

**UNDERSTANDING THE INCREMENTAL NATURE OF
E-PROCUREMENT IMPLEMENTATION AT THE STATE AND
LOCAL LEVELS**

Susan A. MacManus*

ABSTRACT. Government's e-procurement system has not caught on as rapidly as has e-Bay! This article examines the slow implementation rate of public e-procurement systems. It challenges the notion that efficiency gains alone can entice governments to leave traditional procurement systems and principles behind. Four traditional procurement principles are reexamined to see whether they are deterrents to e-commerce: (1) low bid wins and that's a must; (2) separation between the vendor and user is desirable to avoid claims of favoritism; (3) fixed price and fixed term contracts are best for government; and (4) open access is absolutely imperative in all situations. The jury is still out as to whether the new commerce is contingent upon a reformulation of these principles.

INTRODUCTION

Many in both the public and private sectors have expressed high hopes for a surge in electronic purchasing or "e-procurement" for several years now. For example, in January 2001, Gary Lambert of Buysense.com predicted a sharp increase following pressure from both sectors and from the taxpayers:

Online procurement is on the 'edge of exploding.' I think it's really going to become a political agenda item very soon for a lot of public officials, whether it's a government-to-citizen sort of relationship that will drive it or whether it's the business

* *Susan A. MacManus, Ph.D., is a Distinguished University Professor, Department of Government & International Affairs, University of South Florida. Her teaching and research interests are in public budgeting, public procurement, and public policy.*

community putting pressure on legislators and governors to offer them a more effective way to do business.¹

The appeal of e-procurement to both the public and private sectors is the expectation of improved efficiency:

Nearly everyone recognizes the Internet's vast potential to remake government. Since the dawn of the Web, public officials have promoted the notion that online transactions between agencies and their constituents and business partners will spark huge gains in government efficiency and user-friendliness (Towns, 2001, p. 27).

The bottom line is that many inside and outside government wish more public sector e-procurement systems were in place to bring buyers and sellers together as quickly and easily as via "e-Bay." To date, this has not yet happened. "Should it have?" is the question.

Different Expectations

When the "e-revolution" first began, some expected it to rapidly spread across the entire governmental landscape—national, state, and local. Such expectations were based, at least in part, on the sharp rate of Internet use by individuals (Weiss, 2001, p. 54)² and businesses.

Others were a bit more cautious from the start, well aware of a historical distrust between the public and private sectors (MacManus, 1992b; Sinclair, 2000) and/or of the incremental nature of public policy implementation, especially in a very complex inter- and intra-governmental organizational system (Peters, 1999, chapter 5).³

Key Questions Surrounding Slow Pace of E-Procurement

Is patience a virtue or is the slow pace of the "e-revolution" proof of government's inefficiency and ineptitude? Do differences in the roles, responsibilities, and "customers" of government and business account for the incrementalism? And must traditional definitions of "good purchasing practices" be updated for the e-procurement revolution to be successful?

Focus of the Article

This article examines the implementation rate of public e-procurement systems and policies, primarily at the state and local

levels. It challenges the notion that efficiency gains alone are enough to prompt governments at the grassroots to jump on the high tech bandwagon. (Effectiveness and equity outcomes are also extremely important.) The research also highlights some of the major reasons for the slow pace of implementation. Finally, it discusses some major changes in “the philosophy of purchasing” that some believe must occur if the e-procurement revolution is to succeed.

INVOLVEMENT IN ELECTRONIC COMMERCE OFTEN OVER- STATED

Many governments are proud to report they are engaged in “e-commerce.” For example, 67% of the government agencies responding to a February 2001 National Institute of Governmental Purchasing (NIGP) survey claimed to be using some form of electronic commerce. Among those that were not, 84% projected they would be within a short period of time (NIGP, 2001). Likewise, a 2001 survey of the states revealed that 70% (35 of 50) purported to have an automated centralized procurement system (National Association of State Procurement Officials [NASPO], 2001, p. 110).

