

2008 Summit Award – Leadership in Public Procurement

Nominee Information

Public Sector Procurement Project: **Ushop - UofT's eProcurement Marketplace**

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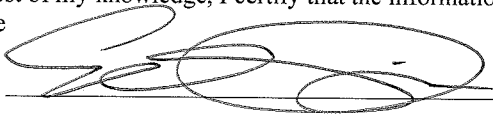
Nomination submitted by

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Certification

To the best of my knowledge, I certify that the information provided is accurate and true.

Signature



Date

July 7/08

Ushop - UofT's eProcurement Marketplace

Overview

The University of Toronto has developed a web-based eProcurement system, branded as “Ushop”, which will save millions of dollars through productivity gains and purchase price reductions. By creating a simple to use yet highly sophisticated electronic marketplace users are able to easily purchase the goods they need to do their jobs knowing they will always be getting the best negotiated price on commodities including computers, office supplies, laboratory supplies and equipment, chemicals, radioisotopes and building maintenance supplies. Through integrating purchasing with the University’s financial systems, automating business processes and approval workflows we have unprecedented control over expenditures and visibility over how funds are being applied. The purchasing process has been significantly streamlined through automation and elimination of redundancy – reducing the number of steps in a typical purchase transaction from 29 to 7. The economic impact of this streamlining is a reduction in transaction costs from \$129 to \$12; a \$117 (or 90%) saving per transaction compared to non-e-procurement methods.

The University of Toronto generates over 120,000 low-value purchase transactions annually. By extension, and with full adoption by suppliers and users, this represents a potential economic saving of \$14 million, annually. Additionally, by providing users with a single access point for the university’s contracted suppliers we are able to drive vendor consolidation which improves the university’s negotiating leverage on over \$75 million of anticipated annual throughput. This will generate concomitant price reductions between 7-11% (i.e. \$5-8 million.)

Objectives:

- To stream line low value purchases at the University
- Provide a simple to use web-based application for faculty and staff to purchase their supplies for research, teaching, administration and building maintenance.
- Improve the transparency of purchases
- Facilitate the consolidation of suppliers by capturing detailed spending to improve spend analysis.
- Provide consistency and access to contracted suppliers.
- Provide an electronic audit trail of purchases.

Project Description

With over 11,000 faculty and staff, the University of Toronto was challenged to create a simple to use system for low value purchases accessible not only on our 3 campuses, but in research facilities used by faculty spread across the world. In addition, the system had to integrate with a SAP financial back end. After an extensive review of systems and services

available, we chose Enterprise Buyer Professional, a stand-alone module of SAP due to its tight integration with SAP R/3 financials.

In 2001, we interviewed over 60 staff covering both academic and administrative roles to determine the features and functionality needed to configure the system. A steering committee comprising of researchers, divisional business officers, systems, finance, audit and procurement staff was formed. Their role was to assist with system development, act as communication and consultation experts for new and future end-users, to pilot the system and develop training material.

Through the use of consultants and internal resources, we were able to launch the eProcurement system after a 6 month implementation at year end, 2002. The initial system was piloted with 3 vendors and 12 users from one division. The uniqueness of the system at that time (and still is, especially in the education sector) was that it was a shop to pay, **paperless** system. Since both the purchase order and invoice are electronic documents, it is truly a 'pure' business to business (i.e. B2B) system. Many eprocurement systems are also paperless; however they utilize the purchasing card as a final payment.

We branded the eprocurement system as, "Ushop" as part of our full rollout program in 2004. Today, Ushop has close to 1300 users spread across 280 departments and 17 suppliers (with full catalogues) providing more than 500,000 sku's.

How it works: Users log onto the system from a browser and shop catalogues by selecting items and adding them to their virtual shopping carts. The carts are submitted and once all approvals are met, an electronic (XML formatted) purchase order is sent via the internet to the supplier. Suppliers ship the products and subsequently submit an electronic (XML formatted) invoice to the Ushop system. Upon receipt of the products, users complete an online goods receipt and this triggers an automated 3 way match (of the e-Purchase order, goods receipt and e-invoice) which results in a payment to the supplier (see Figure 1, for workflow diagram.)

Project Experience

Ushop has been a great success both within the University, Provincially (see OECM, below) and nationally; winning the Canadian Association of University Business Officers productivity award in 2005.

With year to year to year growth in the double digits since 2004, Ushop is now generating \$8 million in purchases, annually and growing (Figure 2.) We have grown from 12 users in 2002 to 1290 users to date and have 17 active suppliers in the marketplace with 4 additional in the onboarding stage.

