays too much. The "winner's curse" is thus the premium the successful bidder overpays for an auctioned item, based on the actual versus perceived information of the value of the item in question.

The winner's curse is based on what is known as the "greater fool theory" (Busch, 1999). In simple terms, this means that there may *always* be someone out their foolish enough to bid more than you—the secret is for you not to be that fool! As Bayers (2000) so aptly put it, the ultimate illustration of the winner's curse is "the sinking feeling you get when you realize you just paid \$500 for a Pokemon card that can be had at Burger King for 99 cents" (p. 212). There is a true urban legend where Jeff Bezos, the billionaire founder of Amazon.com, had to drop out of an online auction for a pack of Star Wars trading cards because, in his opinion, the price had gone too high (*for him*) (Eisenberg, 1999)!

From Klemperer's (2003b) perspective, the "winner's curse" reflects the fact that winning an auction suggests one's opponents have pessimistic views about the value of the prize, compared with the winner's inflatedly optimistic perspective. Weidenhamer (2004b) questioned the winner's curse concept, contending that this overpayment, which may in fact be based on different private information, may not be perceived as a curse by the bidder at all. In fact, the purchase may be based on sentimentality for an item or the need for a particular item to complete a set, collection, or project, which may give the winning bidder an entirely different value equation for the good. Indeed, Holt and Sherman (1994) advanced the idea that the "thrill of winning" can produce overbidding, making it a more rational outcome for the auction participant, as opposed to an irrational failure of the process. As Tim Brady, a vice president at Yahoo observed, "Anybody who's the least bit competitive hates to be outbid. And that's why sellers love it [the auction format] so much." (quoted in Eisenberg, 1999, p. 65).

On the other end of the spectrum, there is what is known as the "loser's curse." This concept, first described by Holt and Sherman (1994) in the *American Economic Review*, holds that bidders who are inherently conservative and/or risk averse will regularly bid below their own individual valuation of an item. By doing so, they will consistently bid low and consistently lose in their bidding versus other bidders.

The key to not falling into the traps of the winner's or loser's curse is for bidders to make an honest, accurate assessment of their own valuations and preferences for items. Indeed, Bazerman and Samuelson (1983), in their aptly titled paper "I

Won the Auction but Don't Want the Prize," highlight the finding that learning that one has won an auction can actually cause a successful bidder to lower his or her appraisal of the value of the item in question. In the end, then, accurate information is the key to defeating both the winner's and loser's curse (Kambil and van Heck, 2002).

Online Auctions

Kambil and van Heck (2002) observed that online auctions are a specific type of electronic market and that "electronic markets are not technological interactions supported by humans. They are human interactions supported by technology" (p. 3). Thus, the rules and strategies for online auctions go a long way toward the success of both buyers and sellers in the market and individual auction events.

Collusion

According to Klemperer (2002), the principal factors in auction design are:

- To discourage collusion.
- To minimize aspects that are market deterring.
- To protect bidders from predatory behavior.

Indeed, speaking from auction practice, Deb Weidenhamer (2004b) believes that collusion—both on the part of the bidder, seller, or auctioneer—is the most important concern, as it is a very real obstacle that must be confronted in auction conduct and design. Bidding collusion can occur when a group of bidders agrees to try to win against a heavyweight bidder who can discourage competing bids on items to protect their position. Seller collusion most typically takes the form of "shill" bidding, whereby a pre-positioned bidder artificially bids up the price for an item. Finally, collusion can be achieved by the auctioneer. While traditionally held to be a neutral, honest broker, the auctioneer can collude to hold down the price achieved on an item at auction by holding down the number of bidders through misleading or absent advertising for the event or by hiding valuable items in the midst of lower-value items. An example of the latter would be the proverbial "diamond in the rough," with an online example being a highly expensive, large flat-screen monitor being listed in the middle of 20 to 50 lower-priced computer items.

The Rules of the Game

Bapna, Goes, Gupta, and Karuga (2002) characterized online auctions as having four key controllable factors for the auctioneer. These are:

- 1. Lot size
- 2. Opening bid
- 3. Bid increment
- 4. Auction duration

The auction rules can play a big part in determining the total returns on salable assets for the seller, as well as the satisfaction—and therefore the likelihood of repeat bidding activity—of interested buyers.

Certainly, a key rule-making decision is how to "end" the online auction. If one sets an arbitrary, firm time for the closing of the auction, this presents an opportunity for what is known as "sniping" to occur. This is when a bidder enters a bid at the last second of an auction to win the item up for bid. Today, this is a significant problem in online markets such as eBay, as sophisticated techniques are available to foster such sniping, including software that assists in the process. The sniping problem can be overcome by establishing auction rules that allow for overtime, where auctions are not to "close" until all bidders exhaust their desire to bid the final price upwards. The auction would close after a set period of time passes—commonly between one and five minutes—without the submission of a higher bid (Anonymous, "Bid4Assets Offers Snipe-Free Auction Environment," 2002). The overtime rule is a technique commonly employed in reverse auctions for e-procurement. As CEO Richard Hayman of Bid4Assets remarked, the overtime rule is popular with sellers and buyers alike because it "makes the online auction environment more closely simulate a live bidding environment" (personal interview, 2004).

Also, mirroring practices in physical auctions, it is a good idea for the auction service provider to have interested bidders set up an escrow account or electronic deposit before being allowed to bid. This is a means of qualifying interested parties for their potential to carry through on their winning bids. This differentiates people who are "window shoppers" or "tire kickers" from those who are serious

potential buyers. Market knowledge comes into play, however, in determining the appropriate deposit amount for such earnest money. For instance, when Bid4Assets auctioned a yacht, expecting to yield an estimated \$400,000 purchase price, the e-deposit amount was established at \$15,000 (Menchaca, 2003).

Lotting Strategies

Kane (2003) emphasized the importance of lotting strategies, as online auctions are a living, breathing embodiment of Economics 101, where supply and demand rule the day. For instance, if too many brand name companies are offering their goods on eBay, then they will see their average selling prices decline due to possible supply/demand imbalances (Johnson, 2002). Likewise, if an individual firm has too many listings up for a category of items, it will find that the average price garnered on such items will drop. Conversely, if there are too few items up for sale online, then demand may cause prices to rise. However, while the latter case may result in individual prices to spike, total returns may be diminished by restricting the product offerings up for auction over time. Likewise, small buyers may be frozen out by large lots that make goods and equipment desirable to them unattainable due to the quantities and dollars involved (Hannon, 2001).

In practice, the offering and ordering of auction items are decisions that need to be made carefully, in order to maximize revenue and minimize hassles. If like items are up for bid at the same time, then interested buyers will not be able to "learn" from prior auction results. For instance, if a dozen PalmPilots are up for bid with the same closing time, the total revenue from the sale is likely to be less than if the closing times are staggered over time. Why? This is attributable to the fact that bidders will base their reasonable price estimations on their prior experience. Also, as time passes, allowing new bidders to enter into the online fray, the overall strength of demand will be higher than for a one-time close (Harden and Heyman, 2002).

The ordering of items up for bid simultaneously is of vital importance, due to the fact that, as first described by Simonson and Tversky (1992), "consumer choice is often influenced by the context, defined by the set of alternatives under consideration" (p. 281). Simonson and Tversky (1992) pro-

posed that consumers want to avoid extremes and contrast between the available individual items. They gave the following analogy: "The same circle appears large when surrounded by small circles and small when surrounded by large ones. Similarly, the same product may appear attractive on the background of less attractive alternatives and unattractive on the background of more attractive alternatives" (p. 285).

There are numerous real-world examples of how the effects of ordering influence consumer behavior both in and out of the auction environment. Kambil and van Heck (2002) provide the example of how restaurateurs will front-load their wine list with very expensive vintages, making lower-quality wines often appear as good values versus the higherpriced alternatives. Likewise, writing in the Harvard Business Review, Nunes and Boatwright (2001) reported on their five-year study of classic-car auction results. They found that while sales tended to take place at the norm—the so-called "blue book" value of the automobile—the first car to be auctioned at an event sold for between 100 and 200 percent more than its anticipated value, and the second auto up for bid sold, on average, for almost 40 percent more than its blue book value. This holds true in public sector sales as well. Caesar Salicchi, treasurer of Elko County, Nevada, reported his experience has shown that when listing taxdelinquent properties for sale in an online auction, those items listed higher in order draw more bids than those properties listed further down the page (cited in Harding, 2003).

The Road Not Taken

What if, at the end of the day, it would be better for all if an auction sale—whether online or offline—didn't take place? That is the interesting prospect raised by the work of Jehiel, Moldovanu, and Stacchetti (1996). These researchers focused on the area of externalities that arise from auction sales, examining instances where the gains from a potential sale are far less in value than the negative or positive consequences that are likely to arise from the sale. These authors considered the Ukrainian government's experience with their nuclear weapons arsenal as an archetypical case, whereby the Ukraine gained far more monetarily from destroying the weapons than any illicit sale could have

brought anyone in the government. Needless to say, the negative externalities of such a sale could be nothing less than catastrophic; therefore, in cold, hard analysis, it would be impossible for a sale to net enough to outweigh the negative consequences.

In the area of externalities, it is certainly possible to see less dire situations where the externalities arising from a sale would outweigh the positive aspects of a public sector auction. For instance, if an agency mistakenly declares an item to be surplus when it was still useful and needed, then the likely gain would be less than the necessary cost to replace the piece of equipment or asset. Thus, if the agency sells a usable pickup truck as surplus, only to have to replace it with a new model, then the negative externalities would cost far more than the revenue the agency could derive from the sale.

Reverse Logistics and Online Surplus Auctions

The Reverse Supply Chain

Conceptual Overview

As Chuck Martin (2002), CEO of the Net Future Institute, observed, in today's current economic climate, organizations "cannot afford to be excess in anything" (p. viii). Yet, according to Stern and Tsui (2002), "corporate executives often have no clue how much used or surplus equipment their company is sitting on—or where it is" (n.p.).

With today's hypercompetitive business environment, every company must concentrate on maximizing the efficiencies and effectiveness of its forward supply chain (Lee, 2002). However, we have reached the point today where electronic methods for both acquisition and sales support have, in effect, become simply *de facto* standards for all firms. Now, no less an authority than Michael Hammer (2001), the founder of the reengineering movement, has observed that because e-procurement and CRM (customer relationship management) techniques have become competitive necessities today, "competitive advantage must be sought in parts of the value chain that thus far have been either overlooked or under-addressed" (p. 4).

Now attention is being focused on the "flip side of the supply chain" (Mason 2002, p. 42). Writing in the *Harvard Business Review*, Guide and Van Wassenhove (2002) labeled the *reverse supply chain* as "the series of activities required to retrieve a used product from a customer and either dispose of it or reuse it" (p. 25). This area is now referred to as *reverse logistics*. Reverse logistics was first defined in the academic literature by Murphy and

Poist (1989) as "the movement of goods from a consumer towards a producer in a channel of distribution" (p. 179). It was more recently defined by the IQ Business Group (2003) to be "the process of managing the movement of specific goods away from their typical final destination in order to maximize its value or for proper disposal" (p. 1). The Reverse Logistics Executive Council approximated that in the United States alone, the costs associated with reverse logistics are approximately \$35 billion annually (Kim, 2003).

Duffy (2003) observed that dealing with surplus is not as simple as merely throwing e-procurement into reverse. Veerkamolmal and Gupta (2002) asserted that the operational characteristics of reverse logistics were fundamentally different and inherently more complex than the forward logistics involved in manufacturing and distribution. Clay Valstad, director of reverse flow and specialty distribution for Sears, categorized the principal difference between forward and reverse logistics this way: "On the forward side, you deal with order. On the reverse side, you deal with chaos, trying to create order" (quoted in Harps, 2003, n.p.). On the procurement side, an organization is dealing with an organized flow of items, coming into its possession in an organized manner (in truckloads, pallets, and cases) and clearly labeled and packaged. On the opposite end, reverse logistics deals with a random flow of goods and materials of all types and in various conditions. Because the reverse flow consists of smaller shipments that require a great deal of handling, the per unit costs associated with them are far higher than with outbound shipments. For instance, the average profit on a personal computer

The Reverse Supply Chain in Retail America

We may not think much about the fishing pole, oil filter, or cereal that we return to our local Wal-Mart. However, in the aggregate, customer returns represent 4 percent of American retailers' total revenues—or an astonishing total of approximately \$100 billion per year (Trebilcock, 2001)!

Current statistics show that the overall return rate for products sold in the United States is approximately 6 percent. The rate of returns for different categories of products can be staggeringly high—up to 50 percent of all products shipped for some goods. For instance, for the consumer electronics area, the return rate is 8.5 percent. (Lee, 2002). There are some 90 million individual items returned annually (Cox, 2001). The cost to manufacturers just in handling, processing, and transporting returns has been estimated to be up to \$150 per item, which amounts to over \$40 billion annually across the American economy (Mannella, 2003).

In the consumer area, returns have been categorized by Jeff Roster, a senior analyst with Gartner, as "the ugliest part of the retail environment ... (being) all expense with no upside" (op. cited in Sant, 2000). Until recently, most companies have looked upon the area of product returns as a "black hole" (Anonymous, "Reverse Logistics Services: New Prospects for Carriers," 2003). In fact, the landfill was often the most attractive option for firms dealing with such volume of reverse flow. For instance, before implementing a company-wide reverse logistics solution, large retailers such as Sears and Radio Shack routinely saw the landfill as the best route for returned goods to take (Mason, 2002). Likewise, Estée Lauder used to dump \$60 million worth of cosmetics annually that had been returned to them (Caldwell, 1999).

sold in the United States in 2003 was \$76, but the combined costs of returns and technical support for each defective or returned unit is approximately \$100 (Zieger, 2003).

Kim (2003) points out that managing the reverse supply chain is a very different and much more complex matter than trying to make an organization's forward supply chain more efficient and costeffective. He observed: "Traditionally, companies have focused on improving the efficiency of their forward supply chain from order entry to delivery. Managing the reverse supply chain ... is a very different process. Trying to do this with existing systems or traditional supply chain management solutions has proven to be ineffective because these systems aren't designed to meet the unique and complex needs of the reverse supply chain" (p. 2). The complexity of reverse logistics far surpasses that of forward logistics, which means that there really is not at present an "off-the-shelf" software solution available to handle the reverse flow.

The "Gold" at the End of the Supply Chain

Organizations are not just simply seeking to minimize their reverse logistics costs, but are seeking to improve their recoveries on goods at the end of the flip side of the supply chain. They increasingly realize the costs associated with handling this reverse

flow. What are some of the hidden costs involved in handling surplus? According to Mannella (2003), these costs include:

- Opportunity costs
- Poor space utilization
- Depreciation expenses
- Tracking expenses
- Maintenance costs
- Insurance costs
- Lower ROA (return on assets)
- Higher taxes

Now, as Cottrill (2003) observed, "reverse logistics is no longer an afterthought, as companies discover gold in the mountains of returned products at the back end of the supply chain" (p. 20). By actively marketing their surplus—getting an unneeded asset out of their hands and deriving positive revenue from the process—companies are finding that they can produce significant gains, including:

- Increasing short-term cash flow
- Eliminating the expenses involved in holding the asset, including maintenance, inventory tracking, and liability

- Ending the depreciation of the asset
- Providing new physical space where the asset was formerly housed that can be put to more productive use
- Increasing productivity and cutting costs by using existing assets more effectively

In its white paper Online Asset Disposition: Finding Value in Surplus Assets, ATKearney (2002) went on to prove that 70 to 90 percent of every dollar generated through asset recovery goes straight to the bottom line.

Governments and Asset Management

We are seeing this shift in focus in the public sector as well, as governments at all levels begin to focus more of their attention on asset management and the reverse supply chain. Refining the front end of the supply chain in the public sector has received much attention lately, with agencies at all levels of government incorporating many of the e-procurement tools and techniques of leading private sector firms. However, while forward logistics has received a great deal of investment and consideration in the private sector, asset management and reverse logistics have been the oft-neglected part of the public sector supply chain.

Colonel Joseph L. Walden (2004) of the U.S. Army Command and General Staff College in Fort Leavenworth, Kansas, criticized government leaders for not realizing that they too are in the reverse logistics business. In fact, he found in a study of the Department of Defense that the size of the military's reverse logistics operations is bigger than *any* operation found in the private sector, even if these operations are not commonly thought of or labeled as such. Likewise, Wyld (2004b) found that governmental organizations can find far greater opportunities for operational improvements and financial gains from reverse logistics innovations than from the traditional, forward-facing supply chain.

Reinventing the Surplus Marketplace through Online Auctions

It has been said that "the asset sales business is a good business in good times and a great business in not-so-good times" (Hirsh, 2002, n.p.). The market for surplus assets has been accurately described

as being a difficult market, characterized by inefficient processes and illiquidity (Draenos, 2000, p. 126–127). The chief reason that the market is illiquid and inefficient is poor information, making it hard for buyers and sellers to connect (Hickey, 1999). Traditionally, the surplus market has been localized in scope, with trading being geographically confined. Bulk liquidators, operating in an "under the radar" environment, have built their businesses largely based on the traditionally illiquid and inefficient methods of surplus disposal (Norman, 2003)—which enabled them to buy unwanted goods on the cheap and remarket them.

In market after market, the Internet is forcing transparency throughout the economy, making information sharing an economic imperative today (Hof, 2003). Writing in the Harvard Business Review, Scott McNealy (2001), the CEO of Sun Microsystems, observed that the Internet has created "the biggest bid/ask trading floor in history" (p. 18). Martin (2002) asserts that online auctions offer great benefits for buyers and sellers alike, as they have the ability to "aggregate both supply and demand simultaneously." In this environment, transactions can happen much faster and the "true price of a product or service can more accurately reflect true supply and true demand in real time" (emphasis in the original, p. vii). According to Hannon (2001), "The core benefit of online exchanges is that they disseminate real-time information globally ... opening up previously isolated markets" (p. 24). The availability of real-time information in an online auction on both the item for sale and the supply/ demand for the item, as evidenced by the bidding activities, lends great transparency to the sales process. As Koufaris, Kambil, and LaBarbera (2002) commented, "Electronic commerce empowers consumers by giving them unprecedented information access and communications" (p. 133).

The surplus market is thus an area where the use of e-tools can create whole new ways of doing business. One such e-tool is the use of online auctions. Writing in *Decision Sciences*, Bapna, Goes, Gupta, and Karuga (2002) stated that online auctions, in the absence of spatial, temporal, and geographic constraints, provide an "alternative supply channel for the distribution of goods and services" (p. 558). Surplus online auctions were defined by Hickey (1999) as a mechanism that "liquidates surplus at

the best possible prices by allowing a range of potential buyers to bid for products at below market prices" (p. 29). Online surplus auctions can be further defined as "a dynamic pricing structure where buyers compete for the product(s); therefore, pushing the price to fair market value and maximizing cost recovery versus other disposition options" (Connection to eBay, 2003, p. 3).

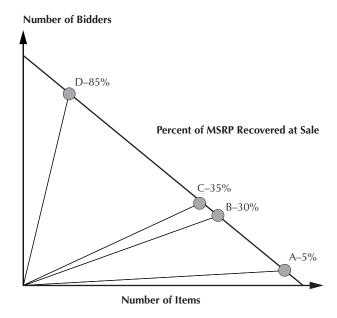
The Alphabetical Case for Online Surplus Auctions

Tim Miller, president of Webmergers.com and an Internet-business analyst, remarked that three things are certain in life: "death, taxes, and liquidation sales" (quoted in Hirsh, 2002, n.p.). Online surplus auctions have proven to:

- Increase participation rates for surplus auctions.
- Increase rates of recovery on items put up for sale.
- Decrease the costs associated with both carrying the items and conducting the auction events.
- Provide better management information on surplus sales.

In their book The Auction-App, Harden and Heyman (2002) constructed a model showing the impact of dynamic pricing on such liquidation sales. An adaptation of this model is shown in Figure 1. These authors hold that through traditional closed bidding for surplus, over time, an organization can expect to recover between 5 percent (point A) and 35 percent (point C) of the item's original purchase value (its MSRP, or Manufacturer's Suggested Retail Price). However, in an online auction environment, due to the heightened competition to be gained from the increased number of bidders, the seller can expect to receive between 30 percent (point B) and 85 percent (point D) of the MSRP. Thus, organizations that use online auctions for surplus can expect to achieve at least an approximation of the best prices that have been historically garnered through traditional sales techniques—and potentially far, far more. This increased Rate of Recovery, or ROR (the final selling price of an asset as a percentage of its acquisition value), can therefore turn auctions of surplus from money-losing or break-even events, at best, into positive sources of revenue for the organization.

Figure 1: The Effects of Dynamic Pricing on Liquidation



Source: Adapted from Harden and Heyman (2002, p. 5).

Research has shown that companies that employ auctions increase their recovery prices on assets by, on average, 25 percent (Queree, 2000). According to Bill Angrick, CEO of Washington, D.C.-based Liquidity Services, Inc., online surplus auctions produce returns 50 to 200 percent higher than inperson, physical auctions (cited in Norman, 2003, n.p.). The goal is, of course, to maximize returns on the assets and equipment being auctioned, while minimizing costs of all forms (direct and indirect) associated with these items (Tulip, 1998).

Companies are finding that eBay and other online auction service providers represent an ideal outlet for what Rogers and Tibben-Lembke (2002) labeled the "B channel," for goods that have been through a reverse flow. While the B channel is intended to operate separately and distinctly from a company's primary sales channel (their "A channel"), the B channel can also handle first-quality and neverused items as well. By operating as a B channel, companies can derive positive revenue without harming their A channel. Yet, this is a delicate path for companies to walk. As Kambil and van Heck (2002) point out, the B channel can create channel conflict with a company's present distributors and retailers. For that reason, most companies today limit their sales on eBay and other auction sites to

returned, refurbished, and overstock goods (Schonfeld, 2004).

The Post-Bubble Realities of Surplus

The model for electronic markets, which have become the worldwide standard for trading commodities and completing financial transactions, has been proven usable for trading surplus assets on a global scale (Queree, 2000). This fueled a fire of investment activity at the height of the "dot-com bubble," when literally 300 to 500 online businessto-business (B2B) sites and exchanges were attempting to become the online intermediaries for facilitating exchanges between buyers and sellers in disparate markets for surplus goods and machinery (Stern and Tsui, 2002). Today, only a handful of these companies remain. While it is doubtful that B2B online auctions will fulfill the projections of proponents such as Keegan (1999), who forecast that they would become the "primary commerce model of the future" (p. 70), online markets have proven their value. For instance, a few years ago, General Motors faced the problem of having too many off-lease vehicles and cars that were being retired from rental car fleets. Today, GM conducts online auctions for such used vehicles. In both 2002 and 2003, GM's auction sales topped over 300,000 units, with returns running \$500 to \$600 per car ahead of the former off-line methods (Welch, 2003).

There are numerous tales of how companies have discovered that such online surplus auctions can be a great way of sourcing a wide variety of equipment, machinery, and "stuff." In the information technology area for instance, Caulfield (2002) recounts the tale of Ken Smith, an engineer for Equipe Communications, a computer networking firm. After visiting Texas A&M University, he went to eBay to buy a souvenir cap or sweatshirt. When he typed in the word "ATM," which is how the university's name is shown on all licensed products, he found numerous auctions offering barely or never-used high-end ATM networking gear. The firm then began sourcing these products on eBay, saving over \$750,000 in just one year through such purchases. The ability for businesses and consumers to purchase gently or never-used equipment via the Internet can also hurt the ability of manufacturers to command retail prices for their wares. This has been evidenced in the IT areas of computer

and networking gear, as well as wireless technologies, where "one man's asset recovery is another man's poison," collapsing pricing in these areas (Omatseye, 2001, n.p.).