The fact is that many state and local governments somewhat overstate the degree to which they are involved in e-commerce and, more specifically, in e-procurement. Data from the 2001 NIGP and NASPO surveys prove the point (See Tables 1 and 2).

Reverting to Viewing “Procurement” & “Purchasing” as Synonymous

When responding to surveys, it is obvious that many governments (and businesses) report they have “*e-procurement*” systems in place when, in fact, what they have in place more closely resembles “*e-purchasing*.” The two terms are not synonymous, although in the rush to prove one’s government or business is part of the e-commerce revolution they have often been treated as such—a somewhat retrogressive view.

Over the past two decades, professional groups like NIGP have spent much energy trying to delineate the difference between procurement and purchasing. The Dictionary of Purchasing Terms (NIGP, 1996, p. 64)

TABLE 1
E-Procurement Tools in Place: 2001 NIGP Survey

Specific E-Commerce Purchasing Tool	Governments Currently Using (in %)	Governments Interested in Using (in %)
Order goods/services via electronic catalogs	68	80
Post solicitations electronically	62	79
Solicit informal bids electronically	48	70
Solicit formal bids electronically	37	57
Post bid results electronically	37	62
Receive informal bids electronically	34	55
Make payments to vendors electronically	24	34
Transmit purchase orders electronically	21	52
Receive formal bids electronically	5	30

Source: National Institute of Governmental Purchasing, February 2001.

defines *procurement* as “the combined functions of purchasing, inventory control, traffic and transportation, receiving and inspection, storekeeping, and salvage and disposal operations.” *Purchasing* has been more narrowly defined as: “the act and the function of responsibility for the acquisition of equipment, materials, supplies, and services. [Purchasing] describes determining the need, selecting the supplier, arriving at a fair and reasonable price and terms, preparing the contract or purchase order, and following up to ensure timely delivery” (NIGP, 1996, p. 68).

More recently, some attempts have been made to contrast traditional procurement with e-procurement. Mitchell (2000, p. 9) makes this distinction:

Traditional procurement is a paper-based process that is characterized by fragmented purchasing, off-contract buying, and lack of control over expenditures....*E-procurement* facilitates, integrates, and streamlines the entire supply chain process (from consumer to supplier and back again) in a seamless, real-time, and iterative manner.

TABLE 2
Rate of E-Procurement Implementation: 2001 NASPO Survey

Specific Procurement Tool	States Implementing as of 2001	
	Number	%
Automated procurement system in central procurement office	35	70
Vendors automatically purged	12	24
Vendors automatically selected	20	40
Bid/RFP notice via E-mail	16	8
Track vendor performance: vendor notes screen	14	28
Track vendor performance: vendor performance screen	15	30
Track vendor performance: linked vendor notes and performance screens	7	14
Invitation to Bid templates available	25	50
Standard terms and conditions language available for use in an Invitation to Bid	30	60
Invitation to Bid downloadable	27	54
System can handle sealed bids	8	16
Terms and conditions can be copied to purchase orders and contracts	28	56
Purchase order can be printed at remote location	28	56
Online requisitioning from agency customers	29	58
Capability for Electronic routing and approvals	24	48
Purchasing process milestones or timelines documented	14	28
Provide lead-time analysis	11	22
Record and prompt pending actions	15	30
Commodity code capability	32	64
Forms downloadable	17	34
Support on-line receiving	15	30
Provide integrated electronic commerce	11	22
Support delegated authority	20	40
System integrated with an asset management system	9	18

Source: National Association of State Procurement Officials (2001).

During the late 1980s and early 1990s, many state and local governments revamped their budgeting and financial management systems in response to declining revenues and major fiscal stress (cf. Mikesell, 1999; MacManus, 1990; Pammer, 1990). Privatization and/or contracting out became a key coping strategy (cf. Savas, 1987). Governments began to look more closely at the organization and

responsibilities of, and the personnel within, purchasing shops (Thai & Grimm, 2000).