With a decentralized environment and a non-mandating framework for procurement procedures, significant effort has been made to promote and market Ushop as the preferred purchasing channel. We retained a marketing consultant to help us rebrand Enterprise Buyer Professional to its current moniker, Ushop. In addition, we engaged our Ushop suppliers in advertising campaigns that promote the eprocurement channel (rather than phone or email ordering.)

In order to determine the effectiveness of Ushop, we conducted an activity based analysis of procurement procedures (Figure 3.) We found that on average, it took 3.46 hours and 29 steps to purchase an item through traditional purchasing procedures (e.g. phone or fax orders and either pcard or paper invoice based payments.) When Ushop was used, the purchase consumed 20 minutes and took only 7 steps; with the elimination of the paper invoice providing the most dramatic decrease in effort.

By utilizing both internal and external resources during the implementation, we were able to effectively capture a seamless knowledge transfer in both maintaining and enhancing the system. This has ensured our continued refinement of Ushop from both a technical and business perspective in a financially frugal manner.

We now look forward to the Ontario Educational Collaborative Marketplace (OECM) program (see Transferability, below) going into production. One of the challenges we continue to face is the ability to implement suppliers in an efficient manner. Although we have a well defined process for integration activities with our system, we are subject to the time lines and resources within a supplier's organization. By combining the spend for the Province's entire education sector (i.e. School Boards, Colleges and Universities); this economy of scale makes the OECM marketplace a more attractive business proposition to suppliers and therefore a greater incentive for engagement. OECM is expected to implement a marketplace of 1000 vendors within a 2 year period. We plan to connect to OECM's marketplace as part of our ongoing improvements to our eprocurement program and that will significantly enhance the variety of products and services available to our Ushop users.

Innovation

Ushop was the first 'pure' business-to-business (i.e. shop-to-pay, back-end integrated and paperless) internet based eProcurement system in the higher education sector, worldwide. It was designed specifically for an academic application with centralized, decentralized or hybrid business organizational frameworks. Ushop has the flexibility to accommodate varying business rules desired by individual researchers, business officers or operating units. Ushop incorporates multi-level approval workflow, real time funds checking and reservation and can automate the application of provincial sales tax research exemptions on a line-item basis. Ushop also enables users to split purchases to multiple funds. The key differentiator between Ushop and similar applications is the integration with back-end financial systems. Most eProcurement systems require a credit card (i.e. Pcard) to pay for purchases, retaining all of the attendant limitations and administrative burden associated with Pcards. Ushop is paperless and eliminates invoice processing in its entirety while improving control and retaining a clear audit trail.

Benefits

We have significantly increased the productivity of our faculty and staff by reducing the procurement effort from 29 steps to 7 when they use Ushop. This typically will free up on average over 3 hours per transaction (Figure 3.) Currently, more than 60,000 transactions have been made through Ushop; providing over 180,000 hours of increased productivity. That converts to more than \$6.3 Million in economic savings (i.e. average wage of \$35/hour times 180,000) to date.

Additionally, all Ushop suppliers are under contract so all spend through the system guarantees we are getting the best pricing and therefore generating hard savings.

Suppliers have provided hard dollar savings by offering incentives for eprocurement orders. Suppliers see a decrease in cost of business when they receive Ushop orders. Savings are incurred when orders are automatically injected into their fulfillment system and electronic invoicing eliminates the cost of a manual paper billing process. As an example, many of the suppliers have eliminated shipping costs for Ushop orders, only. One department at the University has saved over \$70,000 through this incentive program by diverting all their purchases through Ushop.

With detailed line item and g/l coding, we have improved our reporting and capturing of spend. This has resulted in better pricing negotiations as we can determine precisely the materials and volumes we are consuming.

By providing flexible approval workflows many of the over 280 departments have eliminated their 'shadow' systems as Ushop has become the preferred purchasing method. Since Ushop integrates with the financial system, we can do real time funds checking and reservation and this has led to a significant reduction in NSF risk.

Transferability

Ushop is based on a stand-alone module of SAP that can be integrated with a variety of back-end financial systems. The 2 electronic documents exchanged between the university and its suppliers, the purchase order and the invoice, use XML formatting – a global standard. The commodity classification mechanism employed is the United Nations Standard Product and Services Classification (UNSPSC) system – another global standard used by manufacturers and suppliers. We link UNSPSC codes to our general ledger accounts to invoke special workflow for hazardous or restricted goods (e.g. radioisotopes.)