E-commerce trading platforms have made it possible to make the process of matching the supply and demand for specialized equipment (Dittrick, 1999). Idle and surplus equipment has suddenly become tradable between entities through e-commerce marketplaces. For instance, in the oil and gas industry, billions of dollars' worth of oilfield equipment often sits idle in one part of the world where drilling and processing activity may have slowed, while it could be readily used elsewhere (Schimmoller, 2001). In fact, companies trying to offload used heavy industrial equipment typically can recover only 10 to 20 percent of its original cost (Stern and Tsui, 2002). For example, the Burlington Northern Santa Fe railroad began auctioning off its old locomotives online in 2001. The company has sold 47 of these 80-ton diesel locomotives online, six in a single afternoon. The new way of disposing of its old rolling stock has taken a complex, paper-laden process that used to span six weeks and compressed it into a single day (or less), netting Burlington Northern Santa Fe 11 percent higher returns in the process (Gaffen, 2001). In healthcare, the Internet has made it possible for institutions to sell surplus equipment online through specialized sites, turning "trash into treasure" and funds for the hospital (DeJohn, 2000).

The shift to online markets for surplus capital machinery must overcome skepticism in order to ensure activity in such trading. As one longtime buyer framed the issue: "We've always been careful about going on site and thoroughly inspecting equipment ourselves before we'd even consider bidding. I don't know how you'd get the same comfort factor with an online auction. It makes me a little skeptical" (op. cited in Teschler, 2000, p. 149). Due diligence will thus play a big role in providing a comfort level to participants in online surplus auctions to ensure the condition of the material under review. Such services are thus a vital value-add to any online surplus auction.

The Public Sector and Online Surplus Auctions

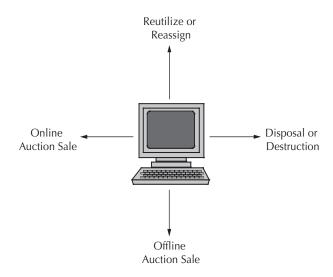
Scott McNealy (2001), CEO of Sun Microsystems, observed that online auctions, while being a "somewhat scary way of doing business," are a key component of an "online revolution [that] is bigger than anyone realizes" (p. 19). We are now beginning to see government agencies embark down this path to help solve the reverse logistics problems of the public sector.

Overview: The Quadruple Option

Basically, any public sector organization has four options for its surplus assets, once the decision is made to no longer hold on to them. This decision framework is shown in Figure 2.

In the first instance, the items can be redistributed, either within or outside the organization, for use.

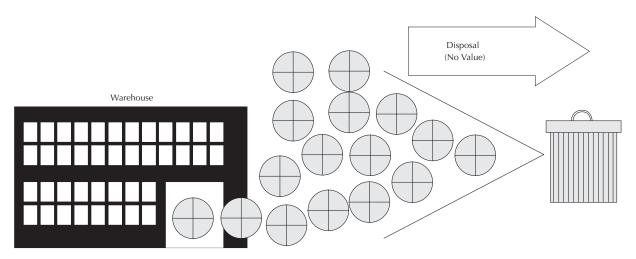
Figure 2: Options for Surplus Assets



This is most commonly seen in the public sector environment in asset reutilization programs, carried out at the federal and state levels. These are highly valuable activities, as they enable agencies at the same or a lower level of government to reutilize assets that are no longer needed or valued by a higher level, while likely saving their own agency the expense of acquiring the item. The federal government operates a highly successful program of this type, whereby state and local governments, along with qualified nonprofit organizations, can reutilize federal surplus assets.

An innovative example of this type of operation is the "Got Stuff?" program, instituted by the state of Connecticut's Department of Administrative Services (DAS) in 2003. This is a coordinated effort among the state's agencies to identify surplus office and computer equipment that has been made available due to the streamlining of government and early retirements of personnel. According to DAS Commissioner Barbara Waters, "Rather than allowing those valuable assets to sit around collecting dust, the "Got Stuff?" campaign will benefit those who most need the equipment" (quoted in Anonymous, 2003, "Statewide Surplus Equipment Initiative Saves Taxpayers' Money," p. 46). As of mid-2003, the DAS had collected almost a quarter million dollars' worth of surplus equipment available for redeployment, which has saved former Connecticut approximately \$50,000 in unnecessary new purchases. Former Connecticut Governor John G. Rowland remarked that the campaign would be expanded to include all state agencies, as "the 'Got Stuff?' program is exactly the type of simple, common-sense program we need to make our government more efficient" (quoted in

Figure 3: Flow of Surplus before Implementing Online Auctions



Anonymous, 2003, "Statewide Surplus Equipment Initiative Saves Taxpayers' Money," p. 46).

In the second instance, public sector surplus assets can meet the same fate as have returned cosmetics and broken remote-controlled cars. As illustrated in Figure 3, all too often the surplus items end up in the trash dumpster, providing no value for the agency. Today, due to the rapid growth of so-called "green laws" for recycling computer equipment and other IT materials, disposal is likely to cost the agency *real* dollars for the proper and legal disposition of the property (Solomon, 2004).

Finally, the two options that remain for public sector surplus are whether to sell the items through a traditional offline sale or through an Internet auction. As will been seen in the case studies, the case to be made for shifting to online sales is dramatic.

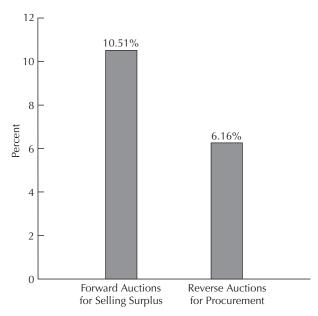
Forward vs. Reverse Auctions

Mirroring the best practices of the private sector, government agencies are beginning to recognize the power of online auctions as a tool for better managing the end of the public sector supply chain. According to results from the *Purchasing 2003 Benchmarking Survey*, conducted by the National Institute of Governmental Purchasing (NIGP) (2003), the level of activity in forward auctions for surplus disposition is growing rapidly. While much focus has been on the growing use

of reverse auctions for public purchasing at the front end of the public sector's supply chain (Wyld, 2000), the use of forward online auctions for handling surplus assets at the end of government agencies' supply chain activities is where much of the auction action is today. In fact, as shown in Figure 4, the NIGP's national survey of non-federal public sector purchasing managers showed that nearly *double* the number of agencies were selling surplus via forward auctions than were utilizing reverse auctions in their procurement activities.

As charted in Figure 5, the NIGP's study reported that approximately 1 in 7 local governments across the United States were presently using online auctions to gain revenue from their surplus equipment and materials. These results mirror the ever-emerging picture on eBay, where, according to company spokeswoman Kristin Seuell, literally hundreds of cities and counties are selling their surplus (cited in Henle, 2003). Thus, according to Matthews (2001), one of the most promising areas for the development of e-government is the concept that the public sector should use online technologies to maximize its revenues through online auctions of surplus, used, and seized assets—goals akin to the private sector. According to Hunter Hoffman, corporate spokesman for Liquidity Services: "Surplus as a separate revenue entity is still being largely overlooked. Governments are looking at millions of dollars of unrealized money that can go back to the taxpayer (quoted in Sarkar, 2000, p. 40).

Figure 4: Overall Use of Auctions in State and Local Governments



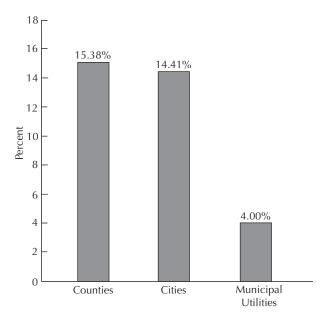
Source: National Institute of Governmental Purchasing— Purchasing 2003 Benchmarking Survey, pp. 6–8.

Why Now?

Federal, state, and local officials are today looking to online auctioning as a way of increasing the reach and scope of surplus auction events—and, ultimately, the number of participants and bidders in them. Brown (2001) observed that "although it's nothing new for government to sell excess property and assets, using the Internet is changing the way the government does business in this area" (p. 21). According to auction theory, this should mean higher prices for items being put out to bid. In practical terms, it also means that governments can lessen their expenses associated with carrying the surplus items for longer than is necessary. As Martin (2002) characterized the situation, selling surplus items online thereby creates a "double return" for any governmental organization, extracting new non-tax revenues and minimizing expenditures.

Of course, all of this is taking place at a time when budget deficits across all levels of government are at record points. According to estimates from the National Conference of State Legislatures, despite the improving economy, the 50 states are collectively looking at over \$35 billion in budget shortfalls in 2005 (Peterson, 2004). Still, while current budget realities may be increasing the motivation

Figure 5: Percentage of Local Governmental Units Using Online Auctions for Selling Surplus



Source: National Institute of Governmental Purchasing— Purchasing 2003 Benchmarking Survey, p. 6.

for some government agencies to step up their reverse logistics and online surplus sales activities, the economic equation for better management at the end of the public sector supply chain will hold in both good and bad budgetary times.

Selling High

The Council of State Governments, Eastern Regional Conference (2003) found that by taking auctions online, the returns from such sales can be *up to10 times greater* than what physical auctions have brought in the past. In doing so, governments can move to a forum that, according to Lieutenant John Dixon of the Lexington, Kentucky Police Department, which just moved to online auctions of seized and stolen property, "is as public as you can get ... open 24 hours, seven days a week" (quoted in Massey, 2004, n.p.).

For example, the state of Tennessee analyzed its experience selling one of the most prevalent government surplus items: passenger cars. The state found that its online auctions were bringing in 47 percent higher net prices than what had been garnered in live, in-person auction events. Brenda Grant, the director of property utilization for the Tennessee Department of General Services,

commented that Tennessee's auto experience demonstrates that "selling online expands your audience.... We're getting better competition and better prices" (cited in Swope, 2004, p. 16). Likewise, the state of Oregon began selling surplus on eBay in 1998 (Gress, 2003). Oregon Surplus takes advantage of eBay's regional sales capabilities, enabling the state operation to offer larger items online to reach eBay's worldwide audience, but with a focused approach that targets regional buyers that can reasonably be expected to be the "serious" bidders for such items (Krebs, 2000). (Oregon Surplus is profiled in the case study "eBay and the Public Sector").

Krebs (2000) noted that government online auctions work particularly well for "glamour items," such as jewelry, electronics, and sporting goods. This is both because they attract high interest from buyers, while having a low "weight-to-value ratio," which means that shipping and storage costs can be minimized. They work less well for non-glamorous items that have a high weight-to-value ratio. As Hugh Graf, spokesperson for the Broward County, Florida, Sheriff's Office, which auctions off unclaimed stolen and unclaimed through Property Bureau (the subject of a case study presented later in this report), observed: "The downside is if you're going to buy something like a kitchen sink.... The heavier items are so big that the shipping costs can be prohibitive" (quoted in Anonymous, 2002, "BSO Property Among Goods on Auction," p. B3).

Yet online auctions have proven to work well for decidedly non-glamorous items as well. For example, the public transportation agency in La Mirada, California, had for years been selling their used buses in the traditional manner of an on-site, physical auction. Their guidelines called for the buses to be retired once they reach 90,000 miles. In 1999, a physical auction garnered only \$7,000 for three buses, which cost \$60,000 to \$70,000 new. In 2000, the city moved to an online auction environment, collecting \$23,000 for two buses sold through ecitydeals.com (now defunct). (Anonymous, "Sold! Distributing Surplus Online," 2000).

Carrying Low

As *The American City & County* put it, the Internet enables the creation of a "trading forum" for governments to be able to help them to create new

sources of revenue for their agencies. Just as importantly, online auctions allow public sector organizations to more readily shed their surplus assets, trimming unnecessary expenses from carrying these unneeded items (Anonymous, 2000, "Sold! Distributing Surplus Online"). By getting the property off their books, agencies are saving the personnel and warehousing costs necessary for holding the goods and equipment (Nasser, 2003a). Selling surplus online also dramatically lowers not only the costs associated with the management of surplus assets (as will be demonstrated through the case studies), but also lowers the costs associated with the auction events themselves.

For instance, before San Diego County, California, began selling its surplus online, it would hold an annual auction, renting Golden Hall in downtown San Diego for the event. The county encumbered significant direct and indirect costs to conduct the event, having to devote significant staff time to physically moving and displaying the goods and to conducting the auction itself (Monteagudo, 2001).

Federal Surplus

Overview

Up to the present time, the federal government's sale of surplus has been a largely hidden market, albeit a very large one, as the government disposes of an estimated \$16 billion worth of property annually. Information technology equipment—spanning the gamut from laptops to monitors to supercomputers—accounts for an estimated 17 percent of the federal surplus market (Frank, 2003). According to Corey Runnels with the Federal Asset Sales Initiative, at present the General Services Administration (GSA) recovers only approximately two cents on the dollar in sales of federal surplus items (cited in Frank, 2003, n.p.).

As chronicled in Wyld (2003), up until now, GSA has spearheaded the sale of non-military federal surplus. For decades, GSA has held auctions at various locations around the country on all types of surplus federal property. By the year 2000, GSA was bringing in \$300 million annually from these physical auctions. For the past few years, GSA has operated GSA Auctions (www.gsaauctions.gov) as an online auction site for such sales. However, it has suffered from high fees, low agency participation, and low sales figures.

E-Government and e-Auctions

Much attention has been given in Washington to President George W. Bush's e-government agenda. President Bush's program has three guiding principles, calling for e-government to be:

- Citizen-centered
- Results-oriented, and
- Market-based (Office of Management and Budget, "Presidential Memo: The Importance of E-Government," 2002).

The Federal Asset Sales (FAS) initiative, one of the 25 presidential e-government initiatives, has the following goals:

- **Goal 1:** Make it easy to find, buy, and sell federal assets (unify and simplify).
- Goal 2: Leverage economies of scale to increase return on assets sold, decrease cost of sale, and reach a broader customer base (results-oriented).
- Goal 3: Take advantage of market driven "best in class" practices and solutions (Federal Asset Sales, 2004, http://www.whitehouse.gov/omb/ egov/gtob/asset.htm.)

Mitra Nejad, program manager for the Federal Asset Sales initiative, observed that the key element for the FAS solution to succeed will be creating something that agencies will want to use to dispose of property as easy and cheaply as possible. Eighteen federal agencies are providing input into the FAS initiative, and 10 have signed memoranda of understanding to make use of the eventual FAS asset sales mechanism (cited in Frank, 2003). According to a mid-2004 e-government status report from the Office of Management and Budget (2004), the FAS initiative is still far from implementation. Funding is proving to be the major issue for this and all 25 of the e-government initiatives (Michael, 2004).

The biggest current experiment in this area involves the Department of Defense (DoD). Until recently, American military surplus was sold through physical auctions at over 200 military facilities, both in the United States and abroad. After a competitive public process, in mid-2001, the Defense Reutilization and Marketing Service entered into a

unique partnership with Liquidity Services, awarding the firm an exclusive contract to sell the wide panoply of items that become surplus for the armed forces and are not claimed for reuse by other federal, state, and local agencies. Liquidity Services set up a special subsidiary, Government Liquidation, which oversees the storage, display, lotting, and auctioning of military surplus items on a specially created auction site, www.govliquidation.com. The company's proprietary auction platform provides complete fulfillment solutions, including the handling of payments, shipments, and customer service, and dispute resolutions. (This operation is detailed in a case study on pages 45–58).

The Resolution Trust Corporation Model

The experience of the Resolution Trust Corporation (RTC) is pointed to as the bellwether for government to engage is sales of seized and surplus property in public hands. It was created as a temporary federal agency in 1989, charged with cleaning up the mess and debris from the massive failures in the savings and loan industry, with the mandate that it be "out of business" by December 31, 1995—a goal that the RTC met (Stanton, 2003b). The RTC faced a daunting task, namely, how to garner the highest possible returns for taxpayers on billions in seized real-estate and loan portfolios from the failed thrifts, as well as approximately \$10 billion in personal property. The latter category of items spanned the gamut, ranging from pedestrian computers and office furnishings to eclectic items such as high-end automobiles, collections of fine art, and Arabian show horses (Chelekis, 1993).

The RTC managed to sell approximately \$400 billion in assets, representing 87 percent of the book value of the assets (Stanton, 2003b). Much of the success of the RTC can be attributed to the unique joint venture approach the agency employed. Under a traditional government auction, the agency would have sold assets and then watched as they were resold by the private purchaser for profit. With the 40 joint venture partnerships the RTC formed, the agency effectively sold the right to private sector partners to sell assets out of the RTC's portfolio. The government received between 50 and 80 percent of the returns, with the joint venture agreement aligning the incentives for both parties to maximize their recoveries on the assets.

Smith (2003) points to the success of the RTC's auctions of failed savings and loan assets as a model for effective governmental use of auctions. The RTC experience demonstrated that auctions should be a *first* option for effective disposal of assets, rather than a final, desperate option. Further, the RTC experience demonstrated the value of joint public-private ventures for government asset sales, serving as a precursor for activities at the Department of Housing and Urban Development (HUD) and for the Defense Reutilization and Marketing Service (DRMS) (a case study of which is included on pages 45–58) (Stanton, 2003b).

eBay: The 800-lb. Gorilla of the Online Auction Market

Introduction: From Oddball to Hardball

Think of online auctions, and your mind most likely conjures up the leading name in the field—eBay. According to Investor's Business Daily, total online auction sales will double over the next several years, reaching over \$100 billion annually by 2007. Estimates are that eBay will represent at least half of this figure (Barlas, 2003). Late last year, Business Week heralded with a cover story the birth of a new "new economy"—"The eBay Economy." From the viewpoint of W. Brian Arthur, an economist with the Santa Fe Institute: "eBay is creating a second, virtual economy. It's opening up a whole new medium of exchange" (op. cited in Hof, 2003, p. 126). eBay or, more precisely, the individuals and companies selling on the site—"create markets where none existed before" (Schonfeld, 2002, p. 56). Almost just as surely, what comes to mind as being sold on eBay are not the serious items, but the odd, the curious, and, yes, perhaps even the illegal.

eBay grew from Pierre Omidyar's vision of an online auction exchange through which his fiancée could trade Pez candy dispensers and other collectibles (Keegan, 1999); the first sale was a broken laser pointer (Conlin, 2004). As Jim Griffith (2004), dean of education for eBay University, characterized the start-up of this dot.com success story, the site was originally called AuctionWeb and was hosted on a computer at Omidyar's San Jose, California, condominium. Omidyar wrote the original code for the online auction over Labor Day weekend 1995, and the site was up and running—intermittently at best, as much of eBay's early his-

tory was characterized by site crashes. Still, from its humble beginnings, the size of this alternate, "eBay economy" is estimated to be \$35 billion as of mid-2004, driven by over 100 million registered buyers, sellers, and shoppers from all over the world (Whitehead, 2004).

Many members of the general public most associate eBay with the bizarre items that have been auctioned off, such as the world's longest French fry. According to Griffith (2004), part of the lore of the eBay culture and community are the off-beat and bizarre items that have been offered for sale on the site. Over the past nine years, people have tried to sell ghosts, their soul, their relatives (grandmothers and in-laws), their virginity, and their kidney on eBay. The latter case is arguably the most notorious in eBay's history, when a healthy man in his 20s offered to sell his kidney for donation to the highest bidder. This instance led to eBay's first category of items that would be prohibited for sale, namely human body parts. Various individuals have tried to sell original artifacts of modern history and American culture that have been guickly pulled from the site, due to eBay's policy of not auctioning what it terms "Murderobilia"—items allegedly connected with crime or with nefarious or tragic current events. Such items pulled from the eBay site have included:

- Pieces of the Space Shuttle Columbia
- Items from the World Trade Center
- Several "original" rafts that delivered Elian Gonzalez from Cuba to the United States

Trash into Treasure

One of the lures for people to begin to sell their items on eBay is that online auctions are a mechanism whereby the old adage that "one man's trash is another man's treasure" comes to life on a 24/7/365 basis. In a June 2004 presentation, Jim Griffith (2004), Dean of Education for eBay University, recounted three such stories, culled from the billions of eBay transactions. These are the type of stories that interject the element of gambling—the prospect of hitting the lottery, so to speak—into eBay auctions.

In mid-2002, an eBay seller listed a six gallon Norton stoneware crock for sale on the auction site. The circa-1876 crock, which depicted an eagle and a flag in blue and white, was in top condition. The owner started the listing with a \$500 minimum price, hoping to get perhaps a thousand dollars for the item. After fifty bids, submitted over a week's time, the crock ended-up being sold for \$37,877.77. This sale stands as the highest price ever paid for a piece of collectible American stoneware on eBay.



The second item is an antique fishing lure, which was sold on eBay in February 2003. The starting price for the item was set at \$9. The antique lure, made of bronze and wood, drew wide interest for its Canadian owner. When the online dust

cleared, the lure ended up catching a buyer for \$31,857.50.

The final example literally came from something that should have been in the trash—a long time ago. In November 2002, an anonymous woman came across empty beer cans in a home she was remodeling. These cans had been left by workmen who had worked on the home sixty years earlier, during World War. Fortunately, these littered cans had been left in a crawl space of the home, The woman was also fortunate that the beer of choice for the wartime workmen was today a highly collectible, flattop Clipper beer can from 1941. The steel can had been preserved in an almost ideal condition, undisturbed and protected from the weather and other elements that normally corrode items of this vintage and material. The can was important both for the beautiful graphic and the era (World War II) in which it was made. After frenzied bidding and attention in the eBay community, the can ended up selling for over \$19,000! Both buyer and seller were happy with the transaction, with the seller receiving a Christmas a gift basket from the buyer.



The Metrics of the eBay Marketplace

While some associate eBay with the bizarre items that have ended up for sale in their marketplace, the site is increasingly becoming mainstream. Forrester Research estimates that online auction sales are expected to reach \$54.3 billion annually by 2007, with eBay projected to have an 85 to 90 percent share of the online auction marketspace (Johnson, 2002).

The numbers on eBay are astonishing. According to Forbes magazine, on an average day in March 2004, eBay logged:

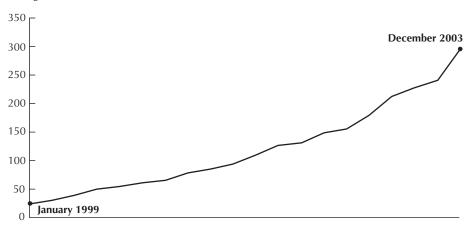
- 175 million searches
- 10 million bids
- 2 million new listings
- \$85 million in auction sales (Murphy, 2004)

eBay is the most visited website online, with visitors lingering 3.5 times longer than on any other site. The "sales velocity" of items on eBay is startling, when one considers that, on average, three consumer electronics products are sold each second in the online marketplace (Connection to eBay, 2003).

The aggregate numbers on eBay show that as of the end of 2003, the number of active listings on eBay was approaching 300,000 (Figure 6). As can be seen in Figure 7, gross merchandise sales through the eBay marketplace have been rising at approximately 50 percent annually, with no letup in the growth of the site in sight. Put in perspective, eBay's sales of over \$20 billion in 2003 mean that the value of the trading volume on the firm's site exceeds the Gross Domestic Product of 130 of the nations of the world (Hof, 2003).

Figure 6: Number of Listings on eBay, 1999-2003

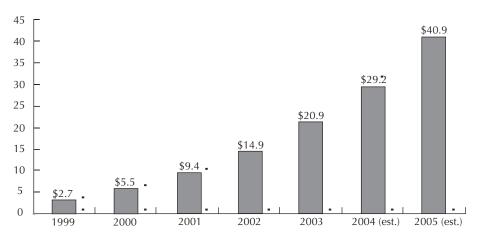
Listings of Both Auctions and Fixed Price Items (in Millions)



Source: Wingfield (2004, p. A1).

Figure 7: Gross Merchandise Sales on eBay, 1999-2005





Source: Connection to eBay (2003, p. 2).

These results are all the more remarkable considering that in 1998, according to CEO Meg Whitman, 8 percent of all the items for sale on eBay were Beanie Babies (cited in CBS News, 2003). In 2001, the most expensive single item ever auctioned on eBay was a Gulfstream IV jet, which sold for \$4.9 million (Griffith, 2004).

