

e-BUY!OHIO
On-Line Catalog

Nomination--NASCA

Category: E-government or Governmental Technology Applications

Title: e-BUY!Ohio--Closing the electronic business loop!

A. Description of the program and relative significance to the improvement of the operation and or efficiency of state government

Ohio has been quietly providing e-commerce services with and to vendors since 1995. At that time EDI was introduced in the invoicing and payment process. Vendors who chose to be EDI compliant found that the turnaround time for doing business with the state drastically dropped: payments that once took as many as 30 days now were being accomplished in fewer than 10 days. That was the first step in providing process improvement. Since that time purchase orders have been added to the EDI transactions being done with the vendor community.

And EDI has been good for the State of Ohio and its vendors. But what about state employees who try to purchase goods and services to do their job?

Our goal was to make the entire buying process an electronic process, both for the vendor and the state employee. **e-BUY!Ohio** is a dynamic system--it's operational today and being used by state agencies. It's also a developmental system. We are adding State Term Schedule holders and State Term Contract holders to the catalog on a regular basis as well as adding new features to the catalog.

e-BUY!Ohio is an on-line catalog that houses data from vendors who hold State Term Contracts or State Term Schedules. Because Ohio has contracts that have Ohio-specific language and offerings the state decided that an electronic catalog containing only those items actually available to state employees by contract should be in the catalog. Using the vendor's website would not give us specifically what was on our contract, nor could it be downloaded to the workflow approval process without rekeying.

But we didn't stop there. We tied **e-BUY!Ohio** and EDI together.

An electronic workflow approval process was also developed that front-ended the Central Accounting System (CAS). CAS is the system that all state agencies use to obtain purchase orders and the system that is already providing EDI transaction documents to vendors.

Today an employee can sit at their desk, shop in **e-BUY!Ohio**, pick items from multiple vendors and put them in a shopping cart, import those items into the electronic workflow approval process without rekeying data, get multiple requisitions approved, have an 850 (Purchase Order) sent to the vendor, receive the items, have the vendor invoice the

State with an 810, and the State deposits the funds via EFT to the vendor's bank account and sends the 820 (Remittance Advice) electronically to the vendor.

We have completed the electronic buying loop!

B. Calculation of actual savings in the short term and / or long term

The State of Ohio has not had an independent cost-benefit analysis completed on the on-line catalog and workflow portion of the system yet; however, the independent cost-benefit of EDI alone was significant.

We did do a cost of business study prior to beginning the pilot that included only office supplies. We know that each paper transaction costs between \$75 and \$100 in labor and paperwork to complete. We know that in FYK97 when we first began studying this idea we spent \$4,956,000 on office supplies. If it cost \$75 to complete one transaction the state spent \$3,304,500. These costs did not include envelopes or postage.

We know that on average 40 Purchase Orders a day were completed for office supplies. We have five office supply vendors on contract. Postage alone would have cost at least \$16,000 a year for the pilot vendors.

Beyond costs to the state there were also costs to the vendor. Each office supply vendor was required to supply at least 2,000 catalogs to the state. Per the vendor community each catalog cost between \$10 and \$16.50. This was only printing cost to the vendor, nothing else. They had to supply these catalogs at least once a year for the term of the contract and they were responsible for distribution to the state agencies. Any amendments to the contract were also done using paper. In addition to supplying catalogs, vendors were getting between 75 and 150 calls per day for price quotes, order status, etc. All of this took time away from other activities related to their business. Additionally they were receiving fax orders at a rate of 35 per day hard copy, POs ran between 30 and 50 per day depending on the time of year.

With e-BUY!Ohio the vendor supplies an electronic file to the state. All updates/amendments are done electronically as well. When fully implemented vendors will no longer be required to submit paper catalogs, contracts or schedules. State employees will not be contacting them for quotes because a quote is no longer needed. If the item is in e-BUY!Ohio it is on contract and can be ordered. The request to order is imported to the workflow approval system that is also electronic and integrated with the state's Central Accounting System (JCAS). EDI enables POs to be processed overnight--no more waiting for the agency to tear the four-part PO apart and mail it or fax it. Time is money and we have shortened the buying process by over three weeks.

Now a vendor can receive an EDI Purchase Order, after delivery and acceptance of the items by the state agency, and bill the state using an EDI invoice. Their payment can be directly deposited in their bank account, and an EDI remittance advice goes to them with all the relevant information. Besides saving money it is also saving time.

