

COMMERCE 436

UBC SEEDS Paper Reduction Initiative

Final Report

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Prepared for:

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Dear Ms. Wakefield:

We would like to thank you for the opportunity to work with the UBC Sustainability Office to understand an internal business process within the organization. Through the interaction with you and your colleagues, we have a better understanding of the steps within the product requisition process and have identified modifications to this process that may be more aligned with the organizational goals. Enclosed within this report are both the analysis of your current work systems and practices, and the details of our recommended solution.

You will find that the analysis and recommendations are based upon the current technology and software already in place within the office (i.e. Laserfiche), therefore the result should be taken as a case study for a department which already has an Electronic Records Management System in place.

It has been a pleasure working with you and understanding the goals that UBC SEEDS is trying to accomplish here at UBC. If you have any questions with the contents of this document, please feel free to email us for clarifications.

Sincerely,

Min Kai Sun (Kevin)
Kwan Ting Lee (Alex)
Christopher Dennis

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Executive Summary

UBC Sustainability Office was established to help create a sustainable environment by putting sustainability into action through projects initiated by The University of British Columbia students and staff. The project's aim is to tackle an important sustainability issue, which is paper reduction.

In this report, we examined their product requisition business process within the Purchasing Unit which is part of Supply Management Department at The University of British Columbia. Using this process as a case study, we conducted a document-driven analysis to identify steps in the process where physical documents are created, where paper reduction initiatives can be applied and the discounts because of this reduction; in terms of money, environment, and time. In this report we will give the background, objectives, and scope of the project. We will also present an overview and analysis of the current system as it is now. The report will also describe some of the alternatives the purchasing unit can take to reduce the amount of paper used within the process. Lastly, we will provide some recommendations as to which alternative should be taken, and the steps required to turn this recommendation into a reality.

Purpose of Document

The project report will:

- Define objectives and scope of the project, the main activities and information sources and the specific limitations
- Identify the relevant business process, existing IT technologies/applications and provide detailed analysis
- Provide the alternatives considered and our recommendation for implementation

Ultimately, this document is meant to provide useful guidance for SEEDS to follow through with their paper reduction initiative.

Background, Objective and Scope

The purposed of the project is to understand the policies at UBC that govern paper retention, and how they affect the internal business processes of the Supply Management department at UBC. This project intends to analyze the documents created via the product requisition process and what changes can be done to reduce the number of physical documents generated.

As of now, certain processes performed at the Supply Management department requires massive amount of paper documents to be produced, and then subsequently stored off campus when the storage capacity within the building is reached. Many of these documents are capable of being generated and stored electronically, however physical documents are printed and stored for the purposes of internal audits and legal issues should they arise.

The information gathered from this project will allow the business unit to understand what can be stored electronically and what must be stored physically. With less physical documents required for storage, less trips to the off campus storage site will be required, thus reducing storage cost and pollution via CO₂ emission.

Using this business unit as a case study, the main objective is to reduce the overall paper usage on campus and implement an electronic storage solution for other departments. Switching from paper to on-line communications for most internal operations and reducing the amount of pollution produced by UBC will help the University achieve its commitment of moving towards a more sustainable future.

Main Project Activities

Table 1 - Data collection on work systems and the related paper creation process

Purpose:	To collect data on the product requisition process and the amount and type of paper produced.
Outcome:	To understand the purpose of the created documents via the life cycle of these documents. This will give us an insight to the "as is" work system and processes.
Deliverable:	Process model of the product requisition process and the documents created in this process.
Responsibility:	Interview with the Supply Management Manager to understand the requirements and intentions of the project. The interview will also give us a walkthrough of the processes which created these documents.

Table 2 - Analyze the policies on record storage and record retention

Purpose:	To study the university policies currently in place for record storage and retention
Outcome:	To understand and clarify what the policies intents are and what alternatives can be used instead of paper storage while being compliant to the policy
Deliverable:	Summary of findings
Responsibility:	<ul style="list-style-type: none"> • Contact the Legal Council representative to understand which records are required to be stored physically and which records can be stored electronically • Contact the Internal Audit representative to understand which records are required to be stored physically and which records can be stored electronically • Contact archivist of the University of British Columbia to understand which records are required to be stored physically and which records can be stored electronically

Table 3 - Research the role of Iron Mountain in the Current Business Process

Purpose:	Research into Iron Mountain, the storage solution the business process currently employs.
Outcome:	To understand the role of Iron Mountain plays in the current product requisition process, as well as the costs associated with storing records with them.
Deliverables:	Summary of findings, cost analysis.
Responsibility:	<ul style="list-style-type: none"> • Meeting with the Supply Manager to identify activities where documents are created in the product requisition process, and when these documents are transported to Iron Mountain • Understand the contract UBC has with Iron Mountain to determine the cost associated with storing records with them