Kane (2002) pointed out that the lasting technologies of e-commerce are the ones that help facilitate transactions. She cited eBay's introduction of the "Buy-It-Now" feature as one such example. Since introducing the feature in 2000, eBay has brought

in buyers who might otherwise have been unwilling to participate in the auction process, with its inherent uncertainty and time demands. With approximately 20 percent of all transactions being consummated through the "Buy-It-Now" option, eBay has seen its average auction length shrink dramatically. Likewise, with the security of payments being a big concern for both buyers and sellers, eBay saw much of its payments being processed by a once small firm called PayPal, Inc. eBay then purchased PayPal, bringing its operations into the eBay fold (Hof, 2003).

eBay: "The Liquidation Machine"

According to Kane (2003), eBay is fast shedding its reputation as an "online flea market" and attracting large corporate sellers. This is particularly true for used equipment or refurbished goods, which previously would have been sold in bulk to liquidators or wholesalers. Now, particularly in the area of technology products, these goods are finding a ready global pool of both individual and corporate buyers. Original equipment manufacturers (OEMs) are looking to online auctions, and eBay in particular, as a mechanism to dispose of excess inventory (Hannon, 2001). Leading manufacturers and retailers are also selling their excess inventory and returned goods on eBay. These include such household names as:

- Dell
- Disney
- Donna Karan
- Ford
- Fujitsu
- Harman International
- Hewlett-Packard
- IBM
- J.C. Penney
- Kodak
- MTD Products
- Nike

- Nokia
- Olympus
- Price Pfister
- Ritz Camera
- Samsonite
- Sears
- Sure Fit

Sources: Kemp, 2001; Berkowitz, 2003; Junnarkar, 2003; Schonfeld, 2004.

eBay has been labeled a "liquidation machine" for businesses, as companies are fast recognizing the power of the eBay marketplace. For instance, Sears now sells in excess of \$1 million a month of returned items, refurbished goods, and excess inventory on eBay, recovering as much as five times the 10 to 15 percent of MSRP that it formerly collected when dealing with liquidators (Schonfeld, 2004). Table 1 demonstrates that Sears' results are just par for the course for companies selling items through the eBay channel.

eBay can also be used by companies not just as a sales outlet, but as a dynamic source of market information. Today, many firms routinely use eBay for the pricing intelligence that can be gained by monitoring sales of like items on eBay. In this way, companies can glean a no-cost gauge on what they should be charging for their surplus or excess inventory items to see them move, whether in an online or offline sales environment (Berkowitz, December 5, 2003).

Table 1: Comparison of Results for Companies Selling on eBay

Seller	Item	Retail Price	eBay Price	Liquidator Price
Harman International	Harman Kardon AVR 7200 Home Theater Receiver	\$2,000	\$751	\$180
Olympus America	C-5050 Digital Camera	\$760	\$480	\$100
Sears	Kenmore Elite Front-Loading Washer	\$1,470	\$800	\$150

Source: Schonfeld (2004, p. 45).

eBay's Open Marketplace

The "Double-Edged Sword"

According to Barbara Gore, eBay's senior director of marketing and industry relations, companies are often surprised to learn that their products are already being sold on the eBay marketplace, listed by individuals and bulk resellers who are hawking firms' goods online (op. cited in Berkowitz, December 5, 2003). For instance, according to Connection to eBay (2003), approximately \$2.2 billion in consumer electronics products were sold on eBay by manufacturers and retailers in 2002. Yet, in the same year, individuals sold approximately the *same* volume of used consumer electronics on eBay.

Kambil and van Heck (2002) labeled this a "double-edged sword," in that while eBay offers firms a mechanism to unload surplus, this activity can work to depress the price of new goods if consumers decide they like the price/value relationship of used goods that can be purchased through online auctions. This was the experience of Callaway Golf, which found that its eBay sales were taking away from the sales of its new high-end clubs. Further, as Callaway increased its number of auction items available on eBay, the company saw its auction success rate (where it sold an item at or above the minimum bid) plummet from approximately 90 percent to 50 percent.

A front page Wall Street Journal article in February 2004 demonstrated the conundrum facing big corporate sellers on eBay: Even with the size of the eBay marketplace, there are "demand ceilings" for any given category of item. In this piece, Nick Wingfield (2004) encapsulated the "basic economics" issue that companies seeking to liquidate surplus stock on eBay face: "Because of limited demand for any particular item from users of the eBay auction site, merchants that offer a big supply of identical items often drive the price way down, just as a stock sinks if an investor dumps a large block on the market. On the flip side, some big sellers that trickle goods onto eBay have found they can't sell enough to make the site worth their while" (p. A1). eBay CEO Meg Whitman acknowledged that "if you want to move a thousand of the same computer in a day, eBay may not be one of the most effective channels" (quoted in Wingfield, 2004, p. A1). Companies such as PalmOne and

Motorola learned that if they simply "dumped" a large number of like items for sale on eBay at one time, not only were prices driven down, but they had to handle all the customer fulfillment and service obligations at one time, intensifying the headaches and need for corporate support (Schonfeld, 2004).

"By the People, for the People"

One hindrance of the open eBay e-marketplace is one of its plusses as well—all sellers, from Sears selling large appliances to a Sioux City grandmother selling antique glassware, are treated equally and sell under equal terms and conditions. One of eBay's hallmarks, as Whitman explained on 60 Minutes, is that "the soul of eBay" is to operate very democratically—"by the people, for the people" (quoted in CBS News, 2003, n.p.). As such, it holds to its policy of not offering big sellers special terms—such as fee discounts and special placement—that are not available to individual sellers.

Yet this policy is limiting the cost-effectiveness of the eBay channel for large corporate sellers, and potentially government sellers as well. Without a change, such egalitarian policies may force large operators to shift their surplus auctions to alternate providers or to their own websites, as has been done by firms such as Callaway Golf, Home Depot, and Omaha Steaks (Wingfield, 2004). Indeed, surplus items from corporations and even governments commingle with similar items offered for sale by private individuals and corporations in the eBay channel (Henle, 2003). For instance, when one searches on eBay for a flatscreen computer monitor, surplus monitors from city and state governments would be pulled up by the site's search engine, right alongside similar monitors for sale from Dell and other corporate and individual computer sellers.

Fraud and Trust

Tension exists today in the eBay community over the issue of fraud. The traditional eBay practice of self-regulation and laissez-faire governance is being challenged in light of ever-increasing rates of fraud in online auctions. With eBay the leading market-place, the firm is seeing the lion's share of the cases. Although eBay maintains that fraud claims occur in less than .01 percent of all transactions, their internal surveys show that consumers' fears of being taken in a fraudulent transaction are a major reason

why prospective customers are not willing to "take the leap" and make purchases through the auction site (Hof, 2003). eBay has also been plagued by scammers who have hacked the corporate site or created spoof sites that fool users into revealing their username and password. As a result, buyers have unwittingly seen their eBay identities—and, in some cases, their real identities—stolen (Festa, 2002).

Still, a June 2004 survey conducted by the Ponemon Institute and TRUSTe asked over 6,000 web consumers who the most trusted companies were in the realm of Internet commerce. Survey participants were asked to rate companies based on three criteria:

- Their overall reputation for product and service quality
- 2. Their limits on collection of customers' personal information
- 3. Their use of advertisements and solicitations that respect consumer privacy

The study found that eBay was the most trusted name on the web, with the top 10 firms shown in Table 2. According to Greenspan (2004), eBay has become highly regarded because the firm takes a "community-based approach" to e-commerce. As such, members use both feedback provided by other users and an effective customer service system to assure the security and accuracy of both their own information and that of other buyers and sellers on the site.

Table 2: The Top 10 Most Trusted Names on the Internet

1. eBay
2. American Express
3. Procter & Gamble
4. Amazon.com
5. Hewlett-Packard
6. The US Postal Service
7. IBM
8. EarthLink
9. Citibank
10 Dell

Source: The Ponemon Institute and TRUSTe (June 2004)

Case Study 1: eBay and the Public Sector

Key Points

- Numerous governmental agencies are maximizing their rates of recovery through eBay online auctions.
- At least 14 states and numerous local jurisdictions currently sell surplus property on eBay.
- Oregon Surplus is succeeding in selling not only its own state's surplus property, but also serving as an intermediary for other government agencies to sell their items on eBay as well.
- Government agencies are succeeding at selling both everyday items and high-end goods on eBay, as well as creating markets for unusual public properties, such as school buildings and airports.

Overview: eBay and Public Sector Sales

Following its organic business model, eBay's public sector sales have been largely achieved through the pull attraction of its marketplace rather than through any coordinated effort on the company's part (Griffith, 2004). eBay didn't even begin to track government sales on its site until 1999, when a used snowplow was sold for \$50,000 by a county in Upstate New York (Johnson, 2001). Today, as shown in Figure 8 on page 40, at least 14 states today currently sell items on eBay alone (Council of State Governments, Eastern Regional Conference, 2003).

eBay and Local Government "Potpourri"

From anecdotal evidence, the number of local governments selling on eBay likely numbers in the hundreds at present, with rapid growth to be expected in the coming years as best practices and auction facilitation services emerge.

By using an established marketplace such as eBay, you can get immediate results from leveraging their infrastructure and market power. For example, the most recognizable landmark in the city of Allen Park, Michigan, is an 80-foot-tall Uniroyal brand tire. When the company retired its "Takes on Nails" promotion in late 2003, Allen Park came into possession of the 11-foot-tall, 250-pound nail that had been "stuck" in it for years. City Administrator Kevin Welch decided to try to sell the nail on eBay, and much to his surprise, the unusual item fetched \$3,000, bought by a local real estate agent. Welch's only regret: "I wish we'd put it [the 'Buy It Now' price] at \$5,000" (quoted in Swope, 2004, p. 16).

Consider that in May 2004, Douglas County, Kansas, sold a total of seven Ford Crown Victorias on eBay. Each of these surplus squad cars came equipped with Ford's special police interceptor package, including beefed-up suspension system and shocks. The auctions netted the county just under \$40,000, which represented approximately

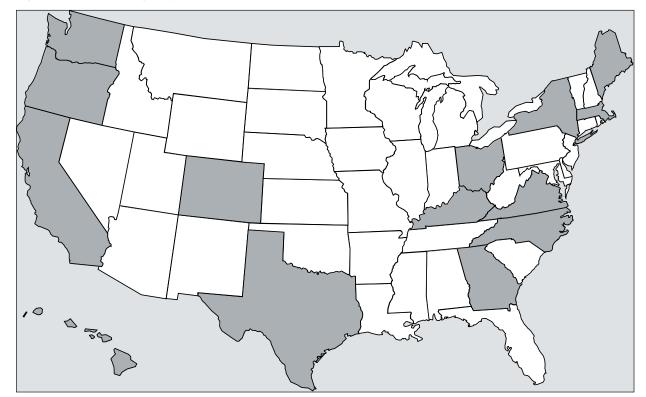


Figure 8: States Selling Surplus Items on eBay

Source: Council of State Governments, Eastern Regional Conference (2003).

25 percent more than the agency would have expected to receive by selling the vehicles through a traditional auto auction house. The results led Charles Jones, chairman of the Douglas County Commission, to proclaim: "I love entrepreneurialism! As long as it's fair and legal, putting it [the vehicle] out there where the market can respond most aggressively is good business" (quoted in Fagan, 2004, A5).

A Missouri school district sold an abandoned school for \$50,000, receiving 10 times the anticipated amount for an ex-school building auctioned on eBay (Hillmer, 2003). Likewise, two school districts in Kansas successfully sold school buildings on eBay. In the first case, the La Crosse School District attracted 70 qualified bids for a school that literally could not be given away to charity. The tiny town of Gaylord, Kansas, sold its former school building for \$25,000 (it would have cost far more than that to demolish), drawing its first bid in less than two hours on eBay (Curtin, 2003). Likewise, an eBay "power seller" was the winning bidder for a school building in remote McCracken, Kansas,

buying the unused school to house her burgeoning eBay business, which she moved there after the successful purchase was completed (Griffith, 2004). The Mount Anthony Union School Board in Bennington, Vermont, saw the sale of its 91-year-old middle school fall through when the executive director of the nonprofit agency that had agreed to buy the property abruptly resigned. When this transpired, Sean-Marie Oller, vice-chairwoman of the school board, admitted that "we had to think outside the box," and that led the board to begin the process of selling the school property on eBay (cited in Encarnacao, 2004, p. B1).

The Golden Gate Transit Bridge, Highway and Transportation District is in the process of a massive upgrade of its fleet of buses, replacing aging 1989-vintage buses with new, low-pollution buses in order to meet California's higher state clean-air standards and improve on the older model's 4.1 miles per gallon. Facing budget cutbacks due to the state's fiscal problems and higher operating and fuel costs, Golden Gate Transit sought to improve on the average \$5,400 that traditional sealed-bid

buying had been returning for these well-maintained and well-appointed buses. In early 2004, the agency began selling the prior-generation buses on eBay on an "as is, where is" basis from its yard in San Rafael, California. To date, the online auctions have produced sales averaging 15 percent more than what had been garnered through the former method (Gathright, 2004). Mary Currie, spokeswoman for the transit authority, said that in addition to decreasing the amount of time and paperwork staff had to put into the traditional sales method, selling the buses online has the added benefit of allowing the agency to "tell people who want to bid on our buses, 'Hey, it's on eBay."" (quoted in Gathright, 2004, n.p.). Golden Gate Transit intends to continue selling older model buses as it updates its fleet, and the available vehicles can be viewed (with a link to their eBay auctions) at http://www.goldengate.org/contracts/ contracts.html.

Other smaller communities are beginning to "dip their toes" into the online auctioning of surplus to generate revenue. For instance, Salisbury, North Carolina, recently began selling surplus computer equipment from its website at http://www.salisburync.gov/ebay. While the city takes PayPal payments and will ship sold items to winning bidders, it also offers local delivery and payment as a "value-added" service for its own citizens who purchase the surplus goods (Wineka, 2004). The city of Chandler, Arizona, sold three police motorcycles on eBay, averaging almost \$1,300 per bike. These online auction sales results were *double* the prices the city had achieved in prior physical auctions of similarly equipped cycles (Henle, 2003).

Yet, every Internet auction does not yield spectacular results. For instance, Baker City, Oregon, recently began auctioning surplus police items on eBay, including parking meters and two police cars. The city was somewhat disappointed in the results, seeing the police cars—admittedly not in vintage condition and with their police markings peeled off and windows broken—sell for just over \$500 each (Anonymous, 2004, "Baker City Auctions off City Property on eBay").

Oregon Surplus

The state of Oregon began selling state surplus online in 1998, being an early adopter of the new technology. Today, through its Oregon Surplus operation, the state is leveraging its own online auction marketing expertise to facilitate the sales of surplus property and equipment for dozens of government agencies across the country. Oregon Surplus's clients range from the federal government (including the Department of the Interior) to cities and municipalities (including Lynchburg, Virginia). These agencies are putting their surplus items up for sale on eBay, but "outsourcing" the work to Oregon Surplus, making the state's online marketing capabilities work for them. The partnerships have proven to pay off for both the state of Oregon and its nationwide clients, as Oregon Surplus is essentially working as an "eBay facilitator" for the public sector. In doing so, Oregon's operation is providing a service—for a fee—that is akin to what other for-profit firms are doing to facilitate surplus sales for large companies and even individuals, as detailed elsewhere in this report.

From the perspective of Scott Pepperman, president of the National Association of State Agencies for Surplus Property, Oregon Surplus stands as a cutting-edge model for how surplus sales should be handled by government agencies; as he describes the operation, "the way they do it all is very efficient" (cited in Gress, 2003, n.p.). In most cases, Oregon Surplus takes possession of the item at its 72,000-square-foot Salem, Oregon, warehouse. There, the item is stored and made available for public viewing, with computers being set up in the warehouse to enable interested buyers to bid on them while at the storage facility. Oregon Surplus has sold a wide variety of items through its eBay portal, ranging from confiscated items from the Portland International Airport to seized motor homes and surplus vehicles. On big-ticket items, however, such as Interior Department automobiles and Lynchburg's surplus fire trucks, Oregon Surplus does not move the vehicle cross-country, selling the item virtually from its home locale (Gress, 2003).

Skip Morton, manager of Oregon's Property Distribution Center, observed that the state's online sales program has grown through a "natural progression" that has "snowballed" over time (quoted in Krebs, 2000, n.p.). In fact, it grew 250 percent in its first year of operation alone, and the program has steadily increased since then. Now, however, according to Stacey Oller, business manager for Oregon Surplus, the operation is looking to take on new cooperative arrangements with outside agencies on a case-by-case basis, as they recognize that "as with any business, if you grow too fast, you'll disrupt the infrastructure" (quoted in Gress, 2003, n.p.).

Oller is quite proud that Oregon Surplus runs a "profit" on its operations, returning money to the state. Through its sales arrangement, Oregon Surplus charges agencies using their services a fee that ranges from 2 to 20 percent of the selling price of the item, with a goal of 80 percent of the sales price being returned to the agency. Oregon Surplus's take is then reinvested in the operation, rather than being returned to the state's general fund, so as to enable the service to grow its IT and warehousing capabilities and be in a position to take on more client agencies (Krebs, 2000). In 2002, the Oregon Surplus program netted \$7.3 million in sales, returning 84 percent of that amount to the selling agency (Gress, 2003).

While Oregon has been hailed as a trendsetter in the area of public sector auctions and a model to be followed, it has also been criticized for not being the most cost-effective solution. Weidenhamer (2004d) termed Oregon Surplus "a very expensive auction solution" (n.p.), due to the fact that for the average 16 percent commission paid to the Oregon operation, an agency must provide all of its own digital pictures and item descriptions, while also prepping the surplus item for shipment. Yet, for cities such as Charleston, West Virginia, Oregon Surplus is a conduit through which it can sell specialized vehicles, such as construction equipment and street sweepers. Charleston's vehicle manager, Gary Smith, is quite happy with Oregon Surplus's 7 percent take on the sales price of a piece of large equipment, especially considering: "There's not much of a market locally for some of the larger pieces of equipment. We just sold a street sweeper for \$7,000. But one city sold one on eBay for \$25,000" (quoted in Rorrer, 2003, p. 5A).

Other States of eBay

Two other states can be cited as examples for how they have taken the initiative to dispose of assets through online auctions on eBay. First, the state of Pennsylvania has seen its returns increase greatly since it took its sales of unclaimed property online. Pennsylvania was the first state to establish a continuous sale of unclaimed property on the Internet in May 2001 (Pennsylvania Treasury Department, 2004). As of the end of 2003, according to State Treasurer Barbara Hafer, Pennsylvania's Bureau of Unclaimed Property has sold a total of 15,500 items, garnering over \$800,000 to date on eBay (Toland, 2003). Pennsylvania's online unclaimed property sales inventory can be found via a link at the Department of the Treasury's website at http:// www.patreasury.org.

The state of New York has also been an innovator in using eBay as a channel for selling off surplus state property. As of the spring of 2004, the state had sold almost a thousand surplus assets on eBay under the user name "nysurplus-albany," garnering approximately half a million dollars for the state and earning a positive feedback rating of almost 99 percent from satisfied buyers (New York State Office of General Services, 2004). New York Commissioner of General Services Kenneth Ringler, Jr., observed: "Through our successful program using eBay, we are selling items that in the past we often had to pay to have removed. Not only are we generating more revenue for the state, but we're benefiting the environment by ensuring these items do not end up in a landfill," (Anonymous, 2004, "State Plane Up for eBay Auction," n.p.). Jennifer Meicht of New York State's Office of General Services added: "You would be amazed at what people will buy. It's been great!" (cited in Anonymous, 2003, "New York Uses eBay to Sell Surplus Property," n.p.). New York State surplus offered for online sale can be viewed at New York's web storefront at http://members.ebay.com/ aboutme/nyssurplus-albany/.

The Limits of eBay?

Despite the growth of the eBay marketplace, we have seen that innovations often bring controversy, and sometimes policy (i.e., eBay's prohibition on "murderabilia"), to the auction site. Cash-strapped agencies at all levels of government may now use

So You Want to Buy the Town?

Bridgeville, California, is a case study in how not to sell something on eBay. In December 2002, the entire 82-acre town was sold on eBay, complete with a post office, a cemetery, and a dozen homes and cabins available for rental. The rural town had been owned by Joe and Elizabeth Lapple since 1985. Facing an estimated quarter-million-dollar tab for necessary repairs and renovations, the Lapples decided to auction off the town and head for their intended retirement home, which they had built in nearby Fortuna.



The eBay auction site for the event offered the winning bidder the entire town, an admitted "fixer-upper," but with prospects as a potential retreat or development, given its scenic location on 1.5 miles of the Van Duzen River. The description of the property even promised that the winning bidder would have their very own ZIP code: 95526.

Over the one-month duration of the auction in December 2002, over 250 bids were cast, pushing the sales price far beyond the minimum price established at \$775,000. The winning bid for Bridgeville came from an anonymous bidder from Los Angeles, who bid approximately \$1.8 million. Just after

the bidding closed, the Lapples experienced the thrill of eBay victory, but then the bad news came. The winning bidder backed out after having a case of buyer's remorse when he actually saw the town. Thus, the eBay sale was not a sale, and the Lapples did not get to head off into the sunset with their retirement nest egg.

Likewise, five backup bidders failed to follow through on their purchase offers. The 20 or so townspeople blamed the prospective buyers' cold feet on what they saw as an "overblown" description of the town on eBay. More importantly, one can also attribute the "no sale" to the fact that the bidders were allowed to bid through the eBay system without having to be qualified and screened for their ability to actually have the financial resources necessary to carry through on their purchase offers.

Today, the town is still for sale for \$850,000—but through a traditional real estate agent and the Multiple Listing Service for real estate sales.

Sources: CBS News (2002); Podger (2003).

the eBay market as a creative—yet controversial—mechanism to fight their budget wars. It is not without peril, as demonstrated in the tale of Bridgeville, California (see "So You Want to Buy the Town?").

Recently, Superintendent John Kellmayer of Brooklawn, New Jersey, a one-school district with approximately 300 students near Camden, has approached eBay with a novel concept. In the wake of New Jersey's severe budget problems, he has proposed auctioning off the naming rights to the highest bidder for the Alice Costello School in Brooklawn. The superintendent's proposal seems to have had generally favorable support from students, parents, and the community. Dana Egreczky, vice president of the New Jersey Chamber of Commerce, commented that "anything a school can do to be entrepreneurial, so much the better"

(quoted in Mulvihill, 2004, n.p.). Barbara Worth, executive director of the Council of Educational Facility Planners International, believes that eBay auctions could become a trend in an era of tight funding for schools from federal and state sources, remarking: "Everything gets sold on eBay; that's for sure. There are a lot of innovative things coming up for schools to make money" (cited in Encarnacao, 2004, p. B1). However, Kathleen Maass, a former school board president, observed: "There are some things that shouldn't be for sale.... Alice Costello did a lot for the school (as a former teacher and principal), and I don't think they should sell her name" (Mulvihill, 2004, n.p.).

One critical factor in online auctions for government property is that quite often the type of goods being sold are far more sophisticated and in need of due diligence than the everyday goods sold in mass-market, general-purpose auction sites (Garretson, 2000). As Stanton (2003b) observed, "If the government holds assets of a type that are unfamiliar to the market, then the government might need to develop the market before it can have a successful sale" (p. 22). For instance, the state of Tennessee had 16,000 pounds of mussel shells that were a byproduct of a field experiment of its wildlife agency. The state marketed the item on eBay in a manner so as to appeal to jewelers. Hoping to draw \$4,000 for the single lot in an eBay auction, the state saw the final sales price rise to \$25,000 when a bidding war broke out in the last minutes of the auction (Swope, 2004).

In preparation for its move to a new facility in August 2004, Colorado Mountain College is making available for sale on eBay its former 15,000square-foot campus, less than 200 yards from a ski lift in Vail, Colorado. For a minimum bid of \$3.5 million, the facility, which is a combination of 12 condominium units, along with an art gallery, dance studio, computer lab, restaurant, and movie theater, is being marketed for use either as a retail center or as a potential celebrity getaway, subject to the new owner receiving use approval from the condo association. According to E. Alexandra Yajko, CEO of the college's foundation, the bidding for the ex-college presents "a win-win situation for the college and the buyer," as the excess paid for the property over the minimum price of \$3.5 million will be considered a donation to the fund-raising arm of Colorado Mountain College and thus be tax-deductible (cited in Curtin, 2003, p. B1).