The State hired an outside consulting firm to conduct an EDI cost/benefit analysis of the original pilot to determine whether it should move forward with this program. The firm used a structured methodology to collect the information needed to perform the cost/benefit analysis. After validating the State's baseline (manual or "as is") operational costs the State would incur if it continued to process the invoices with the baseline (manual or "as is") process. To determine the appropriate baseline (manual or "as is") process operational costs to consider, the baseline (manual or "as is") and EDI invoice and payment processes were broken into activities, and costs were determined for each activity impacted by the pilot implementation. Both direct and indirect labor costs were considered in calculating costs.

Without taking into account all of the possible tangible benefits or the possibility of extending the EDI project to additional functional areas, savings were very conservatively estimated at over \$2.3 million by the end of FY2000. This represents a return on the \$1.3 Million implementation investment of 180%, and a return on total investment of at least 32% by the end of FY2000. Returns on operational investments were estimated at about 90% each year thereafter.

Using less conservative but still realistic assumptions, savings could easily exceed \$25 million by the end of FY2000. This represents a return on implementation investment of over 2000% and a return on total investment of more than 130%. Returns on operational investments exceed 160% per year after FY2000.

According to the cost benefit analysis the break-even point on total cost (i.e., EDI investment and operations cost) was conservatively estimated to be in late FY98. The State achieved the break-even point in FY97.

C. Quantitative benefits realized by service recipients, taxpayers, agencies and/or the state

There are number of currently unquantified tangible benefits: reduced paper handling and storage; reduced paper purchases; reduced postage; fewer errors; improved error detection; faster delivery; prompt payment and easier retrieval of information. All of these items can be quantified in monetary terms if enough time is spent researching them.

Some typical intangible benefits associated with the **e-BUY!Ohio** implementation include reduced human involvement in routine tasks; better service to state employees; greater accuracy and timely communications as well as increased efficiency.

The EDI process can be used to accomplish routine compliance checks and reconciliation's, flagging only those transactions that have a problem. This frees State accounting personnel to focus on solving problems rather than finding problems. The EDI implementation uses computers to do what computers do best (e.g., count, add, compare) and humans to do what humans do best e.g., apply imagination and synergy

to solving a problem). Personnel in the participating State agencies have gained a greater sense of job satisfaction and less frustration as a result of closing the procurement loop.

Another major intangible benefit is the integration of the EDI process directly of error. Fewer people are manually involved in completing the process. Purchase orders go to the vendor overnight instead of days in the paper process.

From a vendor standpoint there are also major tangible and intangible benefits. The biggest benefit realized to date is the rapid payment. What took an average of 30 days before now takes fewer than 10! This will be a major economic benefit to the vendor and potentially to the State in terms of future discounts related to prompt payment.

e-BUY!Ohio is successful and is being scaled up, and extended as quickly as possible to additional state term schedule holders, state term contract holders and state employees. Ultimately it will be available to local agencies and universities that have cooperative purchasing agreements with the state.

In addition to **e-BUY!Ohio** being scaled up financial EDI is being scaled up as well. Many vendors who are participating in the catalog are becoming EDI trading partners. They understand the value of making the entire procurement process electronic.

D. Relevancy of use by other state, local and federal government

Certainly Ohio has an advantage--a central accounting system (CAS), a statewide computer network (ODN), an electronic workflow approval process and telecommunications infrastructure made it easier to deploy **e-BUY!Ohio**, EDI and other electronic commerce technologies. However, every state and local government can benefit by using electronic commerce technologies. The quantity of paper that each and every government entity receives is staggering. To be able to reduce the paper costs, mailing costs, storage costs and person hours associated with sorting, mailing and filing alone could probably justify using EC technologies. Being able to redeploy manpower to do more satisfying and productive activities provides even greater benefits to the government entity. Additionally reengineering the business process associated with any new deployment of technology is worthwhile for everyone. Ohio did this while piloting the different EC programs. Redundancies were and are being eliminated as well as review and oversight that had just happened over time, but were not necessary based on any law, rule or executive order. Quite often bureaucracy just builds upon itself. The excuse "we've always done it this way" was reviewed in relationship to laws, rules and executive orders. This activity in and of itself is worthwhile to improve the way business is done. Over time people just add steps to a process, often with no apparent value being added. Reengineering a process whether implementing a new technology or just looking at the way business can be improved is always relevant to government.

The most relevant activity our program has for other government entities is the fact that we provide better customer service, both to other state agencies and to the vendor

community. Ohio is doing business like business is done generally outside of government. Our vendors appreciate our efforts and in the long run this not only benefits our business relationships, but also our bottom line as well as businesses bottom line.

In the future **e-BUY!Ohio** will be available to local agencies participating in the state's cooperative purchasing program. This will probably be one of the most relevant activities related to local government; it should also improve their purchasing process.