The reinventing government/performance measurement “revolution” of the 1990s continued the call for improved, and more integrated, financial management systems linking inputs with outputs (cf. Osborne & Gaebler, 1992; Osborne & Plastrik, 1997; Mikesell, 1999). Suddenly, in addition to striving for improved efficiency, governments were focusing almost equally on the other two vitally important “e’s”—effectiveness and equity. Professional training became far more sophisticated—and complex (cf. Callender & Matthews, 2000; Gordon, Zemansky & Sekwat, 2000; Thai & Grimm, 2000).

What does this have to do with implementation of e-procurement in the public sector? To date, those driving e-procurement the hardest have come from the private sector. They see the Internet as the best vehicle for “B-2-B” and “B-2-G” (business-to-business; business-to-government) buying-and-selling relationships—more e-purchasing than e-procurement. Their “bottom line” goal is bigger profits via improved efficiency while their counterparts in the public sector are keenly interested in effectiveness and equity as well. The policies needed to ensure the latter two are often the most difficult to enact. Why? Because effectiveness and equity tend to be the focal points of litigation aimed at the public sector (MacManus, 1994). They are also the genesis of high profile constituent demands and intense media scrutiny.

The general tendency of governments has been to focus first on the technology needed for e-commerce, then to address public policy and organizational issues later. One analyst has stated the problem succinctly: “Often, e-government⁴ is embarked upon from a purely technological perspective. As a result, initiatives are started in a haphazard fashion...It must be understood that e-government consists of three distinct parts: policy, people, and infrastructure” (Robb, 2001, p. 48).

The private sector has also come under attack for focusing too narrowly on the technology—and using a rather narrow definition of procurement. An analysis by KPMG Consulting (2001, p. 1) concluded: “There has been considerable confusion in the marketplace about how these tools [online procurement] should be appropriately applied. In part, this has been the product of market hype and over-ambitious planning, but it has also resulted from *a leap toward perceived*

technology panaceas without paying attention to fundamental purchasing practices” (emphasis added by author).

MAJOR REASONS FOR IMPLEMENTING E-PROCUREMENT

Why the rush? Those already in the “e-game” point to time and money savings (efficiencies) as the biggest reasons (McKay, 2001a, p. 48). Eighty-five percent of the 2001 NIGP survey respondents mention “time savings” while 75% cite “reduction in costs.”⁵ Similar results surfaced in a Forrester Research, Inc. survey of 35 state and local government purchasing directors. Respondents claimed that by using the Internet to purchase, 54% lowered paper/printing costs, 49% saved postage/ mailing costs, and 43% experienced quicker response/turnaround time (Sharrard, 2001, p. 5).

Initially, many expected the e-revolution to greatly improve the entire bidding process. A white paper titled *Buying Smart: Blueprint For Action* (NASPO, NASIRE & NASDAGS, 1998, p. 1) released in the late 1990s by a joint task force of state organizations predicted reforms would help “keep pace with advancements in technology to not only procure products but *distribute bids in an equally expedient fashion...to provide procurement methods that assure customers of receiving leading-edge information-technology products and services in a timely and cost-effective manner*”⁶ (emphasis added by author). The white paper did not, however, put a time line on how long it would take to put these reforms in place.

No Generally-Accepted “One Size Fits All” Practices

Implementing e-procurement has been difficult (cf. Newcombe, 2001). The route has been “challenging and replete with forks in the road,” says one analyst describing the experiences of Los Angeles County and several other state and local governments (McKay, 2001a, p. 46). So what’s the problem? It is the absence of generally-accepted practices, says the L.A. County acquisition manager (in McKay, 2001a, p. 46): “There’s nothing that’s really fallen into place as an accepted standard across the industry. There are no magic bullets.”

The existence of the more than 86,000 local governments of varying sizes and functional responsibilities makes it difficult to generate “one size fits all” standards. This means that governments first do what can be done most easily without having to undergo major policy and procedure

revisions. It has been easiest to focus on purchasing commodities rather than services. In a survey of city and county governments by the International City/County Management Association (ICMA) and Public Technology, Inc. (PTI) (2001) in the fall of 2000, 53% acknowledged making purchases online, while just 14% say they have contracted for *services* with an e-government vendor. (The survey defined e-procurement as “buying or selling products over the Internet”—the narrower view).