Likewise, Riverside County, California, has a cash-draining asset in its Desert Center airport. The 1,129-acre airport, which is located 70 miles east of Palm Springs, is a lightly used, one-runway facility. With annual operating costs of approximately \$80,000, the airport generates only about \$7,200 a year. The county government is now offering the airport for sale on eBay for \$2.7 million. In doing so, it is taking advantage of eBay's advertising power, as the airport will not be actually "sold" in an online auction on the site. Rather, the eBay ad is a way of inviting interested parties to contact Riverside County directly to negotiate the potential purchase of the facility. The \$350 price of the ad brought precisely what Rob Field, the county's avi-

ation division supervisor, wanted: media attention that would help further market the property nation-wide. This made it possible for Riverside County to reach a large audience of potential buyers for such a civic asset as this former World War II training facility that has great redevelopment potential (Mehta, 2004).

In Pennsylvania, the Lehigh-Northampton Airport Authority (LNAA) came into possession of three vintage airplanes and two helicopters as a result of a long-standing dispute with the Allied Air Force, a group of local aviation buffs. The group lost in its bid to prove in court that its possession of five aging and unrestored aircraft constituted a "museum," and it was evicted from the Queen City Airport in Allentown in preparation for its closure and redevelopment. The LNAA has now attempted to sell the more valuable of the two airplanes, a twin-engine Grumman S2 anti-submarine tracker, on eBay (Anonymous, 2004, "Old Aircraft for Sale on eBay").

Case Study 2: The Department of Defense and Liquidity Services, Inc.

Key Points

- The public-private partnership between the Department of Defense and Washington, D.C.-based Liquidity Services, Inc., is the largest operation for government surplus sales today.
- In the 1990s, the U.S. military recognized the opportunity for employing the best practices of the private sector to transform the manner in which defense surplus was handled, instituting the commercial venture concept for reengineering the process.
- The Government Liquidation operation has demonstrated the ability to handle the wide-ranging and uncertain flow of military surplus being made available for sale from over 200 U.S. military installations worldwide.
- Drawing upon Liquidity Services' marketplace knowledge, Government Liquidation has proven successful at marketing specialized public goods and assets, drawing in new bidders for these and other liquidation sales.
- The three years of operation to date have proven that the proper alignment of revenue and cost sharing between the federal government and the private sector partner in the operation can work to maximize rates of recovery and minimize outlays in the sales of public surplus.
- The Government Liquidation operation in the United States is now being replicated in the United Kingdom for the sales of that country's military surplus.

Overview

Without a doubt, the biggest experiment in the use of online auctions for government surplus is that being undertaken currently by the U.S. military. In this case study, we will examine the unique partnership between the Pentagon and Liquidity Services, Inc., to sell the wealth of surplus generated by military operations through the govliquidation.com auction marketplace. We will see that this unique partnership model has produced impressive results and, indeed, is being replicated abroad.

Background

The Defense Reutilization and Marketing Service (DRMS), based in Battle Creek, Michigan, is the unit of the Defense Logistics Agency (DLA) charged with disposing of all material no longer needed by the Department of Defense (DoD). Such items become excess property for a multitude of reasons, including:

- Outdated technology
- Changes in priorities
- Items outliving their useful life

- Damage to equipment rendering it nonfunctional
- Military base and facility closures (DRMS, 2001a).

By law, excess military property is first made available to all agencies in DoD. The leaders of DRMS recognize that "every DoD dollar saved through reutilization that avoids an alternative procurement action frees up funds to be used to sustain and modernize the military forces" (DRMS, 2002, p. 7). According to DRMS, in FY 2002, approximately \$1.2 billion worth of items (acquisition value) were reutilized by various DoD operations. Items not reutilized within DoD are then made available for use to all federal agencies, and if not claimed within the federal government, the assets are made available for donation to state and local governments, as well as nonprofit groups. In FY 2002, such transferred and donated property totaled almost \$500 million (again, at acquisition value). Property that makes it through this multi-level claiming process is then considered surplus and made available for sale by the DRMS. In FY 2002, the worth of the sold items was pegged at just over \$50 million in acquisition value (DRMS, 2003a).

Until 2001, defense surplus was sold at public auctions that were held monthly at over 100 DRMS sites across America. According to *The Wall Street Journal*, problems with DRMS physical auctions included:

- Disorganized auctions
- Inconsistent procedures
- Low returns
- Low participation
- Remote locations (Squeo, 2003).

In fact, the average sales price at DRMS's auctions has historically been only 1 to 2 percent of the acquisition cost of the items that go to sale (Stanton, 2003b).

DRMS (2003b) handles a "wealth of excess," encompassing a wide range of personal property items. Walker (2003) reported that military surplus goes far beyond what one typically would think the term connotes, with "items you might never think

the Pentagon had owned, until you realized military bases are like mini-cities" (p. E1).

Can you buy a tank or a machine gun from DRMS? The answer is no. DRMS (2001a) makes it clear that all offensive and defensive military supplies can only be sold for scrap *after* they are demilitarized, rendered useless for their intended purposes, and subject to State Department regulations. Also, Jeeps (M-151s) and Humvees cannot be sold to the public, because they fail to meet Department of Transportation (DOT) road safety standards. What remains, however, is anything and everything that can be used by the military in its operations, with major product categories being:

- Machine tools
- Electronics (including computer hardware and personal electronic items)
- Vehicles
- Aircraft parts
- Bearings
- Hardware
- Medical equipment
- Recyclable materials (DRMS, 2001a).

DRMS's Road to a Joint Venture

In 1993, the Office of the Secretary of Defense identified DRMS as a candidate for outsourcing. Ever since, DRMS and the DLA have been looking for ways to reinvent the way the agency operates and the manner in which the military sheds its excess personal property.

In June 1996, as part of Vice President Al Gore's Reinventing Government Initiative, the National Performance Review (NPR) Committee visited DRMS, looking for ways to streamline and modernize the agency's business practices. One of the outgrowths of this review was that the committee recommended DRMS explore the use of joint commercial ventures, based on the model used by the Resolution Trust Corporation (RTC) (U.S. Army Logistics Management College, Materiel Management Department, 2002). Currently, DRMS is in the midst of attempting to reduce its 2000 workforce by half by September 2005 (DRMS,

2001b). According to the agency's strategic plan, this has caused the leadership of DRMS to rethink the way the agency does business through the enterprise management model, looking to, whenever possible, engage in "managing information, not property" (DRMS, 2002, p. 3). By, in effect, outsourcing the day-to-day sales function, the reduced DRMS workforce could then concentrate on the aspects of the agency's operations that cannot be transferred to the private sector, such as overseeing the disposal of the military's hazardous materials (DRMS, 2001b).

When looking at the possibility of employing public-private partnerships to handle DoD's surplus sales, it must be recognized that a significant difference exists between the nature of the joint venture employed at the RTC and what would be needed for DRMS. With the RTC, the nature of the property that would be sold through the joint venture agreement was knowable a priori, and the bidders seeking to become commercial partners could thus examine the properties that would be sold through the joint venture. In contrast, in the case of defense surplus with DRMS, it was impossible to know what kinds of military property would make it through the reutilization and donation screen to become available for surplus sale and what the volume and flow of these items would be at any given time. In sum, the RTC experience was dealing with pools of assets to be resold through joint ventures between private partners and the government, while DRMS was having to create a joint venture structure to handle a "pipeline" of future assets. In Stanton's (2003b) view:

The strength of the joint venture concept is ... that it aligns the incentives of the private partner with those of the government. When the private partner makes money, the government does too. Essentially, the joint venture concept is that the government benefits from selling the right to sell assets, rather than selling the assets themselves directly (p. 42).

The Commercial Venture Concept

The partnership to sell surplus defense property is known as the "commercial venture" (CV). The CV contract is a "proceed and risk-sharing sales transaction" in which the private partner is required to form a stand-alone entity whose sole business is

the management and sale of DRMS surplus. The CV contracts were awarded pursuant to the provisions of the Federal Property Management Regulations (DRMS, 2001b). The first such contract (CV1) was issued to Levy/Latham Global, LLC, in July 1998. Then, in June 2001, DRMS awarded an exclusive contract (CV2) to Washington, D.C.-based Liquidity Services, Inc., to handle all military surplus auctions through a newly formed, wholly owned subsidiary, called Government Liquidation. The contract was valued at an estimated \$23 billion in military surplus (acquisition value) in sales in 342 FSC (Federal Supply Code) categories and three categories of demilitarized items over seven years (DRMS, 2001c).

According to the terms of the CV2 contract, all costs associated with the processing of the surplus items, including transport, storage, refurbishment, and marketing, are payable from the receipts on the commercial venture's sale of the property. In practice, this means that there is an 80/20 split between the government (80 percent) and Liquidity Services (20 percent) in both the auction's costs and net proceeds (DRMS, 2001b). The U.S. Army Logistics Management College (2002) found substantial benefit in consolidating all salable military surplus under one sales vehicle. It estimated that DRMS will experience \$20 million in annual savings, while producing approximately \$10 million in annual sales revenue for Government Liquidation. This creates an alignment of incentives to maximize the revenue and minimize costs for both parties. Thomas H. Stanton (2003b), a Fellow of the Center for the Study of American Government at Johns Hopkins University, observed that such alignment of incentives is crucial to producing successful public-private partnerships.

Govliquidation.com

Overview

Government Liquidation's operations for the Department of Defense are extraordinary in size and scope. First, the logistics of the operation span over 200 military bases, located throughout the continental U.S., Alaska, Hawaii, Puerto Rico, and Guam. These locations are shown in Figure 9 on page 48. At these facilities, the company directly manages 2 million square feet of DoD warehouse space, where over 125 full-time corporate person-



Figure 9: DoD Installations Where Surplus Is Housed

Source: Liquidity Services, Inc. (2004).

nel receive, store, lot, and verify asset information. In the almost three years that the partnership has operated, Government Liquidation has sold approximately 400,000 items online each year, spanning 600 commodity categories, located at these 200 geographically dispersed and quite often remote facilities. To complicate matters, it must be remembered that this flow of goods is unpredictable in quantity, quality, condition, and type.

How It Works

At the manned warehouse facilities, company personnel perform all activities necessary to bring the items to the online auction arena. Government Liquidation uses the proprietary auction management platform of its parent company, Liquidity Services. This auction architecture has the financial systems and operational controls to track the movement of each and every property item from cradle to grave while in its custody as it moves from storage

through sale and shipment from the over 200 DoD stored locations. Government Liquidation has established a relationship with a freight forwarder to enable buyers to order, "pick, pack, and shipment" services from these managed warehouse locations.

The specially branded govliquidation.com auction site draws upon Liquidity Services' established buyer base of over 130,000 surplus buyers. The company's ongoing, focused marketing efforts attract more than 5,000 new professional buyers every month. Purchasers on the site run the gamut from individual bargain hunters and collectors to traditional liquidators. In fact, according to Bill Angrick, CEO of Liquidity Services, one in four of the buyers on the company's site are in fact eBay "PowerSellers," who buy surplus seeking to resell the items to individuals (Personal interview, 2004).² As Tim Daniels, regional manager for Government Liquidation, put it, "This may be Uncle Sam's junk,

but to our buyers it's their treasure" (quoted in Walker, 2003, p. E1).

Key components of Government Liquidation's marketplace solution include:

- Homepage—The govliquidation.com homepage displays upcoming DoD sales events to draw buyer attention to events that are closing soonest. There is also a link on the homepage where the buyer can see all upcoming events.
- Search capability—The site gives buyers the ability to search simply and easily for military items for sale currently and those scheduled for upcoming sales. Searches can be conducted on numerous bases, including for property by geographic location, sales event, category, keyword, Federal Supply Code (FSC), NIIN (National Item Identification Number), NSN (National Stock Number), condition type, and DEMIL code (a code assigned to an item by DoD that identifies the required demilitarization for that item). Searches can be saved by registered users for later use. Furthermore, buyers can opt to have the search run automatically over a given time frame. They then will receive an e-mail notification if results were returned from the saved search in their particular area of interest.
- 3. Item information—Each lot up for auction has a detailed view page, where potential buyers can get all the information they need to make a buying decision. Also, the Liquidity Services' auction software automatically integrates government data from FEDLOG into its sales descriptions, providing more information to potential buyers on the nature and condition of the goods.
- 4. Inspection—The govliquidation.com site enables online previewing of all offered assets. In addition, interested buyers may use the marketplace to schedule on-site previews of items that will be up for bid. The site enables interested buyers to learn of the time and date of in-person preview opportunities, even enabling them to print directions to the specific DoD location where the event will be held.
- 5. Bidder registration and utility functions— All prospective buyers must be registered with Government Liquidation to participate in the auctions of military surplus on

- govliquidation.com. The corporate partner enforces multiple quality checks on its buyers, both to protect its business and to comply with the export controls under the International Traffic in Arms Regulations (ITAR) of the U.S. State Department. Government Liquidation checks buyers against a variety of banned buyer lists, including stolen credit cards, Internet IP address, debarred bidders, and non-approved end-use certificate. Bidding is allowed across multiple channels to ensure the widest participation in the DoD auction events. In addition to online bidding, bids can be submitted via fax. Once an auction has ended, all winning bidders are notified by e-mail. Finally, all registered users can access a "My Account" function, enabling them to manage all of their activity on the auction marketplace, including the viewing of bids submitted, auctions won, and payment options.
- 6. Payment—A Liquidity Services' subsidiary executes online invoicing for completed transactions and handles all payment collection, which currently must be completed within three days after the close of each auction event. The govliquidation.com site offers users multiple payment options for completing their transactions, including payment by major credit card, PayPal, ACH, bank wire transaction, certified check, money order, personal check, or company check.
- 7. Regulatory requirements—All regulatory forms are available online to facilitate transactions, including sales tax forms, end-use certificates, and other required government regulatory forms associated with the terms of sale.
- 8. Order fulfillment—An integrated online shipping and packing website is incorporated in the view page for each item. This gives the buyer more certainty regarding the landed cost of purchased DoD surplus property.
- 9. Customer support—The govliquidation.com marketplace provides comprehensive customer support. Online, the site includes an extensive Frequently Asked Questions section and a tutorial. If buyers have any questions that are not answered by the online help facilities, Liquidity Service' subsidiary has customer service representatives that are available during business hours by phone or e-mail. On average, the customer

service team for Government Liquidation handles over 2,100 e-mails and 2,600 phone calls each month. In addition, the customer service representatives handle any customer disputes that may arise out of an auction event or sale.

Marketplace Knowledge

As seen throughout this report, lotting decisions are crucial to the overall success of both individual auction events and sales results over time. To that end, Government Liquidation utilizes personnel who have extensive experience in asset lotting and sales preparation, working to maximize the value of surplus DoD assets. Lotting decisions are made on site at the 200 managed warehouse locations, where the asset is received by company operational staff members who have extensive merchandising experience related to government surplus. Factors affecting lotting decisions include:

- Commodity type
- Quantity
- Asset condition

Liquidity Services' experience has shown that segmenting assets by similar commodity type and condition is important to maximizing returns. For example, Government Liquidation personnel separated unlike or non-corresponding bearing sleeves from a large quantity of otherwise conforming roller bearings in preparation for sale. In doing so, the lower-quality selling sleeves did not devalue the conforming roller bearings. This practice increased the overall value realized for the roller bearing lots.

In another example, Government Liquidation regularly received a large supply of DoD surplus rattan furniture (tables, sofas, end tables) in its Hawaii location. Early on, lots were segmented and sold by type (for example, one lot of sofas). After somewhat disappointing initial results, it changed the lotting strategy. Government Liquidation began creating smaller mixed lots, including four chairs with either a rattan sofa or two rattan side chairs and a coffee table or two end tables. The lots with this new mix have increased values by an average of 88 percent.

Government Liquidation also regularly aggregates surplus DoD assets from these dispersed locations into national commodity-specific sales events on the govliquidation.com marketplace. This is done both to generate "critical mass" and to create a sense of urgency among targeted buyer segments. By aggregating surplus property throughout the United States, Puerto Rico, and Guam—and lotting them into commodity-specific online sales events—the firm has increased the efficiency of its DoD sales and marketing programs and increased buyer participation. Such aggregated sales events have been held to date in categories such as:

- Electronic test and audiovisual equipment
- Aerospace equipment
- Medical/dental equipment
- Industrial, marine, and vehicular assets
- Metal and woodworking machines

For example, with specialized commodity types in the medical area, Government Liquidation has attracted greater buyer interest and higher returns by combining similar medical and dental items into lots, such as surgical items, bandages, catheters, syringes, and surgical packs. Specific lots are also created with headboards, limb restrainers, splints, lamps, and lighting systems. Finding that multiple units produced better sales results than single offerings, Government Liquidation now most often offers dental chairs in pairs. Medical diagnostic electronics are lotted with other medical electronic measurement/diagnosis equipment. Although they are labor intensive and create additional shipping and storage costs, such lotting strategies for specialized items have enabled Government Liquidation to generate higher overall returns for DoD surplus property.

Government Liquidation's marketing strategy is a three-pronged strategy. First, there is marketing that is conducted at the business unit level, seeking to attract more prospective buyers to consider buying DoD surplus in general. For instance, the firm exhibits at events such as eBay Live, attempting to reach the audience of PowerSellers who have demonstrated the ability to buy and resell military surplus. Next, there are marketing efforts aimed for specific sales events. This is accomplished through the use of traditional as well as online marketing methods that have proven to be effective in attracting government surplus buyers to events that are conducted in their specific region of the country.

Table 3: Results of Government Liquidation Online Auctions with Specialized Marketing Campaigns Associated with the Event

Asset Description	Number of Bids	Unique Bidders	Winning Bid	Original Acquisition Value	Rate of Recovery (ROR)
Chrysler forklift truck	94	17	\$11,510	\$18,000	63.94%
Caterpillar Inc. full tractor	153	26	\$86,042	\$158,799	54.18%
Personnel landing craft, MK-12	83	12	\$17,336	\$70,000	24.77%
Aurora Crane Company logger and baler with crane	112	21	\$121,000	\$210,000	57.62%
Chevy Kodiak drilling truck	119	16	\$28,611	\$43,901	65.17%
Lull Corp. diesel forklift truck	120	22	\$25,311	\$69,000	36.68%
Sea Ark boat with deck over stern	196	17	\$25,322	\$35,000	72.35%
John Deere C10 C Turbo scoop loader with backhoe	108	28	\$9,361	\$47,762	19.60%
26-foot personal boat	101	18	\$9,031	\$23,695	38.11%
Average Rate of Recovery					48.05%

Source: Liquidity Services (2004).

This facilitates the purchase of large and difficult-to-transport items, whether they are sold online or offline. Finally, Government Liquidation's marketing efforts can be trained on specific lots that are available for sale on the site. Such focused marketing efforts for high-end or specialty goods have proven to greatly increase recoveries on these assets. This is exemplified by the cases outlined in Table 3, where such targeted marketing produced rates of recovery averaging just over 48 percent.

Examples

The value—both to the buyers and to the government—can be seen in the following 10 examples, culled by the researcher from his access to the results of thousands of Government Liquidation auction events for DoD.



Example 1—PalmPilots
First, in July 2003, 120
M500 Palm Pilots went
on the online auction
block from a DoD
facility in Tobyhanna,
Pennsylvania. These

were Federal Condition Code "G," meaning they were inoperable units, in need of repair and/or parts. Bidders in this auction event came from 32 states and Canada. Sold as individual units, the average selling price achieved across all 120 auctions was \$124. According to the firm's analysis, this price point was considerably higher than comparable M500 Palm Pilots being sold at the same time on eBay for approximately \$100 and on Ubid for around \$90.



Example 2—
Computer Monitors
Another example of
DOD surplus IT
equipment being sold
through Government
Liquidation was a
sale of new,
unopened 17-inch

Dell CRT computer monitors. The shift to flat-panel monitors has meant that the prices of the old-style, clunky CRT monitors have fallen sharply, both in the retail and surplus market. Rather than selling the units individually, Government Liquidation chose to sell them in lots of eight. By doing so, the lots sold for \$665 each in an online auction with 11 bidders

participating. This price point meant that the average selling price per unit equated to \$83.12. By comparison, the same model of unused 17-inch Dell monitor was selling for \$59.99 individually at that time (August 2003) on retail computer sites such as DealsDepot.com. This meant that the federal government sold the monitors at a price far above the wholesale and retail price points for the computer equipment.



Example 3—
Raw Timber
In February 2004,
Government Liquidation
conducted an online auction sale of raw timber,
located in Quincy,

Illinois. The timber, composed of 1,489 cottonwood and178 sycamore logs, had been cut and stacked in December 2002, waiting for disposition. The auction drew six bidders. The winner was a first-time participant in an auction at the Government Liquidation site, paying \$52,800 for the entire lot. The auction had been anticipated to net only a couple of hundred dollars!

Example 4—Commodities

The military has commodities of various types in its possession, spread out among its worldwide facilities, and the challenge is to sell them in a manner to garner close to market prices for the material. Two such sales were examined in this research.



The first was a sale of almost half a million pounds of aluminum, in the form of pallets and skids, from the Navy Yard at Mechanicsburg, Pennsylvania, in late

October 2003. Fifteen bidders competed online for the aluminum, which was sold in the aggregate as one lot. A total of 94 bids were put forward, elevating the final selling price to \$233,255. This price point meant that the winning bidder had paid 48 cents per pound for the aluminum, which would have to be recycled to be usable once again. On the date the online auction closed, October 23, 2003, the spot market price for aluminum was 60 cents a pound. This meant that the Government Liquidation

sale had netted the federal government fully 80 percent of the market price for the commodity!



The second sale profiled for this research was an online auction event for approximately 50,000 pounds of copper cable, stored at a facility in Portsmouth, Virginia.

Again, the bulk cable was sold in a single lot, with 13 bidders driving the final online closing price to \$44,055. On the closing date of the auction, March 11, 2004, copper closed trading on the London market at \$1.3113 per pound. This was far higher than the 80 cents per pound garnered by the government through the auction. However, the results represented a greater recovery for the government than had been expected, due to the fact that the buyer would have to process the entire lot, separating the valuable copper from the insulation and rubber contained in the cable.



Example 5—Truck Axles

This example shows how Government Liquidation's experience in selling DoD assets produces better results over time. Table 4 presents the results of two online auction events held by the company in 2003 in

which 4WD truck axles were sold. In the first event, the truck axles were sold as part of mixed lots, while in the second event, the axles were sold individually. The table reveals that the second lotting strategy was far more successful for the axles,



which were all in the same usable condition. As can be seen, the latter event raised the selling

price per axle from \$77.80 to \$108.73, elevating the total garnered through the auctions of the axles by over \$8,000. By shifting to a more specialized selling and lotting strategy, Government Liquidation increased the realized value by 53.7 percent and improved the government's ROR from 6 percent to 9 percent of the acquisition value of the truck parts.

Table 4: Comparative Results from Government Liquidation's Online Auctions of 4WD Truck Axles

	Mixed Item Sale	Stand- Alone Axle Sale
Number of lots	200	200
Acquisition value	\$278,600	\$278,600
Total sale proceeds	\$15,560	\$23,921
Value per lot	\$77.80	\$108.73
Rate of Recovery (ROR)	6%	9%

Source: Liquidity Services (2004).



Example 6— College Textbooks

In September 2003, Government Liquidation faced the daunting task of liquidating a library, selling over 22,000

technical books that had become surplus, due to the closure of the base library at Fort Monmouth, New Jersey. To maximize value for the books, the items were lotted into 21 lots, ranging in size from 300 to 1,300 books. To create a better market for the books, the company sent an e-mail blast to 33,500 prospective buyers. The targeted buyers were universities and community college libraries, along with professors in technical fields, such as engineering, physics, law, and medicine. Also, book collectors were targeted for their potential buying interest. The results of this marketing effort meant that the two-day online auction of the books produced over 1,200 bids for the 21 lots, with sales totaling over \$46,000, or \$2.03 per book. Two dozen new registrants to the Government Liquidation site participated as bidders in these auction events. The returns generated were another example of the marketing value-add of Government Liquidation in effectively creating interest in the online auction event and lotting the items to maximize recoveries for the government.

