The Paperless Paper Trail
Project Abstract

Electronic Forms and Data Storage

In today’s world the paper trail is mountainous. Recycling has been the frontier for cleaning up what has already taken place. Sustainability is the new frontier for reducing, eliminating and rethinking ways to preserve the world’s resources for what has become a throw away world.

Electronic forms in the past has been a great way to get the word out, and to collect data, but the printing of endless piles of paper for data storage and entry can be endless! At BHCC we can reduce much of this waste through automated data storage through electronic forms.

INFOPath
Microsoft Office Professional Pro Suite 2007
• An electronic forms program included with the MSOPPSuite 2007 (program suite used at BHCC).
• Share Point server portal being added to Datatel (this will enable the form to be opened by users that do not have the program installed).
• An InfoPath Forms Service program (enables users to access forms through a forms service).
• Adaptable to most office forms used

NOTE: One drawback with InfoPath is that MS has not created a viewer/reader for InfoPath, but with the integration of a SharePoint Server or an InfoPath Forms Service, InfoPath can be opened by anyone with access to the form. All on campus computers would need to be configured to accept .xsn files.
The Paper Trail Clean Sweep
Project Significance

- Reduce or eliminate the need for printing documents, or forms in order to input/store data.
- Data storage directly from the form data with data query through the form or database.

Hundreds of reams of paper are printed, copied and stored every year. Electronic forms will reduce/eliminate the need to recycle and dispose of mountains of paper.

Human Resources & Other Departmental Uses
Project Plan

Human Resources:

- Workshops/Programs registration forms
  InfoPath has already been used for workshops and program registrations through the HR Office. This has worked out well with a few drawbacks of those not being able to open the form because of security settings on the individuals computer; unable to view through a browser unless on a Sharepoint server or has an older version of MS. The retrieval of email and phone numbers which are populated through the form gives you the ability to respond back through email or phone that they have signed up for a workshop or program.

- Resume/application online forms.
  This is probably the largest volume of paper used in the HR Office. We have saved numerous dollar utilizing online advertising and directing prospective applicants to our website to view the postings and are then instructed to forward their resume and transcripts to our online resume email address. The resume is then printed, put in a folder, named and numbered for later storage for 3 years. An acknowledgement letter and affirmative action form is generated and mailed to each applicant; once the position is certificated another letter is mailed to those applicants that didn’t meet the requirements. A copy of the qualified resumes is given to the search committee chairperson and he/she make a copy for each committee member. After the search is finalized forms are generated outlining the search findings and when the search is finalized and a contract is signed by the new employee a regret letter is generated and mailed to all qualified applicants. This amounts to not only the mountain of paper generated, but the dollars saved through postage if all applicants are responded through email.

- Annual contracts.
  Annual contract are sent out to all non tenured MCCC/MTA employees every year. Developing the contract in an InfoPath form can be emailed and digitally signed.
  *Routing process would need to structured for confidentially and retrieval purposes.
Uses Through other Offices or Agencies:

- **Compliant Mandated State Ethics forms: Summary and Online Training**
  The Mass State Ethics Commission has passed a bill that requires all state, municipal, and public employees to review and sign a Conflict of Interest Summary form and every two (2) years to complete the online training test. They are instructed to print a copy and bring to their Human Resources Office. This information needs to be stored for six (6) years. With 414 full time employees and hundreds of adjuncts and contractors, this mounts up to be a very big pile. The online test has been created in InfoPath 2007 and once all is in place, this information can be stored electronically without the paper.

- **Public Safety Parking Permit Annual distribution confirmation form**
  Parking permits are distributed every academic year. The form used in the past has been a word document and the information filled out, printed and sent to Public Safety that inputs the information on an excel spreadsheet and then input a number for the hanging tag. A test form was generated in InfoPath to be tested once the information can be stored manually through a SharePoint server/portal. The information from the form now would need to be exported into an excel database although the form information can be updated directly to the form emailed to Public Safety and at the end of the renewal period timeline, all the form information can be exported into an excel spreadsheet and maintained. Once the SharePoint is in place the information can be maintained and updated directly through the form and what information is updated through the Access or SQL database is directly updated on the form.

- **Payroll Department:**
  There are many forms that are used on a daily basis that could be transformed into electronic InfoPath forms and stored electronically i.e., PAF’s, timesheets, etc.

- **Business Office**
  The electronic forms can be used to maintain purchases (RFP’s), Request for Travel, Reimbursements, etc.

- **Data retrieval through surveys.**
  An InfoPath form could be used for workshop surveys and evaluations and would save on the use of printing and storing the information. This information can also be sent confidentially to only the intended receiver.

Numerous forms are used throughout the College that could be stored and queried electronically. It is evident that the list is much longer for so many offices that haven’t been noted. If the forms are created and the members are trained on maintenance and storage of the forms electronically will reduce the mountains of paper that is processed every day. *Forming a team to analyze the need for which daily*
use forms to convert into InfoPath electronic forms and when there is a need to be printed will be essential.

**Workshops & Trainings...**

It will be essential to promote and implement workshops and training in order to understand the needs and security for protecting the form and data to be stored and what information needs to be stored.

- Form and Train a Team to develop and deploy the electronic forms needed to be used throughout the College
- On the form types and uses
- To structure a form for the type of data storage/connection needed.
- Security level needs for information retrieved
- Maintenance of file storage through Access, SQL data storage or document library through a SharePoint Server

**Cost Saving Analysis**

- Utilizing resources already available at BHCC
- InfoPath 2007/2010 a Microsoft Office Professional Pro Suite application
- SharePoint Server portal being added to Datatel
- Form a team through the resources available through the TLiTC at BHCC faculty & staff
- IT Network and Technical Support
- Application Developer (Recruiting and interviewing for an Application Developer that may be able to assist in the development, utilization and trainings)

**Pro's**

- Less paper through database storage
- Online storage through email
- Online Data storage through Access or SQL
- Program part of Microsoft Office
- Multi Departmental Uses
- A need for electronic storage
- An Action Plan could be structured around the need for electronic processing.

**& Cons**

- SharePoint portal being developed
- Not all employees are able to fill out the form
- Unless on campus form displays as HTML
- Computers set with different security options cannot open form
- Not used or taught at BHCC by faculty

The addition of new technologies that support sustainability will remedy the solutions to the Cons as BHCC is brought up to the 21st century on Sustainability.
**Knowledge for Structuring, Maintaining and Securing the Forms and Data Retrieval:**

Access  
SQL  
Visual Basics Scripts  
Visual Basics Studio  
Java Scripts  
C++  
ASP.NET  
XML, XPath, XSLT  
SharePoint 2010 & InfoPath Form Services  
Document Library Storage  
Hosting Applications  
MSOPP Forms Application - InfoPath

**Resources Needed:**

Training the Trainer Training  
Workshops  
Applications that support InfoPath

**Budget:**

Most of the budget would be issuing stipends for the implementation, structuring and assessing the need for each office and training the users. InfoPath Forms Service program is part of SharePoint Server 2010 already being added.

**Stipends: $500-$1,500**