WHY THE SLOW RATE OF IMPLEMENTATION? AND IS IT A BAD THING?

There are a number of explanations for the seemingly slow pace of e-procurement. Many of these are indicative of public-private sector differences, political and legal realities, and the complex web of intergovernmental relations within a state.

Public-Private Sector Differences

Governments must “promote the general welfare of all the people.” Simply put, efficiency cannot be the sole goal of government procurement. As noted in the report on e-procurement by Miami-Dade County, Florida (2000, p. 10):

Unlike private sector procurement, public sector procurement must work within regulations and policies established to accomplish desirable social as well as economic goals. Public sector procurement *emphasizes inclusiveness and broad competition* instead of using a small number of suppliers with whom a trusted relationship has been established (emphasis added by author).

One of the most serious inclusiveness issues facing government procurement offices today is the minority business owners digital divide. “As many businesses tap the promise of the Internet, minority entrepreneurs [many small business owners] are struggling to harness the power of computers, information technology and e-commerce” (Anonymous, 2000). According to data from the U.S. Commerce Department’s Minority Business Development Agency for the year 2000, around half of all minority-owned firms participate in e-commerce (Latino—42%; African-American, 56%; Asian-American, 49%; American Indian—54%). However, only a few have Web sites

(Latino—13%; African-American, 11%; Asian-American—12%; and American Indian—10%). As more communities become racially/ethnically diverse, political pressures to improve the equity of public sector contracting intensify and bring more actors into the e-procurement implementation game.

The reinventing government movement, the growing reliance on public-private partnerships, and the emphasis on strengthening the role of state and local governments has blurred the lines distinguishing the public from the private sector. As noted by Peters (1999, p. 118-119): “The increasing emphasis on the use of the private sector to achieve public purposes [such as in devising e-procurement systems] means that implementation is increasingly being performed by private groups as well as by subnational governments.”⁷ And the more actors involved, the more time delay in implementation.

A History of “Suspicious Minds”

Historically, the public and private sectors have somewhat mistrusted each other. It is no different with e-procurement. Such stereotypes have contributed to the slow pace of implementation.

Business Complaints about Government. The rap against government being slow to change is nothing new. Businesses have always complained that government lags behind the private sector in virtually every aspect of financial management—purchasing new technology, revising processes and procedures, training and retraining employees, and paying vendors (Hunter, 2000; Miami-Dade County, 2000; MacManus, 1992a). The same complaints have been leveled against government “e-procurement” (Wyld, 2000).

Business also criticizes state and local governments for being slow to implement federally-mandated policies. (Nothing is new here!) Most recently, businesses have pointed to NIGP 2001 survey numbers confirming that 65% of the governmental entities responding do not yet recognize electronic signatures in spite of passage of the Electronic Signatures Global and National Commerce Act in 2000. The 2001 NASPO survey of states also revealed that 46% had not yet enacted a digital signature law (also see Blocker, 2001).

On the other hand, governments complain that the federal legislation was far too general and yielded few specifics about electronic, or digital,

signatures. Others in government are concerned about privacy and liability issues associated with digital signatures (See McKay, 2001c).

Some in the private sector fault governments for their failure to engage in strategic planning, particularly of an intra-governmental, inter-agency nature (Hunter, 2000). Their beef is that governments going online do so in a haphazard way. The result is a slow implementation rate and a procurement function that is not well integrated with the overall financial management system.

The links between e-procurement and budgeting and auditing (especially of subcontractors) have been noticeably weak or missing for quite some time. The 2001 NIGP survey verified the shortcoming. Just 17% of the governmental entities using some aspect of e-commerce say they have integrated it with their financial system.