Example 7—Boats! Boats! Boats!

As will be shown in the overall analysis of Government Liquidation's sales in Tables 5 and 6 (pages 54–55), aquatic vessels account for some of the most active sales areas for DoD. However,

many of these craft are, by necessity, quite specialized in nature. Thus, sales of these vessels can be challenging, as their military and civilian uses can be quite different. Two examples of vessel sales through Government Liquidation, both from late 2003, are presented here.



The first example is drawn from the sale of a Vietnam-era mechanized landing craft from the naval facility in King's Bay, Georgia.

This vessel had formerly been utilized to transport cargo and personnel from ship to ship and ship to shore. The landing craft was deemed to be in reparable condition for its public sale. Again, a targeted e-mail was sent to generate interest among prospective bidders by Government Liquidation. Thirteen bidders battled online for the landing craft, with the winner paying just over \$90,000 for the vessel.



The second sale was of a floating housing unit from its former home at the Stennis Space Center in Mississippi. The barge had been used as a portable mess and sleeping unit for crew members during ship repairs or overhauls. Accurately described in both print and electronic media for prospective buyers as a World War II-era barge that had been augmented with housing accoutrements in the 1970s, the vessel was given a condition code of H7. This meant that the vessel was deemed to be beyond reasonable repair. Still, eight bidders competed through the online auction for the vessel, driving the final sales price to just over \$88,000. It was purchased by a Gulf Coast shipyard, which still hoped to put the barge to use in its operations.

Table 5: Ranking of Top 50 FSC Categories of Items Sold for DoD through Government Liquidation by Revenue Generated

Rank	nk FSC (Federal Supply Code) Description		Revenuefrom Asset Sale	
1	3110	Antifriction, unmounted	\$3,582,070	
2	6520	Dental instruments, equipment, and supplies	\$1,661,058	
3	8465	Individual equipment	\$1,475,296	
4	8140	Ammunition and nuclear ordnance boxes	\$1,370,949	
5	3416	Lathes	\$893,839	
6	1940	Small craft	\$640,027	
7	3810	Crane and crane-shovel	\$585,477	
8	6540	Opticians' instruments, equipment, and supplies	\$551,883	
9	3415	Grinding machines	\$519,174	
10	3441	Bending and forming machines	\$449,591	
11	3445	Punching and shearing machines	\$382,664	
12	1935	Barges and lighters, special purpose	\$338,078	
13	1925	Special service vessels	\$336,065	
14	3411	Boring machines	\$245,302	
15	7125	Cabinets, lockers, bins, and shelving	\$224,440	
16	3820	Mining, rock-drilling, earth-boring equipment	\$209,185	
17	1610	Aircraft propellers	\$207,266	
18	2610	Tires and tubes, pneumatic, except aircraft	\$197,189	
19	6780	Photographic sets, kits, and outfits	\$195,775	
20	2410	Tractors, full tracked, low speed	\$194,361	
21	3815	Crane and crane-shovel attachments	\$180,987	
22	3805	Earth moving and excavating equipment	\$180,841	
23	3413	Drilling and tapping machines	\$178,192	
24	3443	Mechanical presses	\$173,414	
25	3750	Gardening implements and tools	\$160,134	
26	8115	Boxes, cartons, crates	\$157,044	
27	5130	Hand tools, power driven	\$150,739	
28	3530	Industrial sewing machinery and mobile textiles	\$142,452	
29	3419	Miscellaneous machine tools	\$139,647	
30	1945	Pontoons and floating docks	\$129,484	
31	8455	Badges and insignia	+	
			\$129,221	
32	3220	Woodworking machines	\$122,194	
33	3405	Saws and filing machines	\$120,384	
34	1905	Combat ships and landing vessels	\$113,977	
35 36	8440 3442	Hosiery, handwear, and clothing accessories, Men Hydraulic and pneumatic presses	\$113,736	
		Tractors, wheeled	\$105,713	
37	2420 2340	Motorcycles, motor scooters, and bicycles	\$97,444	
38		Miscellaneous items (cannot conceivably be classified elsewhere)	\$91,969	
39	9999	,	\$85,017	
40	3447	Wire and metal ribbon forming machines	\$73,005	
41	8470	Armor, personal	\$63,711	
42	7710	Musical instruments	\$63,515	
43	5140	Tool and hardware boxes	\$56,562	
44	3449	Miscellaneous secondary metal and cutting machinery	\$46,745	
45	3446	Forging machinery and hammers	\$46,741	
46	7350	Tableware	\$45,203	
47	4020	Fiber rope, cordage, and twine	\$43,528	
48	7240	Household and commercial utility containers	\$43,185	
49	2050	Buoys	\$32,219	
50	3426	Metal finishing equipment	\$31,220	

Source: Liquidity Services, Inc. (2004)

Note: Results are from the inception of the online auction program through September 30, 2003.

Table 6: Ranking of Top 50 FSC Categories of Items Sold for DoD through Government Liquidation by Rate of Recovery

Rank	FSC (Federal	Description	Original Acquisition	Revenue from	Rate of
	Supply Code)	·	Value	Asset Sale	Recovery
1	1925	Special service vessels	\$633,620	\$336,065	53.00%
2	3414	Gear cutting and fishing machines	\$57,685	\$29,636	51.40%
3	1990	Miscellaneous vessels	\$68,657	\$25,464	37.10%
4	1910	Transport vessels, passenger and troop	\$17,911	\$6,611	36.90%
5	3446	Forging machinery and hammers	\$133,764	\$46,741	34.90%
6	2250	Track material, railroad	\$51,559	\$17,031	33.00%
7	3710	Soil preparation equipment	\$59,714	\$16,922	28.30%
8	8820	Live animals, not raised for food	\$6,644	\$1,800	27.10%
9	3442	Hydraulic and pneumatic presses	\$392,711	\$105,713	26.90%
10	9650	Nonferrous base metal refinery and base	\$41,710	\$10,689	25.60%
11	2410	Tractors, full tracked, low speed	\$783,873	\$194,361	24.80%
12	2830	Water turbines and water wheels	\$13,301	\$3,136	23.60%
13	8310	Yarn and thread	\$6,727	\$1,569	23.30%
14	7340	Cutlery and flatware	\$16,917	\$3,856	22.80%
15	3210	Sawmill and planing mill machinery	\$94,556	\$17,429	18.40%
16	1520	Aircraft, rotary wing	\$10,000	\$1,707	17.10%
17	6508	Medicated cosmetics and toiletries	\$10,319	\$1,708	16.60%
18	3447	Wire and metal ribbon forming machines	\$444,308	\$73,005	16.40%
19	5530	Plywood and veneer	\$25,646	\$4,189	16.30%
20	3530	Industrial sewing machinery and mobile textiles	\$899,062	\$142,452	15.80%
21	2420	Tractors, wheeled	\$616,294	\$97,444	15.80%
22	3770	Saddlery, harness, and whips	\$44,005	\$6,884	15.60%
23	9535	Plate, sheet, strip, and foil nonferrous	\$92,438	\$14,218	15.40%
24	8440	Hosiery, handwear, and clothing accessories, men	\$762,096	\$113,736	14.90%
25	2630	Tires, solid and cushion	\$20,775	\$3,073	14.80%
26	6520	Dental instruments, equipment, and supplies	\$11,412,551	\$1,661,058	14.60%
27	5350	Abrasive materials	\$214,222	\$30,389	14.20%
28	6025	Fiber optic transmitters	\$36,186	\$5,075	14.00%
29	3445	Punching and shearing machines	\$2,798,651	\$382,664	13.70%
30	5440	Scaffolding equipment and concrete forms	\$122,566	\$16,596	13.50%
31	3449	Miscellaneous secondary metal and cutting machinery	\$346,777	\$46,745	13.50%
32	8455	Badges and insignia	\$970,928	\$129,221	13.30%
33	7240	Household and commercial utility containers	\$325,631	\$43,185	13.30%
34	1935	Barges and lighters, special purpose	\$2,571,681	\$338,078	13.10%
35	3444	Manual presses	\$67,705	\$8,889	13.10%
36	3230	Tools and attachments for woodworking	\$86,324	\$11,302	13.10%
37	3220	Woodworking machines	\$960,202	\$122,194	12.70%
38	5140	Tool and hardware boxes	\$445,037	\$56,562	12.70%
39	3441	Bending and forming machines	\$3,593,451	\$449,591	12.50%
40	3820	Mining, rock-drilling, earth-boring equipment	\$1,688,133	\$209,185	12.40%
41	6780	Photographic sets, kits, and outfits	\$1,682,266	\$195,775	11.60%
42	3419	Miscellaneous machine tools	\$1,239,225	\$139,647	11.30%
43	1905	Combat ships and landing vessels	\$1,030,002	\$113,977	11.10%
44	7710	Musical instruments	\$579,467	\$63,515	11.00%
45	3443	Mechanical presses	\$1,597,249	\$173,414	10.90%
46	9670	Iron and steel scrap	\$41,505	\$4,497	10.90%
47	9525	Wire, non-electrical, nonferrous base	\$18,705	\$2,021	10.80%
48	2340	Motorcycles, motor scooters, and bicycles	\$856,420	\$91,969	10.70%
49	1940	Small craft	\$6,097,902	\$640,027	10.50%
50	8140	Ammunition and nuclear ordnance boxes	\$13,132,561	\$1,370,949	10.40%
	0.10	TOTALS	\$57,219,639	\$7,581,964	18.69%

Source: Liquidity Services, Inc. (2004)

Note: Results are from the inception of the online auction program through September 30, 2003.

Table 7: Results from Government Liquidation's Online Auctions of Heavy Construction Equipment

Category	Rate of Recovery (ROR)	Average Number of Bids/Lot
Forklifts—6 sold	14%	73
Cranes—8 sold	16%	97
Rollers—6 sold	20%	96
Full-track Tractors—11 sold	18%	136
Loaders—3 sold	8%	29

Source: Liquidity Services (2004).

Example 8—Construction Equipment

In July 2003, Government Liquidation conducted a series of online auctions composed of military heavy construction equipment from sites nationwide. The sales drew wide interest and participation. As can be seen in Table 7, the vehicles up for sale, which consisted mostly of reparable items, generated a sizable number of bids on each individual piece of equipment. All told, there were 3,675 total bids submitted for these auction events, producing an average sales price of \$25,705 per vehicle. When measured against the acquisition value of the construction vehicle, the ROR was between 8 and 20 percent.



Example 9—Specialized Processing Facility

In mid-2003, Government Liquidation had the opportunity to sell a complete aerospace tooling facility, located in Watervliet, New York. The facility was coded "A4," meaning that it was fully functional and ready for operation, without the need for significant repair and/or retooling. In order to develop significant interest in such a specialized but valuable asset, Government Liquidation undertook a targeted print media campaign over a two-month time period, allowing interested parties to "opt-in" for more information, either through electronic means or a printed brochure. This print campaign was complemented by

a targeted e-mail blast to potential interested buyers from the company's commercial operations.

In the end, the winning party out of the 34 bidders was an entity new to Government Liquidation auctions. Both the level of participation and the final selling price, \$111,223, were considered by the firm to be outstanding, given the rather esoteric nature of the facility. These results were produced with less than \$1,000 in marketing costs!



Example 10—The Robot

The final example is a humorous—and quite profitable—one. Audrey was a camouflage-painted robot, used for driver's education programs at Fort Bragg, North Carolina. Audrey was given a

condition code of "F7," meaning that the robot was deemed to be reparable. To drum up interest in the robot, Government Liquidation conducted a targeted e-mail blast leading up to the sale in October 2003. The item, which had been valued at just a few dollars, drew bids from 15 unique bidders during the online auction. Audrey ended up selling for just over \$1,100, finding herself a good home and bringing in far more than expected for the auction company and the federal government.

Analysis

The results to date have been impressive for both the federal government and Government Liquidation, whose site generates \$60 million annually in military surplus sales on approximately 400,000 individual items, spanning over 600 commodity categories. Transactions have been completed with an average

of 2,500 separate buyers each month, who have come from all 50 states and from over 67 countries, spanning 11 time zones. In the first two years of operation, Government Liquidation's sales have exceeded the prior physical on-site prices by approximately 50 percent, enabling the company to deliver funds back to the federal coffers at a rate 47.1 percent higher than that projected in its contract with the Defense Department. The actual Rate of Recovery, or ROR, that Government Liquidation has delivered is 85 percent above the contractual performance benchmark specified in the CV2 agreement. For its efforts, Liquidity Services has been awarded a Vendor Excellence Award by the Defense Logistics Agency.

For the present research, the author analyzed data provided by Government Liquidation, spanning the time period from June 16, 2001, to September 30, 2003. This data set provided results from Government Liquidation auction events, categorized by the item's Federal Supply Code, or FSC, for codes that had sales of at least \$1,000 in that time period. As can be seen in Table 5 on page 54 in the area of gross sales, the top 50 FSCs produced sales in excess of \$17 million. Also, we see large increases in the ROR for DoD, as evidenced in Table 6 on page 55, which shows the top 50 FSC areas in terms of this metric. The researcher's analysis shows that these 50 FSCs produced gross sales of \$7,581,964 on items that had an aggregate acquisition value of \$57,219,639. This means that for all items in these top 50 FSC designations, Government Liquidation produced an overall 18.69 percent ROR. This is far above the average 1-2 percent recovery rate experienced by the military before entering into the commercial venture concept and the realm of online surplus auctioning. Thus, this author's independent analysis shows that the customized marketplace solution continues to pay dividends for the DoD-Liquidity Services partnership.

Under the terms of the CV2 contract, Government Liquidation has significant reporting requirements. The firm must track all sales activities and direct costs for the management, preservation, improvement, transportation, and disposition of the surplus military property. Government Liquidation publishes a variety of comprehensive monthly, quarterly, and annual reports that are submitted regularly to the Department of Defense.

While the program has been exceedingly successful, there has been embarrassment from the fact that, in this time of heightened terror concerns, some lab equipment and material that could potentially be used by terrorists for creating biological warfare agents has been sold through the Government Liquidation site. Also, in spite of a shortage of chemical-protection suits in the military, unopened, mint-condition suits were purchased by undercover Government Accountability Office investigators. This was obviously an error on the part of DRMS, which declared the suits to be surplus and allowed them to go up for sale on the site. All observers would likely agree with the sentiment of Rep. Christopher Shays (R-Conn.), who said: "The Department of Defense should not be a discount shopping outlet for would-be bioterrorists" (cited in Berkowitz, 2003, n.p.). Indeed, after a stinging report from GAO and a congressional hearing into the matter, DRMS ended the sale of any items that could have potential bioterror applications in September 2003.

The Future of Military Surplus

The Government Liquidation-DoD partnership model may indeed be a harbinger of things to come, as other countries recognize the value of their own military surplus. In fact, the American model is now in the early stages of being replicated in the United Kingdom.

Formerly, British military surplus had been sold through public auctions, administered by the Disposal Services Agency (DSA), an executive agency of the Defence Ministry. Barry (1993) noted that the British Ministry of Defence had been willing to experiment with innovative solutions to its military surplus over the years. It had sold yachts belonging to the Royal Navy through Christie's Auctions and sold several hundred tons of expired ration-pack biscuits to pet-food processors and zoos across the country. In 1998, the DSA identified a number of problems with such sales. These included the fact that there was "ringing" occurring in many of these events. This took place when the dealers in attendance informally agreed amongst themselves on the intended outcomes of auctions ahead of time, intentionally keeping prices low. The prices being achieved at auction were not reflective of the true market value of the goods, but only a

market price on a particular day and in that location. Further, the government was incurring significant storage, transport, and personnel costs to conduct these in-person auction events, and those costs were fixed, while the returns achieved through such auctions varied widely from event to event. Finally, because goods were sold on as "as seen" basis, this encouraged bidders to assume that the equipment in question most likely was inoperable, which led them to bid on a presumption of guilt, which further dragged prices down (Tulip, 1998).

In December 2003, Liquidity Services entered into a five-year agreement with the UK Ministry of Defence to sell its military surplus through a newly formed subsidiary, UK Surplus, at www.uksur plus.com, in an arrangement very similar to the one it holds with the U.S. Department of Defense. Under the terms of the agreement, UK Surplus will collect and manage all surplus military equipment for the United Kingdom's Ministry of Defence, both at the country's domestic installations and in its worldwide operations. Online auctions will be the primary, but not the only, method for sales of the surplus, as online sealed bids and negotiated sales will be used when appropriate for the class of asset. The alignment of incentives and cost structure of the UK contract between Liquidity Services and the Ministry of Defence are strikingly similar to that found in its U.S. predecessor. It is noteworthy that Liquidity Services was selected for the UK solution out of a field of 60 competing bidders, even though it was the lone U.S.-based entrant in the competition (Anonymous, "Liquidity Services, Inc. Awarded UK Ministry of Defence Contract," 2003).

Case Study 3: Bid4Assets—Taking Tax Sales off the Courthouse Steps

Key Points

- Bid4Assets is a market leader in surplus auction sales, with a unique niche for selling tax-defaulted properties for local governments.
- As of this writing, 29 counties in three states were selling tax-defaulted properties online via Bid4Assets.
- Results have shown that the very fact that tax-defaulted properties are going to be auctioned off on the
 Internet is an incentive for local governments to use to return the current owners of such properties to taxpaying status, which is the main goal of such sales.
- Shifting to online auctions lowers the costs associated with the tax sales process for local governments.
- Taxing districts are seeing dramatically higher participation rates in tax sale auctions held online, which, in turn, means that far more of the properties offered for sale actually do sell and at far higher prices than through traditional physical auctions.

Introduction

This case study describes how Silver Spring, Maryland-based Bid4Assets has developed into the largest seller of tax-defaulted properties on the Internet. The researcher examines the rationale for agencies to move such sales into an online environment and then looks at the results that have been generated through such Internet-based tax sales by innovative county governments. We will see that today, online auctions are fast becoming the best method for making sure that properties are brought back to tax-paying status, which is the overarching goal of the tax sale process in the first place.

The "Doonesbury" Idea

In the comic strip "Doonesbury," in 2001, Garry Trudeau had Zonker and the gang working on an

idea ripe for the times. In the midst of the debris from the shattering of the "dot-com bubble," the gang's idea was to create a business that would sell the assets of many of the dead dot-coms (Barnako, 2001). Employees of dot-com companies that crashed and burned, but had lived large, could find their foosball and pool tables, their trendy office furniture (including Herman Miller Aeron chairs), their PalmPilots and laptops, and even their former company domain names being auctioned off online (Cowan, 2001; Phillips, 2001).

In an ironic twist, Bid4Assets made a specialty business out of actually doing just that, auctioning off the assets of defunct dot-com companies, a practice that was dubbed "vulture capitalism" (Needleman, 2001). Bid4Assets specializes in selling "high-end assets" from public entities and private firms. For

Bid4Assets, auctioning off the spoils of dead dotcoms became a "serendipitously lucrative niche" part of their overall business (Barker, 2001). Bid4Assets also auctioned off the assets of e-government firms that hoped to have surplus auctions as part of their business, including Civiczone.com (Garretson, 2000) and eCityDeals.com (Barnako, 2001). In the case of eCityDeals, items sold included almost new computers, appliances, and even the firm's Ikea bookshelves (Chuang, 2001).

Bid4Assets and Tax Sales

Bid4Assets has developed a specialty selling seized and surplus goods for government agencies at the federal, state, and local levels. One of its biggest users is the U.S. Marshals Service (see Table 8). Bid4Assets sells forfeited assets—the ill-gotten proceeds of a criminal enterprise—that come into the possession of the Marshals Service (Caniglia, 2003). These have included licenses to operate ambulance services in Staten Island and Brooklyn, New York,

forfeited by the former holder due to healthcare fraud (Hirsh, 2002) and a florist shop in Cleveland that turned out to be a front for selling cocaine instead of carnations (Caniglia, 2003). Bid4Assets sold a \$400,000, 58-foot luxury yacht that was forfeited by James McLean, who was convicted of perpetrating the largest mortgage fraud ever against the federal government (Menchaca, 2003). It has also auctioned off a collection of autographed Washington Redskins jerseys, signed by a number of the team's famous quarterbacks, including Joe Theismann, Sonny Jergensen, Billy Kilmer, Doug Williams, and Mark Rypien. These sports collectibles were part of the assets seized from Bill Erpenbeck, an Ohio businessman convicted of frauds totaling over \$33 million (Hudson, 2004).

Bid4Assets is also the unmatched leader in the marketspace of using the online auction model to market intangible assets by enabling cities and counties to convert their tax sales from a physical sale to an online auction environment. Currently, as shown in

Table 8: A Sampling of Auction Results from Bid4Assets Events Held for the U.S. Marshals Service

Land and Residences
Pintler Creek Ranch (2,002 acres), Wisdom, Montana: \$1,820,000
Residence—Christiansted, U.S. Virgin Islands: \$156,000
Single Family Home—Lumberton, North Carolina: \$142,000
Single Family Home—Lilburn, Georgia: \$134,000
Single Family Home—Hopewell, Ohio: \$97,750
Raw Land (20 Acres), Fiddletown, California: \$50,000
Automobiles
1999 Lamborghini Diablo Roadster: \$184,000
2001 BMW X5 4-Wheel Drive: \$49,400
2002 Cadillac Escalade: \$37,500
2000 BMW 750iL Sedan: \$37,000
1960 Rolls-Royce Silver Cloud II: \$17,750
Other Vehicles
1998 Freightliner Tractor Classic XL: \$25,000
1996 Rinker Cabin Cruiser: \$19,500
2003 Harley Davidson Heritage Softail: \$18,650
2000 Titan Gecko: \$18,010
Collectibles
Wurlitzer OMT CD jukebox: \$4,900
Glass artwork vase by Chris Hawthorne: \$1,350

Source: Bid4Assets (2004).

Figure 10, the firm is facilitating online tax sales for 24 counties in three states, with 20 of those being in California alone.

In an interview with the author, Richard Hayman, CEO of Bid4Assets, stated that local governments have two aims in mind when they put their tax lien sales online. First, when the county or municipality actually turns over the property for auction, this sends a strong message to the property owner that the agency is "dead serious" about taking the threatened sale action to remedy the tax default. Thus, many times, the very fact that the property is slated for sale via an online auction will lead the defaulted property owner to pay the back taxes and penalties, even though the same notification process is followed as with traditional offline sales (Source, personal interview, 2004).

An example of the influence that such online auctions can have on owners of tax-delinquent properties can be seen in Riverside County, California. In November 1999, the county scheduled the first online auction of tax-defaulted time-shares, looking to clear out some of the 5,000 time-share properties that owed in excess of \$5 million in back taxes. However, when notice of the online auction was mailed to the 23 owners of the properties subject to sale, all responded by paying the more than \$50,000 owed to Riverside County in back taxes, penalties, and interest, making the auction event unnecessary. As McDonnell and Mullen (2000) accurately observed in reporting on Riverside County's results,

Source: Bid4Assets (2004).

the mere threat of an online auction "clearly lit a fire under the feet of property owners, motivating them to pay their delinquent property taxes" (n.p.).