We currently have 17 suppliers in the Ushop marketplace representing the most common commodities purchased by most universities – computers, office supplies, laboratory supplies and equipment, chemicals, radioisotopes and building and maintenance supplies.

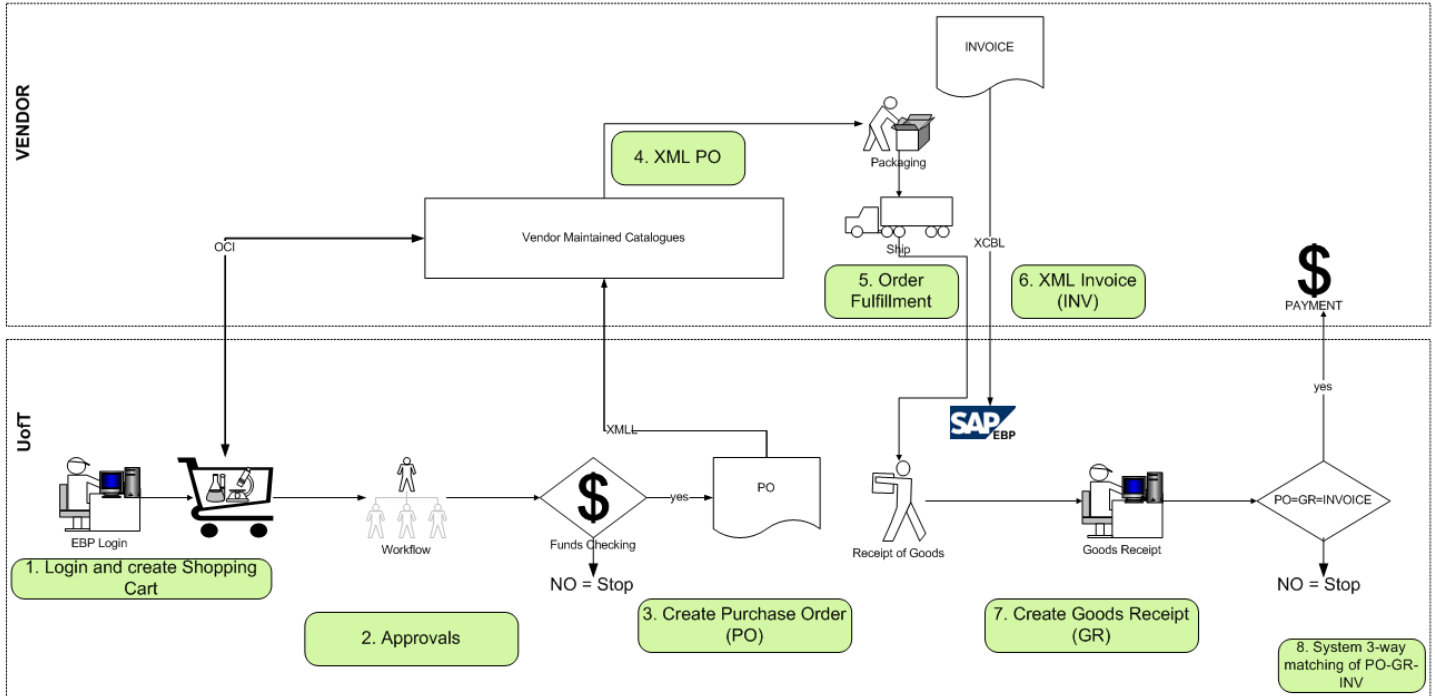
We have also developed an e-cataloguing portal that helps engage vendors of any size, technical capability or geographic location. Through a simple spreadsheet upload, a supplier can generate an electronic catalogue that they can maintain through the portal. This ensures that specialized suppliers (especially those that provide unique research related products) have a cost effective solution to transact in the Ushop marketplace.

Throughout the design, development and implementation of Ushop, a key guiding philosophy was to ensure that the end product could be adapted to a variety of financial systems and business models. This was to ensure that Ushop could evolve to become a marketplace for other institutions in the education sector. In March of 2008, the Ontario government provided funding (\$35 Million) to the Ontario Educational Collaborative Marketplace to build an marketplace influenced by the technology and business models of Ushop. OECCM is expected to go into production in 2009 and be available to not only Universities but Colleges and School Boards across the province, as well.