Government Complaints about Business. Governments complain that businesses vary considerably in their technological sophistication (McKay, 2001a; Newcombe, 2001). Another problem from governments' perspective is that some businesses are less interested in selling to the public sector than others. Stereotypes and bad experiences linger.⁸

Both situations have made it more difficult to attract vendors than many e-procurement enthusiasts initially anticipated. "The problem was that getting suppliers interested enough in the system to convert their paper catalogs to electronic ones was considerably more difficult than imagined; an e-procurement system devoid of suppliers is like a grocery store without groceries" (McKay, 2001b, p. 72).

The lack of interest and enthusiasm up front, especially of small businesses, makes state and local governments less willing to aggressively move toward full-blown e-procurement systems. A March 2001 study by Jupiter Research concluded that: "[Most procurement managers] see little advantage in moving online, in part because their existing suppliers are not there" (cited in Newcombe, 2001, p. 2). Nearly half of those surveyed said they "would do less than 20% of their procurements online for at least the next two years" (Newcombe, 2001, p. 2).

Governments see flaws in much of the e-procurement software heretofore developed by the private sector for use by the public sector. The software does not adequately track savings or performance. This shortcoming has surfaced in auction settings where online competition

can effectively reduce the price of goods.⁹ Such data are also vital in measuring contractor performance, an increasingly important indicator as more governments shift to high value pricing over low bids (Gordon, 2001).

An example of the central role that performance measurement plays in procurement can be found in The Commonwealth of Massachusetts Procurement Policies and Procedures Handbook (NASPO/NASIRE¹⁰ Joint Task Force on Information Technology Reform, 1998, p. 10-11). A successful procurement system is one which:

- *Is driven by results or outcomes* (emphasis added by author),
- Generates the best quality economic value,
- Is timely,
- Minimizes the burden on administrative resources,
- Expedites simple or routine purchases,
- Allows flexibility in developing alternative procurement and business relationships,
- Encourages competition,
- Encourages the continued participation of quality vendors, and
- Supports Commonwealth and Department plans.

Finally, governments complain that businesses do not fully appreciate the role that social and political factors play in the world of *public* policy-making.

Expertise and Staff Shortages; Organizational Roadblocks

Any successful policy redirection involves people. The skills and attitudes of employees and the organizational structure and culture in which they work greatly affect implementation (Peters, 1999). Change comes slow. Money is often tight and the civil service system entrenched, thereby making it more difficult for governments to hire individuals with requisite technical and/or communication skills.

The inadequacy of technology/Web staff has been a problem for many governments (67% of the respondents to the ICMA/PTI survey). Putting an adequate retraining program in place is no piece of cake

either. The costs of retraining employees—measured in dollars, time, and energy—are high. New ways of doing business are often resented and resisted by employees unless there is a considerable effort to educate them. As noted by Newcombe (2001, p. 2): “Buyers [governments] are not going to use an e-procurement system just because it’s a better solution. It requires education and training to make them feel comfortable, and that takes an awful lot of energy.” It requires a “People-centric” perspective (Mitchell, 2000, p. 11).

It is always more difficult to implement staff-based solutions during periods of economic downturn (Sharrard, 2001). During such periods, training is often one of the first activities to be sliced by the budget knife. And major capital investments, such as new computer equipment, are often put on hold. This is the situation facing many state and local governments in the early 2000s.

Slow Implementation a “Bad” Thing?

Opinions are somewhat divided as to whether the slow implementation of e-procurement has been good or bad. Some believe that slow implementation of e-procurement, especially among local governments, is actually a good thing. Indicative of this viewpoint is the comment that it is wise for local government to “let the states and feds with greater financial resources blow their money for awhile in the effort to prove out eProcurement for government” (Sharrard, 2001, p. 19).

Others are equally convinced that delays are “penny wise and pound foolish.” They firmly believe that foot-dragging results in major political and economic damage. It reinforces the notion that government is run inefficiently and has its hands tied by the status quo preferences of bureaucrats. A July 2001 report by Forrester Research, Inc. confirms that in 37% of the state and local governments surveyed, organizational inflexibility has been a barrier to moving purchasing online (Sharrard, 2001, p. 5).

There appears to be more consensus on the need to reexamine the wisdom of certain traditional procurement principles.