Secondly, local governments recognize that the online auction mechanism will likely produce far better results than the traditional auctions held on the "courthouse steps," both in terms of the number of properties sold and the prices paid for them, due to the increased reach that the Internet brings to the process. Karen Adams, treasurer-tax collector for Merced County, California, exclaimed that she was "tickled pink" over the prospects for increased returns, as the online auction process enables her county "to tap into a whole new investor base" for its tax sales (cited in Fonte, 2004, n.p.). However, the overarching goal of the taxing agency is to get the property back on the tax rolls and into tax-paying status. As Dick Larsen, treasurer for San Bernardino County, California, summarized: "This Internet auction is an excellent tool to reach a broader range of buyers and to ultimately get properties into a tax-paying status" (opinion cited in McLaughlin, 2003, n.p.). After all, as Rolein Hiatte, Tax Collection Division Chief for Fresno County, put it bluntly: "We're not here to sell property. We're here to collect taxes. We don't like to do this, but if the ability to sell this property was not here, how many people would really pay their property taxes?" (cited in Fonte, 2004, n.p.). Thus, whether viewed as a "club" to threaten the current owner or a mechanism to achieve a sale to a new owner, online auctions are a tool that works time after time in these circumstances.

Nevada Michigan California Elko Kent Alameda Merced San Diego Washoe Washtenaw Del Norte Modoc Sierra Mono Siskiyou Fresno Kern Plumas Sonoma King's Riverside Tehama San Benito Lassen Venture San Bernardino Madera

Figure 10: Counties Selling Tax-Delinquent Properties Online via Bid4Assets

There have been numerous examples of how Bid4Assets has produced dramatic results for counties moving their tax sales to the Internet. Take, for example, San Bernardino County, California. In past years, when holding its annual physical auction of tax-defaulted properties, the county had only a 16 percent success rate in selling the properties. Now, after putting its tax sales into an online auction environment, San Bernardino County boasts a 95 percent success rate. The county now routinely offers properties for sale through Bid4Assets, ranging from minimum bids of \$400–\$500 to over half a million dollars (Anonymous, "Bid4Assets Nabs California Contract," 2003).

Elko County, Nevada, began selling tax-delinquent properties online in mid-2003 through Bid4Assets. Caesar Salicchi, the county's treasurer, saw dramatically improved results, but admitted to be "flying by the seat of my pants on this" (quoted in Harding, 2003, n.p.). Likewise, Alameda County, California, also has begun offering tax-defaulted properties for sale through the Bid4Assets e-marketplace, with its first sale of properties in Oakland in March 2004. Donald White, treasurer-tax collector for Alameda County, believes that by moving to an online sale environment, the county will see more properties sold for higher prices to an expanded buyer base, while significantly reducing his agency's administrative costs (op. cited in Anonymous, 2004, "Alameda County Enters the Digital Age"). This "faster, better, cheaper" solution is borne out by the experience of Riverside County, California. Tom Mullen, chief deputy treasurer for Riverside County, conducted a cost analysis of the online auction method versus the public auction method. He found that for an auction of approximately 200 properties, the county saved approximately \$10,000 by moving the sales online, while garnering the benefits of a wider market base and higher net prices (cited in Agha, 2003).

The Kern County Experience

The most experienced seller of tax-defaulted properties online is Kern County, California. Before moving their tax auction sales online with Bid4Assets in September 2000, Kern County had sold delinquent properties through physical auctions, held three times a year in the chambers of the county's board of supervisors. Phil Franey (2001), Kern County's treasurer-tax collector, lamented that these events were costly

affairs to produce, involving the majority of his staff working for several days to produce each event. On average, only between 100 and 150 people attended these live auction events, with less than half of the properties offered being successfully sold. In the online environment, bidders now came from across America and even internationally, whereas the former physical sale method almost exclusively drew local buyers. Cumulatively, the first full year of tax sale results brought double the former method (\$3.2 million versus \$1.5 million in sales), with 92 percent of properties being successfully sold (Malamanig, 2001).

Kern County, California's, sales of tax-defaulted properties over the past decade provide testament to the remarkable power of taking the sale of tax-delinquent properties online. This author examined data provided by the Kern County Tax Office on its tax sales, spanning the period from March 1994 to March 2004. As can be seen in Figures 11–15, Kern County's online tax sales auctions, facilitated by Bid4Assets, have produced demonstrable results since the switch to online sales in September 2000.

In this decade, Kern County has generated over \$41 million through the Tax Office's sales of tax-delinquent properties, which the county defines as properties that have been in default for five or more years. Figure 11 shows that the average tax sale produced revenues totaling almost \$1.3 million. Since instituting online auctions less than four years ago, eight tax sale auctions have exceeded this average amount, compared to six in the six years prior to September 2000. Also, Kern County's most recent sales event included in this analysis, held in March 2004, was also its largest ever, producing just over \$4 million in revenue for the county.

Most importantly, it must be remembered that these sales put the property back on Kern County's tax rolls, which is the main goal of sales of tax-delinquent properties for any taxing agency. The analysis of the past decade's results for Kern County show that the introduction of online auction sales delivered this goal far better than the physical auction method. First, as shown in Figure 12, over the period 1994–2004, Kern County averaged a successful sale rate of 67 percent across all auction events. Notably, since the introduction of online bidding, only the first two online auctions failed to far exceed this average. In fact, in half of all the online tax sales held by Kern

4,500,000

Introduction of Online Bidding
September 2000

Average Total Sales
per Auction:
2,500,000

1,500,000

1,000,000

Total Sales
per Auction:
500,000

Total Sales
per Au

Figure 11: Total Sales of Kern County Tax Sale Auctions, 1994–2004

Source: Kern County Tax Sales (http://www.kcttc.co.kern.ca.us/Page.htm).

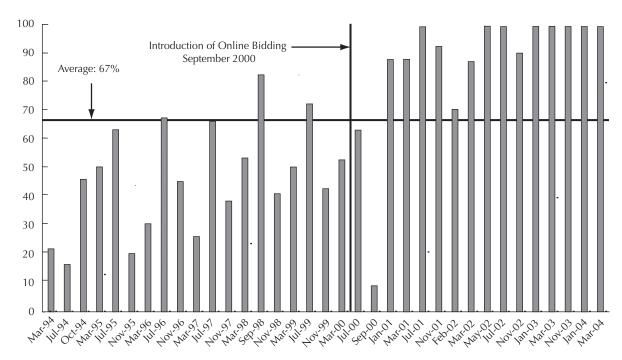


Figure 12: Percentage of Properties Sold by Kern County Tax Sale Auctions, 1994–2004

Source: Kern County Tax Sales (http://kcttc.co.kern.ca.us/Page.htm).

County, all properties made available for sale were actually sold. As can be seen in Figure 13, prior to the September 2000 introduction of online sales, it was quite common for large numbers of properties offered for sale to receive no interest from bidders. However, since moving the sales to the Internet, the number of salable properties receiving no bidding interest has been minuscule. In fact, in the past two years, Kern County has seen almost *every* offered property draw bidding interest.

These results can be achieved only through the active partnership between Kern County and its auction service provider, Bid4Assets. The auction events are marketed by the firm through online and offline methods to draw interest, both domestically and internationally. These efforts have meant that the interest level and number of bidders participating have risen dramatically since the introduction of Internet-based sales in September 2000. The effectiveness of these marketing efforts can be seen in Figure 14, which shows that the number of page views for Kern County's auctions has been on the rise, approaching 200,000 unique screenviews in the last event (March 2004). Figure 15 shows that this attention is turning into action, as the number of bidders has drastically increased over the past four years. These results are even more impressive

when you realize that it is really an "apples and oranges" comparison. This is because prior to September 2000, the county tracked the number of unique *bids*, whereas in the online environment, the number captured for comparison is the number of unique *bidders*.

The Field Is Growing

Bid4Assets is not alone, however, in this marketspace. Indeed, the Pittsburgh-based Grant Street Group is leveraging its expertise in selling financial instruments for government agencies to the newly emerging market for sales of tax-delinquent properties in the state of Florida.

Last year, the Florida Legislature passed a bill that for the first time defined the Internet as a "public space" for the conduct of such tax sale auctions, and thus one of the nation's most potentially lucrative markets for such sales (due to the high concentration of condominiums and time-share properties) was born. Okaloosa County, Florida, led the way with the state's first such online tax sale auction in February 2004 (Forst, 2004). It was quickly followed by Dade, Orange, and Volusia Counties as of late May 2004 (Parente, 2004). Okaloosa County Tax Collector Chris Hughes observed that by auctioning

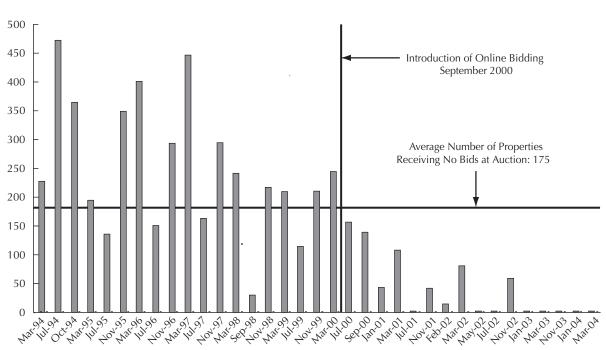


Figure 13: Properties with No Bids during Kern County Tax Sale Auctions, 1994–2004

Source: Kern County Tax Sales (http://kcttc.co.kern.ca.us/Page.htm).

Figure 14: Number of Screenviews during Kern County Tax Sale Auctions, 2000–2004

Source: Kern County Tax Sales (http://kcttc.co.kern.ca.us/Page.htm).

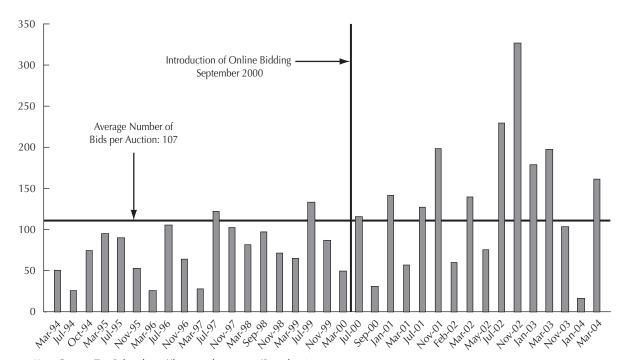


Figure 15: Number of Bidders for Kern County Tax Sale Auctions, 1994–2004

Source: Kern County Tax Sales (http://kcttc.co.kern.ca.us/Page.htm).

the delinquent properties online, he was able to minimize expenses for his office, in that: "You don't have to rent a building. You don't have to pay an auctioneer. You don't have to pay as much overtime (cited in Forst, 2004, A2)." Hughes also noted that the Internet

auction method maximized convenience for interested citizens to observe and participate in such sales, even allowing that "now men and women defending our country in Iraq can participate in it (the auctions)" (cited in Forst, 2004, A2).

Case Study 4: Property Bureau— Transforming the Police Auction

Key Points

- Property Bureau, a company started and run by ex-law-enforcement officials, is reinventing the way in which approximately 400 cities and counties across the nation are managing their surplus, seized, forfeited, and lost items that end up in police property rooms.
- Property Bureau's full-service model ships local police surplus items to one of two centralized processing
 facilities in California or New York. There, each item is evaluated, repaired (if necessary and practical) and
 then sold via the PropertyRoom.com branded auction site.
- By using Property Bureau for their sales outlet, local governments are saving money through reduced ware-housing and management costs and outsourcing the sales process.
- Participating communities are seeing substantially improved returns (up to 300 percent higher) on items sold through police auctions, drawing wider participation and garnering higher prices through this public-private partnership.
- Property Bureau's system provides greater transparency to the police auction sales process, with the ability to provide a complete audit trail and tracking capabilities for each item in its system, from point of collection from the locality to receipt by the eventual buyer.
- The "Steal-it-Back" function of Property Bureau offers the opportunity for original owners to recover lost or stolen items through the website. If the owner can be matched with the merchandise, the item(s) are returned to the victim free of charge.

Introduction

Writing in *The New York Times,* Michael Wilson (2004) aptly described the police auction as "a depressed and homely cousin of the chipper yard sale, held on a gray Saturday morning in a municipal back lot, with grim strangers sifting through boxes full of other people's losses" (n.p.). It is even sadder when one considers that such events are often money losers for the municipal police or county sheriff's office staging the sale. For example, in the town of Ashland,

Massachusetts, Police Chief Roy Melnick found that after deducting all the costs involved in putting on the auction events, the sales of found and stolen property were money-losing affairs for his 30-officer department. He believed that "you can't even break even" on such events, with \$200 bicycles being ridden away for \$2 (quoted in Rosenwald, 2002, p. B1).

One of the byproducts of crime fighting in America is that as laws have been enacted at the federal, state, and local levels to get tough on crime, and particularly drug crimes, police agencies have been seizing more and more property. As William Flynn, executive director of the New York Police Department's (NYPD) Support Services Bureau, recently observed: "It (stepped-up enforcement) has had a ripple effect on the amount of property that has come into police possession. We [in New York City] wind up with truckloads of material. It's sort of the back story on the drop in crime and it's a costly operation to dispose of it" (quoted in Irsay, 2003, n.p.). Across the country, police property rooms—the final resting place for literally stacks and stacks of items—have become costly to manage, draining manpower and monetary resources away from police agencies.

On the local level, one of the true success stories has been San Clemente, California-based Property Bureau. The company was started by and is still headed by former law-enforcement officials, including Daryl Gates, former head of the Los Angeles Police Department. The company's founder and CEO, Tom Lane, himself a former detective for Long Beach, New York, knew that police agencies across the country had a common problem—namely, property rooms overloaded with a bounty of literally anything that could be stolen or seized by law enforcement, along with unclaimed personal property of all sorts. Lane's entrepreneurial vision was to simply ask why not auction off the property online. He knew that the physical sales of such items were a money-losing proposition for law-enforcement agencies. By being the private sector partner to assist police agencies, he could provide a revenue stream for his firm while helping to enhance the revenue from such property sales for police agencies by widening interest and participation in them through the use of online auctions (Moran, 2002).

Property Bureau offers city and county law enforcement agencies the enticing proposition of taking possession of all the stolen and seized goods that are no longer needed for evidence and that go unclaimed by their rightful owners. Its business model was singled out by Internet business analyst Andrew Seybold (2001) as being "one of the most innovative uses of the Internet and the web" (n.p.). In this case study, we will examine how the company's system works and what it means for agencies and the general public.

Because Property Bureau takes possession of these items, not only are revenues maximized for partici-

pating law enforcement agencies, but also carrying costs can be minimized for police departments. Dick Visten, who coordinates property management for the Skagit County, Washington, Sheriff's Office, described Property Bureau's business model simply: "It saves us a lot of money, and they can make a lot more money for us because it is worldwide" (quoted in Murvosh, 2003, n.p.). Lieutenant Scott Barnett heads the property section of the Naples County, Florida, Sheriff's Office. He commented that, above all, the fact that the items do actually sell more often than not, generating even marginal revenue, is "definitely better than the dumpster" (cited in O'Malley, 2002, n.p.).

The Property Bureau Model

The Property Bureau system is a full-service model. The firm provides complete sales and fulfillment support, taking the burden entirely off the law enforcement agencies. As such, the firm has a set pricing plan for all participating agencies. On items that sell for less than \$1,000 (which the vast majority of items do), there is a 50/50 split of the selling price between the company and the police agency. On those items that sell for more than \$1,000, the agency receives 80 percent of the sales price.

The Property Bureau system works in the following manner. All items—no matter the weight or perceived value—are picked up from the participating police agencies by a representative of Property Bureau. In order to provide a complete audit trail for the law enforcement agency, each and every item is assigned a unique identifier and affixed with a barcode for tracking through a proprietary asset management system. Each item is then transported to one of the firm's two central processing facilities—located in Industry, California, and Farmingdale, New York—where it is received and matched against the manifest originated at its point of origin.

Once the item is at the Property Bureau warehouse, it is then inspected and cleaned, beginning the assessment process to determine if the item is salvagable and, ultimately, salable. If it is an operative item, it will undergo electrical or mechanical testing, and if a problem is detected, Property Bureau personnel will repair the article if deemed feasible. If a broken or inoperable item is the item cannot be repaired, it is written up in such a manner (items that have been

shipped to Property Bureau are discarded only as a last resort). All items then head for sale on the firm's branded auction site at www.propertyroom.com.

In preparation for sale, each item is digitally photographed and a narrative written to provide an accurate description of the article and its condition in pictures and words. Items are then priced and lotted for sale in the most appropriate manner. This determination is based on the marketplace expertise of the firm's personnel, who will conduct research to better describe and price items, including obtaining formal appraisals when deemed necessary on higher-end goods. The subject item is then merchandised through the Property Room auction site, with auctions typically starting at \$1 and having a fiveday duration. Once the auction closes, the winning bidder is notified and payment is processed, most typically via a credit card. The sold item is then packaged and prepared for shipment from the processing center and sent to the buyer, typically within a day of the settlement of the auction. Property Bureau offers post-sales customer service and support, guaranteeing that the item the buyer receives matches the description. If this is not the case, Property Bureau offers the buyer a return option. However, according to the company, this very rarely happens, due to the due diligence work of the company to accurately portray the condition of the goods for sale on its site (personal interview, 2004).

What's Property Bureau selling on its site? Well, as Rosenwald (2002) remarked, the PropertyRoom. com site "offers a curious window into what burglars steal—anything" (p. B1). In short, everything that could be stolen is being stolen. Property Bureau's CEO Lane observed: "Anything that can be stolen will wind up on our site. Every day, we're bringing more and more trucks of items in from the police departments, processing them through our warehouse. More TVs, more transformers, sporting goods equipment, radios, Walkmans, PlayStation2s. On an hourly basis, these items are going up on our site" (quoted in Wyld, 2004a, p. G28). These items include all manner of castaway stuff:

- Unclaimed items
- Stolen goods that could not be tied to a specific burglary

 Personal property seized for being in possession of criminals at the time of their arrest

The PropertyRoom.com website has been aptly depicted in *The New York Times* as being a cross between eBay and an episode of "Cops." The firm's auction site has also been described as being "like eBay, only hotter ... where not only is this stuff a real steal, it was probably really stolen. Or shoplifted. Or simply hauled out of warehouses and shipping vans when no one was looking" (Rhor, 2002, n.p.). Bidders are unaware of the origins of the items, with many like Walid Halabi, an active buyer on the site who said: "I always wonder where it came from. I read it [short descriptions of new items] and assume the rest of it." (cited in Wilson, 2004, n.p.)

Two extreme examples from company CEO Lane demonstrate the value-add of Property Bureau's systems. First, in early 2004, the processing center in Industry, California, received a carpet from a participating police department. Sensing that this was no ordinary carpet, Property Bureau took the time and bore the cost of having the item formally appraised. This evaluation showed that the carpet was a centuryold Persian rug in outstanding condition. Appraised for \$20,000, the carpet sold for 85 percent of its estimated value (\$17,000) through the propertyroom. com auction site. The second "trash to treasure" tale also happened in 2004. Property Bureau processing personnel discovered a real "diamond in the rough" in a shipment of what appeared to be all costume jewelry. Once again, company personnel sent the item for a professional appraisal; the ring was found to have diamonds totaling 6.5 carat weight, with the main diamond in the setting a 4 carat gem! When auctioned online, the ring sold for \$16,000, which was right at the wholesale value of the ring on the diamond market (personal interview, 2004).

What these examples show is the value of having trained eyes look over the "stuff" that is going out for sale to determine the true worth of the items. According to Lane, if these two items had been sold at a traditional police or sheriff's auction sale, both would have been scooped up for between \$15 and \$30—if that. Untrained personnel would likely have missed these "diamonds in the rough," and they would have then been sold to either unsophisticated bidders who did not know what they were getting or

savvy buyers who would have a strong inclination they were purchasing an item that they could likely sell for upwards of 1,000 times what they paid for it (personal interview, 2004).

Results

According to Sergeant Dan Ford, who manages property for the Tulsa Police Department, Property Bureau "gets us out of the auction business." There, the "old way" of doing business meant that five officers had to put in two to three weeks of "intense overtime" to stage two physical auctions a year, generating poor results. With Property Bureau, the new way has meant dramatically increased returns with lower costs to the agency, increased auction frequency, and much wider participation. Ford observed that the Tulsa Police Department had a property room that contained "stuff that's been here for years and years." Since coming on board with Property Bureau, Tulsa has sold a wide variety of items via their auction site. Most noteworthy was a steel jail-cell bunkbed unit, which the buyer purchased for \$25 with the intent of turning it into a garage organizer for his home (Nasser, 2003b).

While the physical auctions enabled the city or county law enforcement agency to keep all or most of the revenue collected, it also meant that their expenses for conducting such events were far greater. For example, before signing on as a seller through Property Bureau in October 2000, the Sacramento County Sheriff's Office found its warehouse filled beyond capacity, receiving 8,000 to 10,000 items of unclaimed and seized property each month, further compounding the backlog of items awaiting final disposition. Some of the property had been found to be languishing in the sheriff's warehouse for five years or more. In fact, in early 2001, the Sacramento Sheriff's Office was prepared to spend \$400,000 to add a level to its warehouse facility to house the "stuff." In its first full month of selling property on PropertyRoom. com in 2001, the Sheriff's Office generated more income from its take of the online auction sales than the department had made through its in-house physical auctions for the entire calendar year 2000. Since then, the county dropped its warehouse expansion planes, as it found the percentage of its storage space occupied with unclaimed and seized property declined by one-quarter since beginning

sales through Property Bureau. This is due in large part to the fact that the Sheriff's Office now has the incentive to more quickly process items through for sale via Property Bureau both to solve its storage dilemma and to increase revenue (Blanas, 2002).

For instance, in late 2003, the Honolulu Police Department switched from the offline local auction method to online auctions through Property Bureau. Formerly, Honolulu had contracted with a local auction firm to actually conduct the live, on-site auctions, retaining 90 percent of the auction's gross proceeds, while absorbing all the preparation costs in-house. Property Bureau's sales terms with all its partnering police agencies are that the firm retains 50 percent for items selling up to \$1,000 and 20 percent for items that sell above \$1,000 (personal interview, 2004). In Honolulu's case, while the city has historically netted approximately \$50,000 annually from its former onsite sales method, the police chief believes that the city will net far more via online auctioning of the items through Property Bureau due to the increased visibility and reach of the auctions (Daranciana, 2003).

To date, Property Bureau has enlisted almost 400 police departments in 26 states to use its service, including cities ranging from Los Angeles, Seattle, Honolulu, and San Francisco to Bloomington, Indiana, and Wichita Falls, Texas. The types of cities partnering with Property Bureau cover a wide span, ranging from Williamstown, Massachusetts, with only eight full-time officers, to New York City, which has over 39,000 police officers (Council of State Governments, Eastern Regional Conference, 2003).

With Property Bureau's growth in partnering with police agencies and placing more items on the branded auction site, a synergy develops that makes more and more people interested in the stolen and unclaimed item auctions. With this growth, the firm has roughly doubled its number of auction events annually over the past three years, expecting to top 100,000 property auctions by year's end. According to the company, the site now has over a quarter-million registered bidders, and more than 98 percent of the auctions on Property Bureau's auction site close successfully (personal interview, 2004).

The results have been dramatic, according to Tom Fegan, a vice president with the firm, who related how communities have seen online auctions of a

wide variety items, such as electronics and jewelry, produce results many times greater than those generated through the physical, in-person auctions. On average, Property Bureau's online auctions generate three to eight times the overall revenue for participating law enforcement agencies than the prior physical sales methods. This is especially critical when one considers that the increased dollars are flowing back to the localities where the "stuff" originated. In most instances, the participating agencies increased returns that flowed back to the city or county's general fund. However, in police agencies where laws and regulations allow them to keep the increased revenue, such property sales dramatically help their budget picture. Today, law enforcement agencies find themselves in trying budgetary times, as they are being called upon to handle more and more functions, particularly in regards to homeland security, crime prevention, and drug and gang activity. Beyond the financial incentive to shift to Property Bureau's outsourced auction solution, participating police agencies find that they have better tracking and reporting capabilities, while decreasing the amount of "stuff" piling up in their property rooms and warehouses (personal interview, 2004). Working to meet the needs of participating agencies, the firm is now moving into vehicle and real estate sales.