Advancing Professionalism

Ushop has been a paradigm shift in the procurement function here at the University. Where we once focused on transaction processing, Ushop has helped transform us into a more strategic role. We have reduced the need to monitor small value purchases so staff can now focus more on spend analysis and supplier management. The insights we have learned through Ushop have greatly assisted OECCM in building their business model. In fact, our Director of Procurement has been seconded to OECCM as their Chief Operations Officer. We have also contributed our eProcurement experience to numerous other public organizations such as the City of Toronto, Canadian Blood Services and Toronto Catholic School Board in their preliminary assessments on building their own eProcurement programs.

Figure 1. Ushop Workflow



Ushop workflow:

1. Login and Create shopping cart with items selected from punchout to vendor catalogues. 2. Spending tolerance and business rules are validated prior to; 3. PO creation. 4. Vendor receives xml PO and 5. ships item(s); this triggers 6. submission of xml invoice. 7. Upon receipt of item(s), user enters goods receipt into system and files packing slip. 8. Automated 3 way match of PO/GR/INVOICE by a daily batch process finishes transaction with queued payment to vendor.

Figure 2. Year to Year volumes of Ushop Program

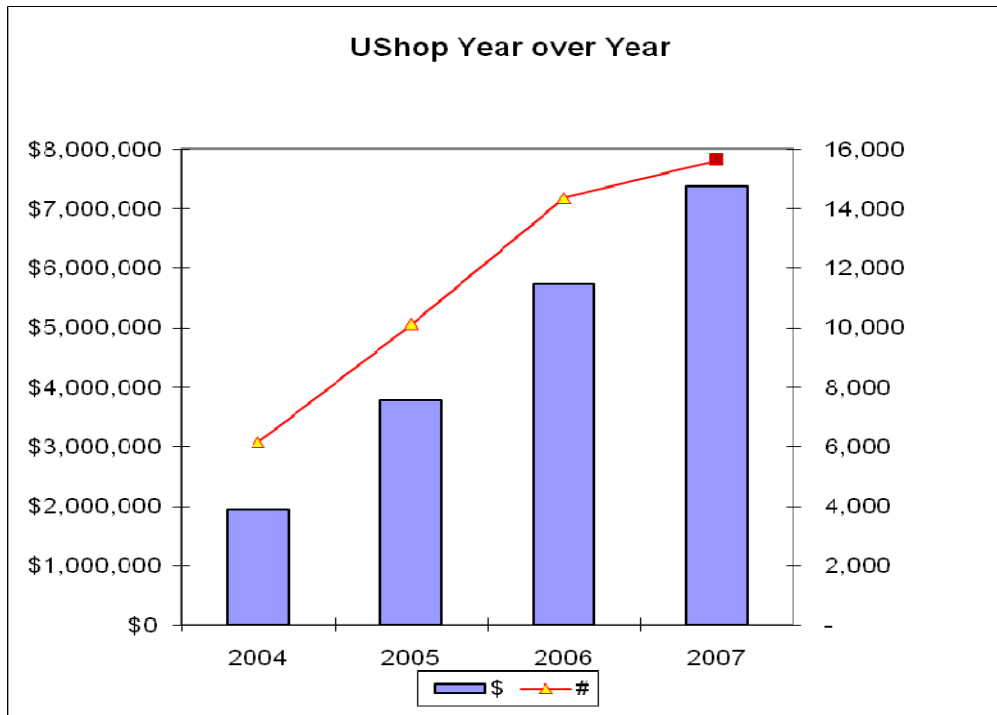
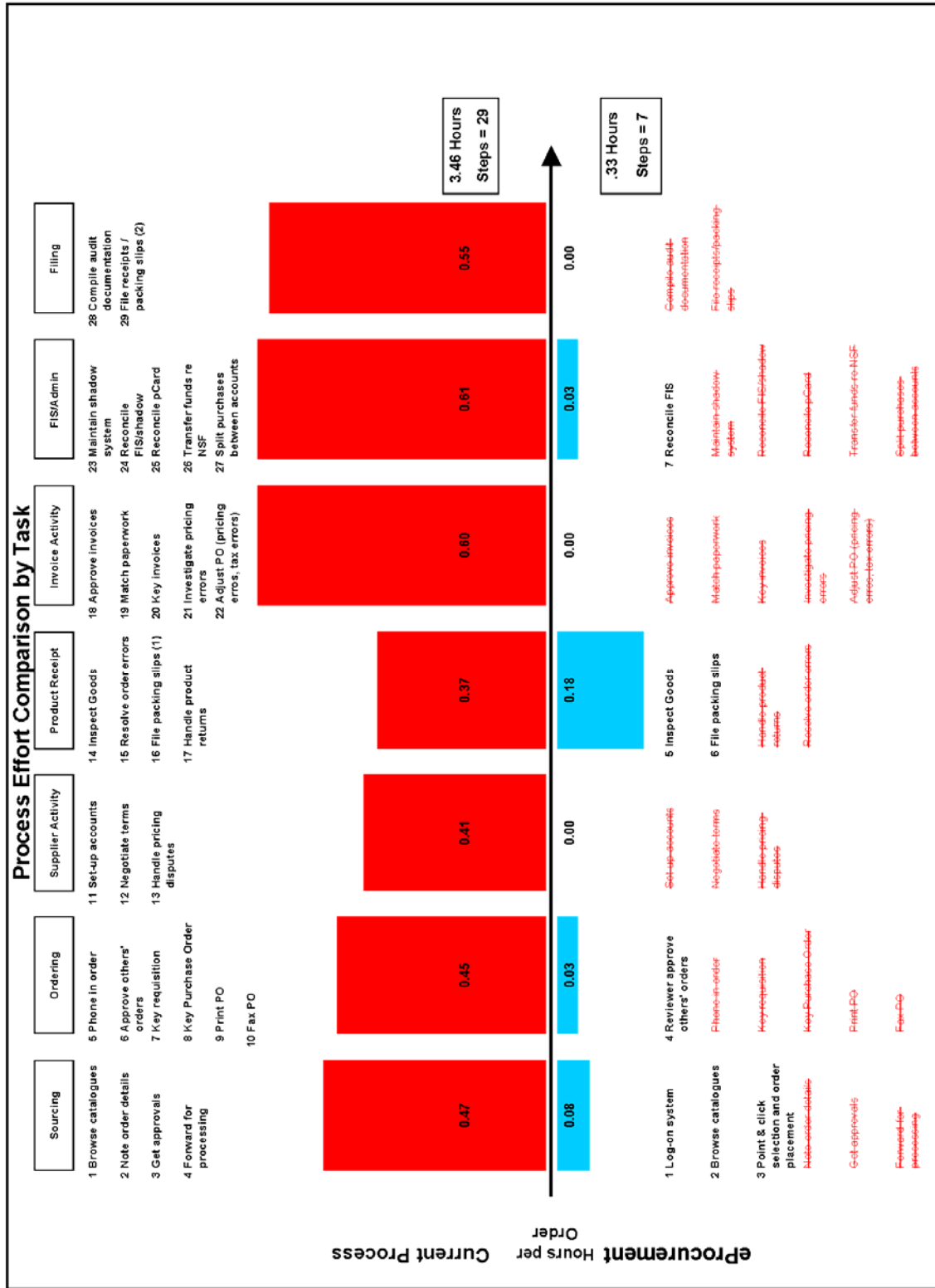