FOUR PURCHASING “PRINCIPLES” THAT ARE UNDER CHALLENGE

Procurement professionals have just begun discussing the possibility of different organizational and regulatory paradigms. Four long-standing

procurement principles, which are currently being debated, are discussed below.

Low Bid Wins

This may be the most difficult “principle” to change (cf. Mahtesian, 1994). For years, the public has constantly been taught that competitive bidding reduces the price of goods and services and that the price is best reduced when the low bid wins.

The underlying assumption of the low bid wins philosophy is that efficiency is the primary goal of contracting for goods and services. However, in the wake of the 1990s—the reinventing government, total quality management (TQM), and performance-based budgeting era—governments have been forced to acknowledge that effectiveness and equity are equally important goals.

The emphasis on reinventing government and improving performance during the 1990s (Ashbaugh, 2001) led to the development of the “best value” contract. A NASPO (1998, p. 3) white paper defines “best value” as “a process for selecting the most advantageous offer by evaluating and comparing all relevant factors¹¹ in addition to cost or price so that the overall combination that best services the interest of the state [or local government] is selected.”

The awarding of best value-based contracts is more subjective, and thus more likely to yield lawsuits related to fairness. But purchasing professionals increasingly see it as the only way to meet all three “e” goals of governance—efficiency, effectiveness, and equity.

Separation Between the Vendor and User

For years, governmental purchasing agencies have worked hard to keep vendors and line agency personnel (the users or customers) as far apart as possible to avoid the appearance of favoritism and conflicts of interest. This “purchasing principle” was first called into question by the decentralization trend observed in many states and localities (NASPO, 2001; Gianakis & Wang, 2000; McCue & Pitzer, 2000). More recently it has been challenged by new technology that better informs both vendors and governments about who needs what and by the principle of supply-chain management (NASPO, 1999).¹²

Supply-chain management involves “tracking the movement of and demand for components used to manufacture a product across a variety

of potential and actual suppliers, otherwise known as the supply chain” (Hamilton, 2001, p. R6). For this to occur, the role of the central purchasing office must be changed and more interaction between user (agency) and supplier (business) permitted:

When contracts are created, central procurement should play less of a gatekeeper role and become more of a facilitator of relationships between the client agencies and suppliers through cross-functional work teams (NASPO, 1999, p. 3).

Hanging on to the old notion that there should be little or no contact between user and supplier has contributed to the initial failure of e-commerce in some jurisdictions. “Too often, e-government initiatives run aground...due to a lack of regard for the end users, either through failure to consult them during the design and implementation phases or through inadequate training on new technology” (Robb, 2001, p. 48).

More contact between actual customers inside government and vendors on the outside is imperative if one wants to enhance competition by broadening the vendor pool. Surveys of firms that have never had a government contract find that the most common reason is the “difficulty in making contact with the actual user of their firm’s products or services” (MacManus, 1992a, p. 163).¹³

Increasingly, private sector procurement system software vendors under contract with a government are permitted to locate some of their employees at the agency, or user, site. ProcureNet—the first private company to be awarded the Hammer Award—points to that practice as critical to its early success: “The two things that have been keys for us are the blending of new and old technologies, and having our people at the agencies to work with the end users to show them how to use the system” (Caterinicchia, 2001, p. 1).

Some states have aggressively promoted long-term agency-vendor partnerships (NASPO, NASIRE & NASDAGS, 1998). The perceived advantages to government are: sharing project completion risk, improving the private sector’s understanding of government needs, continually improving services, and expanding the public sector’s procurement-related knowledge base. Knowledge management has long been a goal of private sector entities but has just begun to spread to the public sector. It is “keeping data that have been aggregated orderly, and analyzing them for trends and other useful insights” (Hamilton, 2001, p. R6).

Long-term agency-vendor relationships, like the selection of a vendor via “best value” rather than “low bid,” are still viewed with suspicion by many who see them through old lenses as promoting favoritism. The notion of separation between user and vendor will be hard to change. Ironically, it will be contingent upon proving the success of the high value v. low bid principle.