William Flynn, the executive director of NYPD's Support Services Bureau, managing the largest police seized property operation in America, sees two primary benefits to his agency switching from physical auctions to Property Bureau's online auction method. First, Property Bureau gives the NYPD the ability—and incentive—to turn property over for online auction as soon as it is cleared for sale. This not only cuts down on the NYPD's warehousing needs and the attendant costs, but also means a faster path to cash for the agency. Also, Property Bureau's market specialists can lot and market items far better than a police agency, thus creating the optimal market bundle for sale online. For instance, if a thousand sweatshirts were confiscated in a garment store seizure of stolen licensed apparel, the NYPD would typically sell all as one unit. As such, only liquidators would be in a position to buy such a lot size. However, Property Bureau took the approach of selling the sweatshirts in lots of 10 and, in doing so, brought in five times the revenue on the seized merchandise (Irsay, 2003).

"Steal-It-Back"

Finally, one of the unique features of Property Bureau's business model is its "Steal-It-Back" service. This provides the opportunity for victims of crime to register as much information as possible (make, model, serial number, and so on) on items that have been stolen from their possession, through a dedicated website at www.stealitback.com. If that item ends up being turned over to Property Bureau for sale by a participating police agency, then the company will ship the item back to the local police agency for return to its rightful owner—free of charge.

By registering on the site, crime victims stand a greater chance of recovering their lost property due to the hundreds of agencies across the country participating in the Property Bureau auctions. Notable success stories include actress Alyssa Milano being reunited with her pilfered photo collection (O'Malley, 2002) and Kirilo, a member of the Japanese punk rock band, ex-Girls, with her custommade Fernandes bass guitar that had been left in a San Francisco cab (Lee, 2001). Also, a California Department of Corrections supervisor found her ring, which she did not even realize had been stolen. When perusing the stealitback.com website, she recognized the picture, description, and her engraved initials (personal interview, 2004).

Commenting on the "Steal-It-Back" feature, Fegan, vice president of Property Bureau, stated: "We like nothing better than getting the property back to the original owner (quoted in Butler, 2003, p. A2). To that end, Property Bureau is engaging in a major upgrade of the functionality of the Steal-It-Back site, expected to be completed in late 2004. This improvement will enable individuals to register their valuable items free of charge with Property Bureau in case they are stolen, in order to increase the chances of recovering the items. This will give individuals an opportunity akin to registering your bicycle with the local police department, except the database will be nationwide, as opposed to your city or county only. Admittedly, according to CEO Lane, this will serve as both a public service and an enticement to get people to come to Property Bureau's website (personal interview, 2004). However, it is a great example of how civic and personal interests can both be furthered through the innovative use of online technologies.

Case Study 5: The Demolition of Three Rivers Stadium

Key Points

- Unique events in the course of a community's life can create opportunities for employing both live and
 online auctions to increase rates of recovery on sales of high-interest public assets.
- The Pittsburgh Sports & Exhibition Authority (SEA) combined live and online auctions to raise \$1.6 million through sales of items from Three Rivers Stadium, defraying approximately one-third of the costs associated with the demolition of the stadium.
- The SEA, working in conjunction with a private sector partner, FreeMarkets, employed creative asset lotting
 and marketing to maximize the rates of recovery on both big-ticket equipment and sports memorabilia items
 from the stadium.

Introduction

In the age of online auctions, one opportunity for governmental agencies is to take advantage of unique circumstances to conduct out-of-theordinary auctions to help defray the need for more taxpayer funding.

Such a prospect faced the Pittsburgh Sports & Exhibition Authority (SEA), a joint authority for the city of Pittsburgh and Allegheny County, Pennsylvania. Three Rivers Stadium had been the home for 30 years to both the Pittsburgh Steelers and Pirates. In the Steelers case, Three Rivers Stadium was the home of four Super Bowl champion teams (1975, 1976, 1979, 1980). One of the most famous plays in National Football League history, Franco Harris's "Immaculate Reception," took place there. Likewise, the Pirates won two World Series (1971, 1979) while playing at Three Rivers.

Yet, similar to what has occurred repeatedly across the nation, Three Rivers Stadium, a multipurpose facility, had grown old, eclipsed by new, single-sport stadiums built with more amenities and suites to meet the needs of today's sports economics. Thus, Pittsburgh built a new baseball stadium for the Pirates, PNC Park, which opened in April 2001, and Heinz Field, the new home for the Steelers, beginning with the 2001 season. Three Rivers Stadium was thus slated for demolition, destined to be used as parking for the two facilities.

To defray the over \$5 million cost of demolishing Three Rivers on February 11, 2001, in preparation for the opening of the new stadiums, the Pittsburgh Stadium Authority (PSA) contracted with Pittsburghheadquartered FreeMarkets (now part of Ariba) to auction off usable assets and memorabilia from the old stadium. The strategy settled upon was to combine both online and on-site auctions of property

from Three Rivers Stadium, to maximize recoveries and to allow for high levels of participation from citizen fans of the two teams.

The Pittsburgh Auctions

The online auction of "big ticket" items was held in November 2000. Buyers from across the United States and Canada participated in the auction. FreeMarkets identified potential buyers through the global network of buyers registered in the FreeMarkets® Asset Exchange for selling surplus assets. The company also marketed the auction to minor league teams and other organizations that could use the assets. Each buyer qualified by FreeMarkets and invited by the Stadium Authority to participate in the auction was trained in the use of FreeMarkets' BidWare technology, which facilitates online, interactive bidding by allowing suppliers to see and respond to bids in real time. In preparation for the auction, FreeMarkets inspected and inventoried all items to be sold and coordinated site visits for interested buyers.

During the November event, over half a million dollars was generated for the PSA, inclusive of these items:

- The stadium's Sony Jumbotron[™] was purchased for \$475,000 by Transit Image of New Jersey.
- A block of 2,535 seats was sold for \$22,688 to BlueChips USA, an Indiana-based developer of a Junior League baseball facility.
- A block of 3,727 seats was purchased for \$18,635 by the Long Island Ducks, a minor league baseball team.
- A Whiteway Mini-Message Center was sold for \$3,550 to the Butte Copper Kings, another minor league baseball team.

In early January 2001, just prior to the scheduled implosion of the stadium, over 6,000 potential bidders registered to participate in the on-site, physical auction. Conducted by FreeMarkets in partnership with Cowan Alexander Equipment Group, a leading international auctioneer, the auction generated more than \$1.1 million for the Pittsburgh Stadium Authority. Buyers from across the United States participated in the auction, some traveling from as far away as Wisconsin. FreeMarkets and Cowan



Alexander advertised the auction to potential buyers through both print and online channels.

On January 6, 2001, bidders and interested onlookers, totaling 12,000 in number, gathered at the Mellon Arena in Pittsburgh. In 10 hours of auctioning, all 4,321 lots were sold to 1,869 buyers. Among the items auctioned during the on-site event (and the winning bids) were:

- Home plate from the bullpen (\$3,100)
- First set of lower-level floor-mounted stadium seats (\$875)
- Game-used bases (\$1,550)
- First 200 pieces of turf (\$200 each)
- Locker room first aid kit (\$800)
- Trash cans from Pirates' locker room (\$175)
- Foul pole net (\$650)
- U.S. flag that flew at the stadium (\$650)
- A stadium seating chart placard (\$1,600)
- A framed Roberto Clemente photo (\$1,300)
- Framed photo of downtown Pittsburgh, circa 1929 (\$650)
- A New York Yankees banner (\$1,000)
- A Baltimore Orioles banner (\$1,200)

Analysis

Both the SEA and FreeMarkets were overwhelmed with the results of the on-site auction. "We are thrilled with the results of the auction," said Steve Leeper, executive director of the Pittsburgh Sports & Exhibition Authority. "We are amazed by the great turnout and the results of the bidding for the various items. We expected strong demand for the

seats and turf, but some of the other items were truly remarkable." Doug Wnorowski, a senior vice president at FreeMarkets, remarked, "The on-site auction was a unique, once-in-a-lifetime event that enabled Steelers and Pirates fans to participate in Pittsburgh history."





All sides seem to have benefited from this collaborative effort, which combined both the new technology of online auctioning with the traditional, on-site auction of the desired collectible items from the historic stadium. For FreeMarkets, Wnorowski commented: "We are very pleased to

have helped auction the assets of Three Rivers Stadium and to have created value for the Stadium Authority and taxpayers in the Pittsburgh region in the process. By auctioning the assets of Three Rivers through both online and on-site auctions, the Stadium Authorities not only maximized their value—generating more than \$1.6 million—but provided fans who wanted a piece of the stadium with an opportunity to compete to get one." Speaking for the Pittsburgh Sports & Exhibition Authority, Executive Director Leeper remarked: "We are extremely pleased with the results. By selling the assets of Three Rivers through FreeMarkets, we were able to create a direct benefit for the taxpayers of the region by maximizing the value of our original investment and generating proceeds which will be applied to the cost of demolishing the facility."

Summary

The demolition of Three Rivers Stadium on February 11, 2001, presented a unique opportunity for many parties to gain through the auctioning of literally thousands of items from the historic field. For the fans of the Pittsburgh sports teams, it presented a chance for them to purchase a piece of the stadium and its memorabilia. For other sports teams and even other governmental agencies, it





was an opportunity to procure items that they could put to use in their own stadiums and other venues. Yet, perhaps most importantly, auctioning the usable and noteworthy parts of the Three Rivers Stadium complex produced significant amounts of revenue—\$1.6 mil-

lion—to help defray almost a third of the cost of the demolition, a significant benefit for the citizens of the Pittsburgh area.

While this is certainly not a "routine" event, the Three Rivers Stadium case shows how innovative thinking on the part of public sector leaders and their private sector partners can create unique opportunities for government not only to maximize returns, but to choose appropriate—and, in this case, multi-channel—strategies to use auctioning to satisfy multiple priorities.

Sources: Compiled from press releases from both the Pittsburgh Sports & Exhibition Authority (www.pgh-sea.com) and FreeMarkets 2001 (www.freemarkets.com). Photos courtesy of the SEA.

The Road to Online Auctions

Introduction

As we have seen in this report, the case for governments to better handle asset management and proactively shift to online auctioning of surplus, seized, forfeited, and lost items is strong. In market after market, from the smallest city to the Department of Defense, public sector agencies are following the best practices in both asset management and reverse logistics for disposing of surplus items. The question for government leaders, both in the United States and abroad, is: How can my agency maximize the rates of recovery and minimize the costs and mission distraction caused by the castaway "stuff" that all agencies hold?

In this section, a road map will be presented, looking at the major decisions that must be made en route to better managing surplus in the public sector. Those governmental leaders that are looking to begin selling their agency's surplus assets and seized items online have to make a number of strategic decisions. However, Stanton (2003b) cautioned that "asset sales work best when they are conducted with a focus on gaining economic value, with public purposes addressed though other means" (p. 25). Thus, the goal of such sales must be squarely focused on creating effective markets. If there are public policy concerns over such sales or if sales could impact the ability of the agency to carry out its mission, these should be addressed in venues outside of the sales effort.

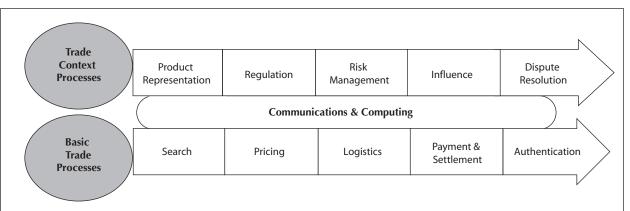
How Much of the Effort Should You Insource/Outsource?

Basically, once the decision to jump is made, the agency must decide how much of the online trading process it wants to engage in. As Gooley (2003) reminds us, how much reverse logistics activities an organization wants to take on is dependent upon both its role in the value chain and its mission. Indeed, as many private sector companies have learned, surplus sales are a nice addition, but they are not the core function of the organization (Wyld, 2004b). Thus, agency leaders should carefully weigh the trade-off that must be made between the insourcing and outsourcing of auction operations.

A useful way of looking at this is through the prism of a model offered by Kambil and van Heck (2002). As shown in Figure 16, the model holds that there are 11 basic processes that must take place in *any* market in order for it to operate successfully. They include five basic trade processes that must occur in order for a trade of any kind to be executed and five basic contextual processes that must be in place to enhance the trust of the buying and selling parties to actually execute the transaction. The 11th factor is communications and computing, which enables communications between the parties and makes the entire market—whether it exists entirely in the real or virtual environment or somewhere in between—work.

As we have seen, government agencies have taken a variety of approaches to auctions of surplus, seized, lost, and forfeited assets. From communities and states that are selling surplus directly on

Figure 16: Key Processes in Any Market



Product Representation: Specify the presentation of products and services to buyers and sellers.

Regulation: Record and recognize the transaction within a framework of laws and rules to signal it as legitimate and conforming to a set of market rules and social principles.

Risk Management: Reduce buyer and seller risks in a transaction.

Influence: Ensure that commitments among trading partners are met.

Dispute Resolution: Resolve conflicts among buyers, sellers, and market makers such as auction houses.

Search: Allow buyers and sellers to discover and compare trading opportunities.

Pricing: Help buyers and sellers discover prices.

Logistics: Coordinate the transfer of physical and digital goods between buyers and sellers.

Payment & Settlement: Facilitate transfer of funds from buyer to seller.

Authentication: Verify the quality of the goods sold and the credibility of both buyers and sellers.

Source: Adapted from Kambil and van Heck (2002, pp. 26-28).

eBay to the full-service model provided by Property Bureau, we have seen that there is *no one best approach* to such sales, whether in the global eBay market or in private e-marketplaces. In this section, we will see that there are additional private sector firms who are willing to work with government agencies at all levels as partners in the online sales of surplus assets. Thus, there will *always* be a meeting point at which the capabilities of private sector partners will match the interests of the public sector agency wishing to engage in online surplus auctioning.

The question essentially comes down to: How much of the 11 necessary functions does an agency

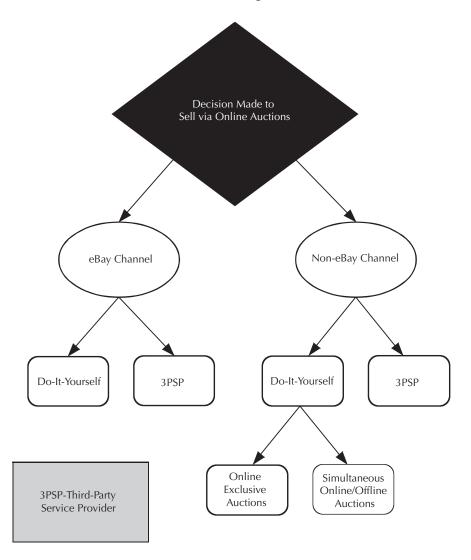
wish to carry out internally? The more an agency can do internally, the more it will be drawn to a DIY (Do-It-Yourself) solution. With a DIY mode, the agency has the prospects of far lower costs for the exchange, thereby retaining a far larger share of the total proceeds generated by an online auction sale. However, by "going it alone" and setting up its own online auctions, a government agency faces both logistical and market difficulties. From the perspective of Jared Blank, an analyst at Jupiter Media Metrix: "Setting up an online auction yourself can be difficult and time-consuming. You may not have the internal resources to do it well" (op. cited in Battey, 2001, p. 22).

In addition to the workload that the agency takes on, there are other risks to operating without a private sector partner. First, the agency may not garnering as much in price as possible for the items auctioned online. This can be due to a number of market knowledge factors, including:

- Lack of experience in photographing the item and writing descriptions
- Lack of expertise in determining how the item should be priced and lotted
- Lack of understanding about how to target prospective buyers and how to hold the auction event at a time and in a venue most appropriate for that item

The agency must also consider whether it wants to take on the role of a customer service provider, responsible for the necessary order fulfillment (payment, pick, pack, and ship) functions that are necessary to complete a transaction. Indeed, many organizations, both in the private and public sectors, may find that they do not have the infrastructure or the resources to conduct the auctions themselves, as the process can be difficult and time-consuming. Moreover, if the auction does not reach the right audience, it may bring low returns (Battey, 2001). As Lansing and Hubbard (2002) pointed out, having a dispute resolution process in place is an essential consideration for any firm seeking to conduct online auctions. Government agencies must address if and how they will be able to meet this core requirement.

Figure 17: Channel Choice Decision Framework for Selling via Online Auctions



However, Weidenhamer (2004d) observed that public sector agencies, with the push for streamlining their operations, may in fact be too eager to outsource their surplus auction activities. Indeed, she believes that in-sourcing these operations may be not only viable, but the most effective solution, especially when one takes into account the duplicate effort that a seller must often engage in with their auction provider. However, Harden and Heyman (2002) aptly point out that organizations often find they need more people than originally planned to carry out their auction endeavors. This is true even when using a full-service auction provider. But the more functions an organization chooses to keep in-house, the greater the staffing needs will be and, hence, the higher the overhead on auction operations.

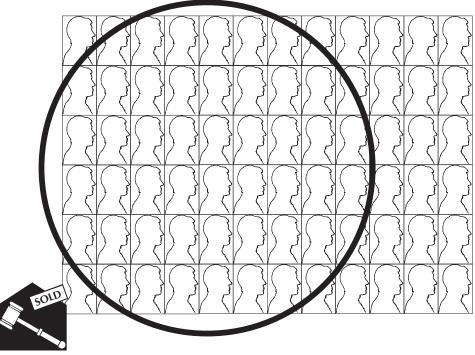
This researcher proposes a decision choice model that public sector leaders can use to determine the best path for their agency to follow in selling surplus assets through online auctions, while keeping its true mission in mind. As shown in Figure 17, once the strategic decision is made to sell such used, seized, excess, and lost items through online auctions, then the all-important tactical decisions must ensue.

To eBay, or Not to eBay, That Is the Question

The first key decision is whether or not the government entity simply wants to take surplus items to the e-Bay marketplace or to pursue a non-eBay channel. Both channels can be accessed directly or indirectly. As this report has shown, there are distinct advantages and disadvantages to taking either fork in the road, and agencies have experienced tremendous success pursuing both paths. Truly, in this instance, the only poor decision is to keep doing things as they always have been done, selling castaway goods to the "usual suspects"—from the courthouse steps to the impound lot. In a nutshell, then, the decision is akin to making the marketing choice to pursue either the "broadcasting" or "narrowcasting" model.

As shown in Figure 18, by choosing to play on the eBay channel, you elect to pursue a strategy whereby you reach the broadest possible audience. In this *broadcast* mode, you are analogous to a major television network, in that you are reaching the most people—indeed a worldwide audience—but the question is whether it is an audience that will be interested in what you have to sell.

Figure 18: The eBay Market—The Broadcast Model



In contrast, you can choose to go with a more specialized online marketplace or to even create your own. As depicted in Figure 19, you elect to target a more specific group of buyers. The segmentation can be by the characteristics of the marketplace (for example, Property Bureau) or the nature of what you have to sell. In the latter case, this would be representative of the county tax sales on Bid4Assets or the DoD surplus sales through Government Liquidation. The segmentation could also be based on the desire to focus on your local market, perhaps through an auction hosted on your own site (or your ISP's site), rather than through a major marketplace.

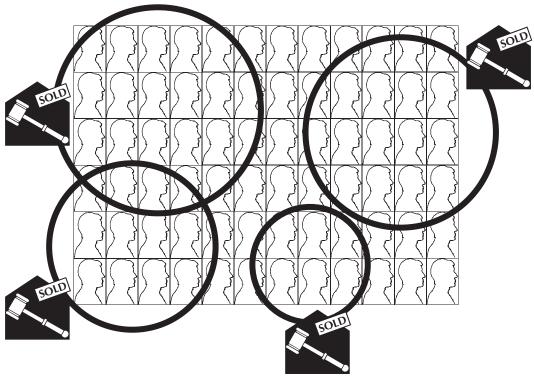
Once the decision is made to go wide via the eBay channel or more narrow through a non-eBay channel, then key operational decisions need to be made on how items will actually flow to and through the auction process. The reader should take note of the 11 key processes in Kambil and van Heck's (2002) model, shown in Figure 16, because all must be accomplished in an online auction environment. The operative questions thus become:

- Who should carry out the activities?
- Where should the functions be done?

 What are the costs/benefits of internal versus external execution?

The temptation to consider eBay the solution should be avoided. This is because, as Weidenhamer (2004d) points out, quite often a market must be developed and created for government surplus items auctioned online. Thus, more specialized auction service providers may be more apt to deliver the right interested parties to the right auction event (through narrowcasting), as opposed to the laissez-faire approach of eBay that depends on customers to find auctions and items that interest them (via broadcasting). As Harden and Heyman (2002) advise, sellers should not "put all your eggs in one online basket" (emphasis in the original, p. 52). And as their capabilities and needs change, they should be flexible enough to consider changing to another trading forum and/or taking on more of the functions themselves. This can be seen in the success of the state of North Carolina's operations to sell seized and surplus property both in the eBay channel and via a hosted auction on its own website (Johnson, 2001).

Figure 19: Specialized Markets—The Narrowcast Model



A New Breed of Auction Intermediaries?

One can expect a new breed of intermediaries to develop to facilitate government agencies' sales of surplus and seized assets, either through hosted online auctions on their municipal, county, and state websites or on eBay. This would mirror what is occurring in the private sector, where companies are working as "middlemen" to facilitate sales of corporate clients' surplus inventory and other items. These following are examples of such companies, along with the products they market through eBay:

- Auctionworks (www.auctionworks.com) (Disney, Olympus)
- ChannelAdvisor (www.channeladvisor.com) (Dell, Motorola, Sears)
- Vendio (www.vendio.com) (small businesses primarily) (Schonfeld, 2004, p. 44).

There's also room for smaller players to emerge to help local governments in particular to market their surplus online. Models for this would be San Carlos, California–based AuctionDrop (www. auctiondrop.com) and QuikDrop International of Huntington Beach, California, both of which specialize in helping individuals market their own surplus items from their attics and garages. As Michelle Higgins (2004) characterized this business model for *The Wall Street Journal*, such services are "for folks with lots of junk but neither the time nor the desire to become eBay merchants" (p. D2).

It is noteworthy that such auction facilitation services come at a price, as the firm's business model dictates differing levels of involvement in the handling of items and in the online sales process. For instance, while services aimed at corporate markets can take less of the total selling price, based on larger volumes and less risk, services aimed at small businesses and individuals must charge higher percentages to have a workable business model. By way of contrast, while corporate sellers through Auctionworks pay fees currently capped at 2 percent of the selling price on eBay, the service/pricing model for companies such as AuctionDrop and QuikDrop, with their focus on individuals, means that the seller nets only between 60 and 80

percent of the total selling price, depending on the dollar value of the item. Needleman (2003) noted that for an item selling for \$100 on eBay, the fees paid by an AuctionDrop seller would amount to 10 times the fee he would pay for selling the item on eBay himself. Thus, the worth of the value-added services delivered by such auction facilitation firms must be carefully evaluated. Yet, for small public sector agencies that do not want to take on the necessary services that must be provided to list, monitor, and ship items for sale in an online auction venue, these may be the best available solutions that nevertheless create positive revenue for the agencies.

Finally, as stated at the outset of this report, one of the promises of online auctions for sales of public sector surplus is the increased transparency and accountability that the Internet brings to the reinvented process. However, these gains cannot take place without control systems in place and strategic thinking about the information necessary for both web-based controls and an online audit trail. Harden and Heyman (2002) recommend that when looking for an auction service provider, an organization should carefully judge the robustness of that firm's reporting capabilities. At a minimum, they advise that the provider should be able to report at least the following metrics for online auctions:

- How many items are up for auction at any given moment
- The average duration of auctions
- The total revenue from the auctions
- How many items have closed but not shipped
- How many items are awaiting payment
- How many auctions are not concluding appropriately
- How your auctions are doing in the aggregate
- How your auctions are doing by category of goods and by price

While the privately branded auction sites studied in this report can provide these capabilities and more, both large and small users of eBay can find such metrics unavailable to them. Thus, this may be a significant value-add that can be provided by auction facilitation services, particularly to public sector organizations, as such management and reporting capabilities may be critical in making the case that the shift to online surplus sales is a smart strategic move.

Is There a Better Alternative to Public Online Auctions?