Figure 3. Activity Based Analysis comparing 'traditional' purchasing and Ushop





University of Toronto

OFFICE OF THE VICE-PRESIDENT, BUSINESS AFFAIRS - Financial Services Department

July 8, 2008

2008 Summit Award
Leadership in Public Procurement

Dear Sir:

I am very pleased to provide you a reference letter in support of the University of Toronto's submission for a 2008 Summit Award.

Our research into electronic procurement began in 1999 and reflected the vision and farsightedness of our procurement services staff. After considering many different process options, we selected SAP's enterprise buyer professional model, which offered tight integration to backend financial systems. We implemented it in 2002 and branded it as UShop in 2004.

UShop was the first pure business-to-business internet based eprocurement system in the higher education sector worldwide. The key differentiator between UShop and similar applications is its integration with our back-end financial system. Most eprocurement systems require a Pcard for payment, retaining all of the attendant limitations and attendant burden associated with Pcards. UShop is paperless and eliminates invoice processing in its entirety while improving control and retaining a clear audit trail.

Throughout the design, development and implementation of UShop, a key guiding philosophy was to ensure that the end product could be adapted to a variety of financial systems and models. This was to ensure that UShop could evolve to become a marketplace for other institutions in the education sector. In March of 2008, the Ontario government provided \$35 million funding to the Ontario Education Collaborative Marketplace to build an emarketplace influenced by the technology and business models of UShop to be used by universities, colleges and school boards across Ontario.

As chief financial officer, I am very pleased with the process and control improvements and with the hard dollar savings that UShop has introduced to the procurement process and with the innovative thinking that has led to these enhancements. I am also excited about the expansion potential. I would like to enthusiastically support this wonderful initiative as a candidate for the 2008 Summit Award.

Sincerely,

Sheila Brown
Chief Financial Officer