It may be the central procurement office that most resists the transition. As noted by McCue (2001, p. 10), many local governments are experiencing internal tugs-of-war as they debate such organizational issues as: “(1) the increased integration of the purchasing function with other areas of the organization; (2) the pursuit of economies of scale by combining purchases among divisions; (3) the adoption of flatter organizational structures with decision-making responsibilities shifted to lower levels of the organization; and (4) the trend toward e-commerce which often allows staff to be located in geographically dispersed areas and agencies.”

Preference For Fixed Price and Fixed Term Contracts

Fixed price contracts are based on an agreed-upon unit cost for a selected unit of a good or service. The NIGP Dictionary of Governmental Purchasing Terms (1996, p. 35) defines a firm fixed-price contract as one that provides “for a firm price, or a price that may be adjusted only in accordance with contract clauses providing for revision of the contract price under stated circumstances.” The benefits of term contracts “include their economies of scale and just-in-time procurement, which sets up the supplier as the procuring entity’s storehouse” (Corvino, 2000, p. 13). But the disadvantages are many. They include: difficulty ensuring that all requisitioners utilize the term contracts and incomplete or inefficient access to the necessary contract data needed to determine whether a term contract will result in increased costs (Corvino, 2000).

Some states have already recognized that fixed price and fixed term contracts won’t cut it in the world of e-commerce. Missouri is one (NASPO, 1998, p. 1):

Our previous ‘cookie cutter’ procurement methodology (specific technology for a fixed price for a fixed period of time) failed to satisfy our customers’ widely diverse and individualized needs for products and services.

Lessons about the shortcomings of fixed rate and fixed term contracts have been most blatantly and painfully learned from contracting for information technology (IT) (cf. NASPO, 1998; Pettijohn & Qiao, 2000). All agencies within the same governmental entity *do not* have the same IT needs!

Open Access Imperative in all Situations

The traditional notion has been “If it’s public, it must be accessible by the public—and press.” But with e-commerce, security and privacy issues have surfaced as major concerns. Businesses (and some citizens) worry about disclosure requirements that might enhance the likelihood of their computer systems being hacked into. Identity fraud—by a competitor—is a very real issue. According to a May 2001 report, “the Federal Trade Commission now receives more than 1,500 complaints of identity theft per week, more than four times last year’s rate” (Anonymous, 2001b). Web fraud complaints are on the upswing in virtually every state (Johnston, 2001).

Governments cannot expect to maximize vendor participation in e-procurement programs without security policies in place. In “Building a Successful E-Govt Strategy,” Robb (2001, p. 48) argues that policies and procedures must be established prior to implementation to: protect the privacy of personal data, determine the amount and types of information to make available to the public, protect data, dictate data access, and establish penalties for lapses of security. Security rules and procedures, often limiting the public and the press’s right to know, appear to some to be counter to the principle of “government in the sunshine”—a practice that is judged to have reduced cronyism and corruption in the contracting process.

At this point, the public’s views on privacy seem to be more closely aligned with the business view (restricted access) than with government’s (non-restricted). A November, 2000 survey conducted by the Center for Survey Research and Analysis at the University of Connecticut found that “Americans want laws to protect their private information, *even at the cost of restricting public access and free press*” (emphasis added by author, Associated Press, 2001a). Of all the procurement principles currently being debated, this is the one that is most likely to be resolved by the courts.

SUMMARY

Many have been quick to identify government as the major drag on the pace of the e-procurement revolution. This article details the reasons why this image has persisted. It also shows that some of the blame for the slow implementation of e-commerce must be shared by the private sector. It has failed to grasp governments' need to be equally concerned with the effectiveness and equity of the purchasing process as with the improved efficiency. The business community has also tended to overlook the difficulty governments face in having to make policy in a highly complex, often competitive, inter-governmental arena.