Finally, as Stanton (2003b) noted, there cannot be one model that fits all situations. Thus, there is still room for sales other than public online auctions to be used. Such an example can be found in the sale of items from the famous Mustang Ranch in Nevada, which became the first state-licensed and fully legal brothel in the nation in 1971. In December 2002, over 250 people gathered in the parlor at the ranch for an auction of items from the now-defunct enterprise. Hundreds of items, including furnishings and paintings, along with clothing and matchbooks imprinted with the Mustang Ranch logo, were sold at the event. All told, the one-day auction raised over \$600,000 for the Department of the Treasury's Asset Forfeiture Fund, which supports law enforcement activities and provides restitution to victims of fraud (Anonymous, "Brothel Auction Raises Money for Police," 2003).

On a smaller and more pedestrian scale, the city of Okeechobee, Florida, has done away with its annual auction of surplus property. In its place, the city government has instituted what it calls the "No-Hassle Surplus Sale," with surplus property being available for sale constantly with fixed prices for every item. The city's smaller sale items are on display at city hall, with larger items being available for inspection at a nearby public works facility. Since instituting the "No-Hassle" program, Okeechobee has not only reduced the city's maintenance and auctioning costs, but has seen items garner prices—on average—25 percent higher than the recoveries brought through the annual physical auctions (Anonymous, "No Auctions, No Hassles," 1996).

Finally, an innovative concept is being employed by the Commonwealth of Pennsylvania as part of Governor Ed Rendell's pledge to help local governments. In May 2004, the Commonwealth instituted a private e-auction for local governments to purchase surplus capital equipment from the state government. Pennsylvania had routinely made surplus state vehicles, trucks, and heavy equipment available for

municipal purchase through a sealed bid process. However, only 130 of the Commonwealth's 2,648 municipal governments had participated in the former offline system. The new online bidding system was being actively marketed to municipalities through the Commonwealth's Department of General Services in hopes of dramatically increasing access for city and county governments to the low-cost but still operable equipment. The secretary of Pennsylvania's Department of Transportation, Allen D. Biehler, commented: "From plowing snow in the winter to hauling stone in the summer, these trucks and other pieces of equipment have reliably served the Commonwealth.... Now it's time to pass the torch, so to speak, and turn these mechanical beasts of burden over to municipal governments, where they can continue to serve to the best of their ability" (Anonymous, 2004, "Rendell Administration to Help Local Governments Slash Operating Costs," n.p.).

Thus, as these examples prove, even when the decision is made to reinvent the manner in which public sector surplus is sold and disposed of, there are innovative ways to do so beyond public online auctions. While the online auction method may be the technique *du jour*, there are other inventive ways to reengineer physical auction sales to widen participation and improve returns.

Lessons Learned and Next Steps

Lessons Learned

Online asset auctions are proving to be a valuable etool for government in the era of the eBay economy. Mindful of Stanton's (2003b) caution that "asset sales work best when they are conducted with a focus on gaining economic value, with public purposes addressed though other means" (p. 25), online auctioning is proving to be the most effective method for disposing of surplus, seized, used, and lost items held by the public sector. This is because—based on the laws of economics and the newfound laws of the Internet, such as network effects—online surplus auctions maximize economic value for surplus assets through:

- Increased participation
- Revenue maximization
- Cost minimization

All the while, the shift to forward online auctions creates greater transparency and accountability in the sales process, while concomitantly fostering public agencies and private sector organizations to forge unique partnerships to accomplish the goal of value maximization.

There are five basic lessons that can be derived from the results to date of government sales of surplus items through online auctions.

Lesson 1. Online auctions vastly improve the public's **ability to participate** in public sector asset auctions. Whether operating in the eBay channel or in a more specialized marketplace, an online auction of publicly held items takes the venue from

local to global. Suddenly, a physical event open only to bidders with the fortitude to show up at what is often a remote location at an inconvenient time for what can be a lengthy and dull event can be transformed into an online event that is potentially available to a nationwide or even global audience. When held in an online marketplace, government surplus auctions open up the sales process to a wider swath of potential bidders, including those who are disabled and those who are physically distant from the event.

Lesson 2. The increased visibility of and participation in government auctions means that there is **increased liquidity** in the marketplace. With the presence of more prospective buyers—and more qualified and interested bidders—the ability of the government to actually produce a sale of a surplus, seized, lost, or stolen item is dramatically enhanced.

Lesson 3. The **dollar volume** generated by agencies in the sales of their surplus items is considerably, if not spectacularly, higher than physical sales of like items, *provided* that the assets are effectively conveyed online through proper presentation. This includes having apposite merchandising decisions behind their offerings, including effective photographs, descriptions, lotting, and pricing.

Lesson 4. The shift to online auctions for selling public sector surplus means a **cost savings** to agencies. These savings come from two areas. First, the online sales method is proving to be far less costly than having to prepare for and conduct physical sales events. Further, substantial savings also stem

from the fact that because online offerings are more likely to actually produce a sale and transfer of the publicly held asset into private hands, governments will lessen the administrative burden of having to manage, maintain, warehouse, protect, and track unneeded items.

Lesson 5. Online auctions shift items from the public sector into private hands, where, quite often, they realize value and utilization that would be impossible in the public sector. As we have seen, whether it is a used police car or books from the library of a closed military base, items that enter the private sector demonstrate the power of the invisible hand of the economy to create opportunities for imaginative uses of castaway goods when directed to parties with a true interest in them.

Taken as a whole, these economic reasons constitute a powerful raison d'être for public sector agencies to begin to follow the best practices established by leading corporations, both in the United States and abroad, to turn to online asset disposition auctions as a first-option solution to their asset management problems. Online auctions, however, are not necessarily the *only* sales technique that can be employed by agencies for assets that have reached the end of the road in government. Indeed, the Mustang Ranch example shows that sometimes on-site auctions still work well. Likewise, the Three Rivers Stadium case study

demonstrates that online auctions can be used effectively as a significant, but not exclusive, part of an overall marketing campaign for public sector surplus. Thus, as with any of the myriad e-tools that have come about from the Internet revolution, online surplus auctions should be employed as a first—but by no means exclusive—tool to help improve the reverse logistics operations of governments at all levels.

Next Steps: "Just Do It"

Kambil and van Heck (2002) observed that "ultimately, to really understand the profound transformation of markets, you have to experience and engage them" (p. 201). That is why they closed their book with a challenge to executives to actually grab something out of their garage or attic and list it for sale on eBay or another auction site to actually experience how the online auction process works for themselves. Only by engaging in the auction process as an individual can one begin to see the possibilities for how online auctioning can be applied to his or her organization.

This author can merely echo Kambil and van Heck's call to "just do it" and experiment—both personally and professionally—with online asset auctions. However, beyond just registering and becoming a user on eBay, which could have the impact of helping you clean out that garage and gaining some extra cash, you need to go on sites

Questions Public Sector Executives Need to Address Involving Surplus

- How much is it costing you to warehouse, catalogue, and administer your surplus assets? Can these employees/space/operations be put to better use?
- What percentage of the estimated value of your surplus assets are you recovering through physical auctions? What is it costing you to conduct these auction events? How many participants (attendees, bidders) are there at such events?
- Is there any regulation on the books that would prevent your agency from shifting to online auctions?
- Does your agency retain the funds generated by surplus sales, or are the proceeds of such sales cycled back to the general fund?
- What functions could be done away with if you switched to a third-party provider of surplus handling and sales solutions?

Source: Wyld (2004a, p. 28).

such as those profiled in this report. Go to e-marketplaces such as Government Liquidation, Bid4Assets, and Property Room, and ask yourself: If those agencies are selling their surplus online, why aren't we doing the same thing? It is likely a question that government employees and citizens, along with top public officials, will be asking very soon, as such auction sales will likely emerge to be the de facto method of selling surplus online over the next decade.

Leaders in government at all levels, both in the United States and abroad, should ask themselves what their reverse logistics and surplus management activities are costing their agency at present and how forward online auctions could help them to turn what is likely a money-losing affair into a positive source of revenue for items that reach the end of the governmental value chain. They should honestly answer the questions posed in the box on page 82.

Follow the Money

Certainly, perhaps the key issue in all of this is money, namely, who gets to keep the proceeds from the property sales. In most of the federal government and in many state and local governments, the revenue generated from asset sales—whether online or offline goes to the general fund. Thus, there is a "Catch 22" situation, in that the individual agencies do not have the incentive to be innovative in this area; any actions they may take to put their asset auctions online will not be rewarded with the ability to retain these funds. Additionally, many agency officials within government—both at the federal and even state and local levels—fear that any gains in revenue that they would see from increased recoveries on asset sales would be offset by funding cuts—leaving the status quo in place and robbing them of any incentive to shift to online asset disposition auctioning.

What we see across the country is a wide variety of revenue arrangements from the sale of government surplus and seized assets. For instance, the city of Honolulu retains all proceeds from police auctions in its general fund (Daranciana, 2003). When sales benefit the government as a whole, the incentives for the individual agency contributing the assets—and often the in-kind labor and storage that it takes to make that possible—are diffuse and unclear. In contrast, the Lexington, Kentucky, police department

retains all of the proceeds from its sale of stolen and seized property, directing the monies to its retirement fund (Massey, 2004). When the agency taking the lead in selling the assets can then retain the funds from such sales, the stars are aligned for their maximum commitment to the surplus operations.

Thus, across government, there is a general willingness across most agencies just to "give the stuff away" through donation programs (which is fine for these purposes). However, there is little incentive to move away from the status quo way of doing things in this area, even if it means that the agency is using outdated methods (for example, the live auction), allowing fewer people to participate and generating less of a dollar recovery on each and every item. Indeed, there are a few agencies that by federal statute can retain revenues generated from asset sales, and these—like the U.S. Marshals Service and the U.S. Treasury—are the most aggressive in moving their sales online. To their credit, as profiled in this report, Oregon has been a leader in the move to online auctions through eBay. Yet, their funds from asset sales, beyond that which is plowed back into the operation, go to the state's general fund. Likewise, for the vast majority of the municipal police agencies and county sheriff's offices that sell their seized, lost, or forfeited items through Property Bureau, the increased dollar gains realized go back into the general coffers of their local government, not to the law enforcement agency taking the initiative to sell online.

The key question, then, is how to line up the incentives for online asset disposition. This is the foundational element to provide individual agencies with incentives, so that the taxpayer would see more agencies moving toward online auctioning. By doing so, more agencies will be able to garner increased recoveries on property sales and, at the same time, allow for greater citizen access and participation in such sales. This researcher *strongly* recommends that across all levels of government, those seeking to move surplus sales to online auctions should push for legislative changes to allow agencies to retain the funds generated by such public property sales, rather than see the proceeds flow to the general fund.

It must be remembered that surplus is not the core function of *any* public sector organization. Thus, it is advisable for public sector leaders to seek to enlist the

aid of private sector partners to best handle the sales of surplus and reduce the cost and attention such operations necessitate. As with internal arrangements, the terms under which government agencies work with private sector partners in the surplus auction area should be "incentivized" as well. The cost and revenue sharing model of the commercial venture contract between the Department of Defense and Liquidity Services stands as a model for the structuring of such arrangements. Certainly, local governments will not require the scale of the Government Liquidation operation. However, it is vital that the incentives be aligned for both the public and private partners in government surplus auctions to maximize rates of recovery and inject greater participation and liquidity into the sales process. This is why the "one size fits all" model of eBay may not be the answer for your agency. Indeed, as has been shown by Property Bureau, a full-service model with the attendant higher fees may in fact produce far greater revenues for the agency than lower-cost alternatives that may appear to be the right road to go.

Online Surplus Auctions: A Profit-Leader for E-Government?

Is there a synergy between e-auctions and e-government? According to May 2004 statistics from Nielsen//NetRatings (2004), eBay and the U.S. government hold two places on the list of the top 10 domains accessed by web users in the United States. The metrics measure all public usage of a parent organization's domains, inclusive of all domains and URLs owned by a single entity. As can be seen in Tables 9 (work) and 10 (home), the two organizations are ranked either fifth or sixth on the list of domains accessed by Internet users at work and at home. The statistics in the two tables are explained as follows:

• Unique audience—For the month of May 2004, 25,199,000 unique Internet users visited at least one website of the U.S. government from work. This means that more people visited a federal website in that measuring period from their jobs than did buyers, sellers, and browsers on the eBay website. For home users, this was reversed, with more having accessed eBay than a federal government site.

Table 9: Top 10 Parent Organizations for Domains Accessed by Work Users in the United States, May 2004

Parent Name	Unique Audience (000's)	Reach (%)	Time Per Person
Microsoft	45,207	88.51	01:56:25
Yahoo!	37,219	72.87	02:38:36
Time Warner	36,106	70.69	05:02:33
Google	30,568	59.85	00:33:08
United States Government	25,199	49.34	00:25:37
еВау	20,981	41.08	01:31:56
InterActiveCorp	18,182	35.60	00:21:31
Amazon	17,345	33.96	00:20:05
Landmark Communications	13,910	27.23	00:14:20
Ask Jeeves	13,626	26.68	00:43:14

Source: Nielsen//NetRatings (2004). May 2004 Web Usage Data: United States.

Table 10: Top 10 Parent Organizations for Domains Accessed by Home Users in the United States, May 2004

Parent Name	Unique Audience (000's)	Reach (%)	Time Per Person
Microsoft	94,791	66.56	01:25:20
Time Warner	82,656	58.04	03:39:48
Yahoo!	81,285	57.08	01:49:59
Google	51,120	35.90	00:17:47
еВау	37,816	26.55	01:27:43
United States Government	30,828	21.65	00:17:15
Ask Jeeves	27,757	19.49	00:21:16
InterActiveCorp	24,232	17.02	00:17:36
Amazon	23,002	16.15	00:15:09
RealNetworks	21,744	15.27	00:42:59

Source: Nielsen//NetRatings (2004). May 2004 Web Usage Data: United States.

- Reach—This metric expresses the percentage of the total universe of U.S. Internet users who logged onto the Internet at least once during the reporting period who visited a website associated with the parent organization. The Nielsen/ NetRatings data shows that almost half of all active U.S. web users visited a federal government website during that month from their work computers, while over 40 percent used eBay while on the job in the same time frame. At home, slightly more web users accessed eBay (26.55 percent) than a federal website (21.65 percent).
- Time per person—This metric captures the amount of time users spend, on average, at a parent organization's domain each time they visit that website or launch an application from that site. eBay has long been regarded as one of the "stickiest" websites, being able to have users remain on its site for long stretches at a time. This can be seen in the fact that, on average, an eBay visitor remained on the site for an hour and a half!

While we may be concerned over the amount of eBay shopping going on at work, these monthly reports from Nielsen//NetRatings (2004)—which have remained rather consistent over the past year—demonstrate the powerful draw of online auctions

and the growing use of e-government, as revealed in the fact that the federal government ranks just below web stalwarts such as Yahoo! and Google and ahead of names such as Ask leeves and Amazon.

Recent surveys have consistently shown that the take-up (namely, utilization) of the information, interactivity, and services that e-government can provide have been lagging, making the ROI of such efforts somewhat difficult to justify. All of this makes e-government a "tough sell" in today's difficult budgetary times at all levels of government, when e-government services must be operated as a distinct (and additional) channel of governmental operations, adding incremental costs to augment traditional operations.

For instance, the most recent report on the American Customer Satisfaction Index (ACSI) E-Government Index was released in June 2004. This study, based on the combined efforts of the University of Michigan, the American Society for Quality, CFI Group, and ForSee Results, found that e-government users are generally pleased with their experiences interacting with the federal government online. While the cumulative results showed that consumer satisfaction with the 53 federal e-

government sites studied still lags that of commercial e-commerce sites, a vast majority of federal sites had demonstrated significant improvements in user satisfaction. Thus, when people are exposed to e-government, they are likely to become repeat customers/users and to recommend the e-government sites to friends, colleagues, and family members (Michael, 2004). Likewise, a mid-2004 survey from the e-Gov Institute found that e-government users found e-government to have high functionality and were surprised at the richness of the information and accessibility of services that could be found on federal websites. The worrisome aspect, according to CEO Evans Witt of Princeton Survey Research Associates, which conducted the e-Gov Institute survey, is that e-government cannot be successful if e-gov sites go unutilized by the vast majority of Americans. Witt put the issue bluntly when he stated: "There is a huge potential for these e-gov sites to be heavily used by Americans. But the government is going to have to find a way to tell Americans to come on over to these sites" (quoted in Hasson, 2004, n.p.).

How do online surplus auctions fit into the e-government equation? It's simple. In marketing parlance, private sector retailers will often offer "loss leaders"—items that get you into the store. While we may go to Wal-mart for the \$19 DVD player, the store makes its real money off the other \$100 or \$200 we spend on that shopping trip. This author strongly believes that online auctions can be a mechanism to lure increased numbers of citizens to government on the Internet. This could be particularly important and exciting in what Michael and Monroe (2004) describe as the toughest-to-reach segments of the population—the poor, the elderly, and the twenty-somethings.

However, the real beauty of the online auction is that it need not be a loss leader to lead citizens to experience e-government, many for the first time. Quite the opposite, as has been proven through the research in this report, if done properly, auctioning surplus, seized, lost, forfeited, and unused property online will likely *enhance* the revenue coming into the agency through such disposition sales, perhaps by 50 to 300 percent or more. In fact, physical auctions likely were themselves a loss leader, costing more to put on than they brought in, only to bring

citizens to out-of-the-way government depots, storage yards, or warehouses.

Thus, there is an intangible value to state and local agencies in having their websites feature online surplus auctions, even if this is only a link to the actual auction site, be it eBay, Property Bureau, Bid4Assets, Liquidation.com, or any other online auction provider. The very fact that people are interested enough to go online and visit their state, county, or municipal website due to property being auctioned off by the government brings that agency an opportunity—an opportunity to engage websavvy (or not so savvy) citizens in what is available to them through the agency's website. Likewise, an attractive and enticing link back to the agency's website from a commercial e-marketplace listing will likely draw at least a portion of the auction audience from that locality to the agency's online government effort. The next level of challenge, then, is how to make the agency's website more "sticky"—with information and e-services that matter to citizens. By doing so, government organizations further the ball down the field in the push for e-government in their area.

As Koufaris, Kambil, and LaBarbera (2002) observed, the development of e-commerce has created a profoundly new role in marketing transactions, that of the consumer/computer user. As a new phenomenon, the online consumer—and his behavior, preferences, and cues—is "inherently complex" and not well understood. When dealing with the government, we can observe that buying participants take on a simultaneous tripartite role, as shown in Figure 20. This role of consumer/citizen/computer user adds a new level of complexity for researching and attempting to understand those engaged as buyers of government property in online auctions.

While beyond the scope of this project, the author sees that this will be an active area for cross-disciplinary research, where consumer behavior, political science, and e-commerce research will intersect as we attempt to understand the implications of this changing role for citizen consumers in an e-government environment.

Who's Your Mike Plott?

As we have seen in this report, most of the time, the march of a government agency to sell its surplus online begins with a single individual. Harkening back to the "I Love Entrepreneurialism!" section at the beginning of this report, you'll recall the story of Mike Plott. Your Mike Plott is likely in your agency right now; your job is to discover that person or persons and empower them to put their online auction savvy to work for your agency. They are not necessarily in a corner office with a window. More likely, they are secretaries or budget analysts, the plumber working in your building, or the equipment manager in your yard who likely moonlights as a current or wanna-be PowerSeller on eBay. If you can tap their enthusiasm and homegrown expertise in online auctioning, the path to begin the sale of your agency's surplus on the web may be only a few mouse-clicks away.

A Final Thought

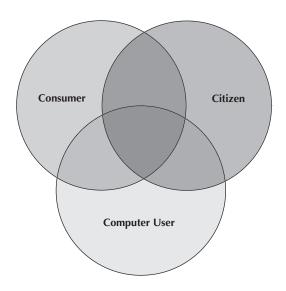
At the beginning of this report, we talked about the eBay economy. This research project has shown that government agencies, through bringing new technologies and new partnerships, best practices, and entrepreneurial thinking to their handling of surplus and seized assets, can play a large role in this new "new economy." Government action—from the Department of Defense selling castaway goods to a town selling unclaimed stolen bikes through Property Bureau—helps provide the raw material for this new "eBay economy."

We hear much talk today about economic development and the need for job creation. In today's economy, we must remember that there are new rules and new sources of opportunity, and many of these are created—for individuals and small businesses—through the active trading that occurs 24x7x365 on auction sites such as eBay, Liquidation.com, Bid4Assets.com, and PropertyRoom.com. In 1999, Phil Harvey (1999) commented that eBay has a way of making entrepreneurs out of individuals who "have a closet of crap to unload" (p. 74). Yet, across the United States today, an estimated 430,000 people primarily earn their living by trading on eBay alone. In practical terms, this means that more individuals are working as eBay PowerSellers than are employed by Procter & Gamble and General

Electric combined worldwide (Conlin, 2004). Estimates are that each and every month, 5,000 people shift from their current jobs or from un-or-under-employment to pursue selling on eBay full-time (Whitehead, 2004). In fact, there is a whole new breed of intermediary in the surplus game, white-collar professionals who believe they can make a great deal by buying and reselling surplus goods online (Barlas, 2003). According to Angrick, CEO of Liquidity Services, Inc., eBay PowerSellers buy one out of every four items sold on Liquidation.com to obtain stock that becomes their own inventory (cited in Tanner, 2003, n.p.).

While these general statistics are great, it is important to always remember that they are accomplished one person at a time. The opportunities created for individuals cannot be minimized, and perhaps do not have an analog in the physical environment. Take, for instance, Bob Bull, who goes by the handle of "Bobal" on eBay. Jim Griffith (2004) of eBay University tells of Bob's work not only as a PowerSeller on eBay, but of his willingness to help others learn HTML online to better their own computer skills and enhance their ability to sell online. Bob was diagnosed with multiple sclerosis some 15 years ago. His online business enables him to stay independent, rather than dependent, and connected to others, rather than disconnected. His story is repeated daily, as count-

Figure 20: The Tripartite Role of the Online Government Auction Participant



less single moms, entrepreneurial teens, retirees, and disabled individuals find meaning—and money—online.

Thus, in the end, turning to forward auctions to solve an agency's problems with surplus items may not come down to costs/benefits that are easy to analyze. Indeed, some of the impact of online auctioning may be very difficult to measure, precisely because the bottom line for auctions may be the starting point for citizens to begin to explore what e-government has to offer and for individuals to make a fine living from buying and reselling government's castaway goods. These objects may hold the key to a better future for many, many people in today's eBay economy—built by and for the people in a new way.

If you are an elected official or agency head, then you must also look to yourself to ask if you can make the strategic leap to online auctioning to better manage your organization's surplus assets. At the end of the day, as proven by the results discussed in this report, it is a matter of fiduciary trust that the end of the governmental supply chain be managed well—by and for the people.

Endnotes

- 1. If you wish to explore the more questionable side of online auctions and explore actual items that have appeared on eBay and other auction sites, there are two websites that are compendiums of such information. These are "Disturbing Auctions" (http://www.disturbing-auctions.com/) and the aptly named "Who Would Buy That" (http://www.whowouldbuythat.com/).
- 2. "To become an eBay PowerSeller, you must consistently sell a significant volume of items, maintain a 98 percent positive feedback rating, and provide a high level of service to buyers. When you see the PowerSeller icon next to a seller's name, you should feel assured that your transaction will go smoothly and that you are dealing with someone who has consistently met the requirements established by eBay.

"PowerSellers now have five tiers—Bronze, Silver, Gold, Platinum, and Titanium. Each tier requires a seller to meet and maintain a preset level of average gross monthly sales for the past three months of selling activity:

- Bronze \$1,000
- Silver \$3,000
- Gold \$10,000
- Platinum \$25,000
- Titanium \$150,000 (n.p.)"

(Source: Scott Prock (2004). "Just What Is an eBay Powerseller Anyway?" BellaOnline. Retrieved from the web on August 25, 2004. Available at http://www.bellaonline.com/about/onlineauctions.)

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