There are, however, some similarities between the public and private sectors. For example, both have been guilty of rushing to put new technology in place without fully gauging the broader implications—on people and on policy making. Both have claimed e-procurement successes, but then based such claims on rather limited definitions of procurement. Both have taken the easy routes first: buying and selling commodities on line, but delaying purchasing services. Finally, both have called for a reexamination of certain key principles that have guided public procurement over the past several decades.

The four principles now under debate are (1) low bid wins and that's a must, (2) separation between the vendor and user is desirable to avoid claims of favoritism, (3) fixed price and fixed term contracts are best for government, and (4) open access is absolutely imperative in all situations. The jury is still out as to whether the new commerce is contingent upon a reformulation of these principles.

There is little consensus as to whether the pace of the e-procurement revolution is a good or bad thing, from the perspective of state and local governments. Time will tell. In the meantime, researchers need to do a better job of determining the willingness and capacity of businesses to sell to government in the era of e-commerce. Likewise, more thorough studies are needed to determine with more precision which of the public sector's regulatory restrictions and organizational dimensions are the biggest deterrents to e-commerce. Thus far, the bulk of the surveys have focused almost exclusively on the interface between larger governments and corporations. But the bulk of governments and businesses in this country are far smaller.

NOTES

1. Quoted by Jim McKay (2001, January), "Getting Through the Maze," Government Technology, p. 48.
2. "According to Nielsen/Net Ratings, 56% of the U.S. population, nearly 154 million people, accessed the Internet in November 2000—a 30 percent increase over the previous year."
3. As Peters (1999, p. 95, 103) has noted: "Anyone interested in policy outcomes must monitor implementation as well as formulation activities...One of the most important things to understand about government is that it is a minor miracle that implementation is ever accomplished."
4. Douglas Holmes (2001, p. 2) defines e-government as "the use of information technology, in particular the Internet, to deliver public services in a much more convenient, customer-oriented, cost-effective, and altogether different and better way. It affects an agency's dealings with citizens, business, and other public agencies as well as its internal business processes and employees." E-government has been defined by Public Technology, Inc. and the International City/County Management Association (PTI/ICMA, 2001, p. 3) as "the delivery of services and information [by government], electronically, to businesses and residents, 24 hours a day, seven days a week." It typically involves use of the Internet and Web-based technology. The Center for Digital Government defines electronic government as "delivery of government service to citizen, business, employees, and internal or external government entities through electronic means" (E-mail from Melinda Dinin, centerdigitalgov.com, October 18, 2001).
5. Less than one-fifth point to any other single factor as a major impetus: decentralization (17%), centralization (15%), reduction in staff (15%), mandate from management (15%).
6. Members of the Joint Task Force: National Association of State Purchasing Officials, National Association of State Information Resource Executives, and the National Association of State Directors of Administration and General Services. Available: www.naspo.org/whitepapers/buyingsmart2.cfm.
7. Peters also notes that a "steer but not row" philosophy urging governments to make policy but depend on other entities (for-profit

and not-for-profit) to implement it emerged from the administrative reforms of the 1990s.

8. Available: www.naspo.org/whitepapers/buyingsmart.cfm.
9. Author's conversations with purchasing official in state getting ready to purchase an e-procurement system from the private sector. An auction is: "Putting out an online request for goods and services, allowing suppliers to bid for the business" (Hamilton, 2001, p. R6).
10. NASIRE is the National Association of State Information Resource Executives.
11. Factors recommended for consideration include: performance history of vendor; quality of goods or services; delivery; proposed technical performance; financial stability of vendor; timeliness; cost of necessary training; qualifications of individuals proposed for a project; realistic risk assessment of the proposed solution; availability and cost of technical support; and testing and quality assurance program.
12. Supply chain management involves "a management role embracing the entire procurement process from the initial identification of need through termination of the contract. The emphasis [shifts] from just a 'buy transaction' to supply chain management, which includes the requirement definition and disciplines such as supply development and global sourcing" (NASPO, 1999, p. 2).
13. One study has concluded that electronic procurement systems put in place by some states have increased competition and because of a more open bidding system, reduced the likelihood of vendor protests. (NASPO, NASIRE & NASDAGS, 1998).

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