Table 4 - Research on Laserfiche and How It Can Be used in the Business Process

Purpose:	Research into a Records Management System known as Laserfiche.
Outcome:	An understanding of the functions and features of Laserfiche, and the role it could play if it becomes a part of the requisition process.
Deliverable:	Summary of findings, including a cost-benefit analysis if Laserfiche was employed.
Responsibility:	<ul style="list-style-type: none"> • Meet with the Supply Manager to understand how Laserfiche is currently used in the process • Research into the capabilities of Laserfiche • Research into whether or not Laserfiche satisfies the policies and regulations regarding record retention

Table 5 - Exploration of Alternatives and Recommendations

Purpose:	To examine the possible alternatives to the current business process which can lead to a reduction of the total amount of documents generated by this process?
Outcome:	An understanding of what alternatives are there and which of these are feasible for the business unit.
Deliverable:	A list of possible alternatives and our recommendation for implementation. The recommended solution will include a cost-benefit analysis for this solution.
Responsibility:	<ul style="list-style-type: none"> • Identify which records can be stored electronically • Identify parts of the business process that can be streamlined and thus reduce the amount of paper required • Understand how the current electronic storage technology is being utilized and how it may be improved if possible

Information Sources

The analysis produced in this project is composed of meetings and discussions with a combination of several sources:

- Supply Management Manager- we communicate closely with the Supply Manager to find out their needs, and to determine the expected outcome from this project. From discussions with our customer, we are able to determine the existing practices of the requisition process and to agree upon a feasible project scope.
- UBC Archivist - we communicate with the archivist to understand the policies and the legal implications of records produced and stored on UBC.
- Records Management System Provider - we obtain information from the vendor who provides the current storage system (Iron Mountain) and a potential provider for a future solution (Laserfiche).

Special Considerations

Our customers, the purchasing unit of Supply Management, already has a system in place for electronic filing. However, the system's full functionality is not used and only a few individuals understand how to operate it. Therefore, it is not necessary to investigate alternative systems that the purchasing unit should use, but rather to find out whether the system fulfills the requirements set out by UBC and Canadian regulations in regards to electronic records management system.

The Organizational Environment

1. The Organization

UBC SEEDS (Social, Ecological, Economic Development Studies) program was first launched in 2001 to bring students, staff, and faculty together and attempt to address the University's sustainability goals. It involves finding project opportunities for staffs, faculty members, and students. The main objectives in SEEDS projects is to reduce consumption of and conserve of resources such as paper, electricity, water, gas, and many others. The amount of resources saved and the number of projects initiated over the years has proven the program to be successful in moving UBC towards a greener future.

2. The Environment

SEEDS is a non-profit program operates under the UBC Sustainability Office. Its mission is to reduce the resources usage within UBC. These resources include energy, water, and paper, among other resources which can help increase the sustainability at UBC. In return, the reduced usage for these resources can help UBC reduce the costs of providing these services. The customers for this project are the staffs, faculty members, students, and everybody who live in UBC. Since it is non-profit and limited to UBC, there are no competitors.

3. The Functional Area under Study

This project is case study involving the product requisition process. The purchasing unit in the UBC Supply Management department typically receives 240 purchase order (paper forms) as well as 1000 customs paperwork per month. These purchase orders come from UBC staff who wants to purchase products, and all of these requests go through our customer. The process begins with a physical purchase order form, and ends when the product arrives at UBC. When it arrives it is accompanied by a courier waybill and may involve customs paperwork if the item

was purchased from across the border. In between there are many other documents involved in the process, and more details will be provided in the following section.

In brief, our customer handles all the purchasing details and paperwork on behalf of the requester and is responsible for filing all the documents relevant for each purchase. These documents are kept for the purpose of leaving an auditing trail and it follows the guidelines for records retention set forth by the Legal Council at UBC.

By understanding which documents are involved in this process, we approached the problem by using a document-driven analysis; in that we follow the life cycle of the documents that are generated in the process, and followed it until it is shipped off for storage off-campus. By focusing on the documents, we are able to ask specific questions about each of the documents, such as if a particular document is needed and if it is needed to be kept physically.

The aim of this project is to reduce the amount of paper generated by reducing the number of forms and documents printed during the product requisition process. By doing so, it will help UBC in moving towards its sustainability goal. Furthermore, this reduction will reduce the cost for physical storage in terms of storage space and money required. If we are able to provide a solution where we can use electronic copies instead of physical copies of the said documents, a positive side-effect is that file storing and retrieving will be instantaneous.

We will be working with representatives from UBC Archival, UBC Internal Audit, and UBC Legal Counsel to determine if there are any legal and/or UBC regulations indicating that the documents produced in the product requisition process is required to be stored as physical copies.

Description of the Current Process and the System

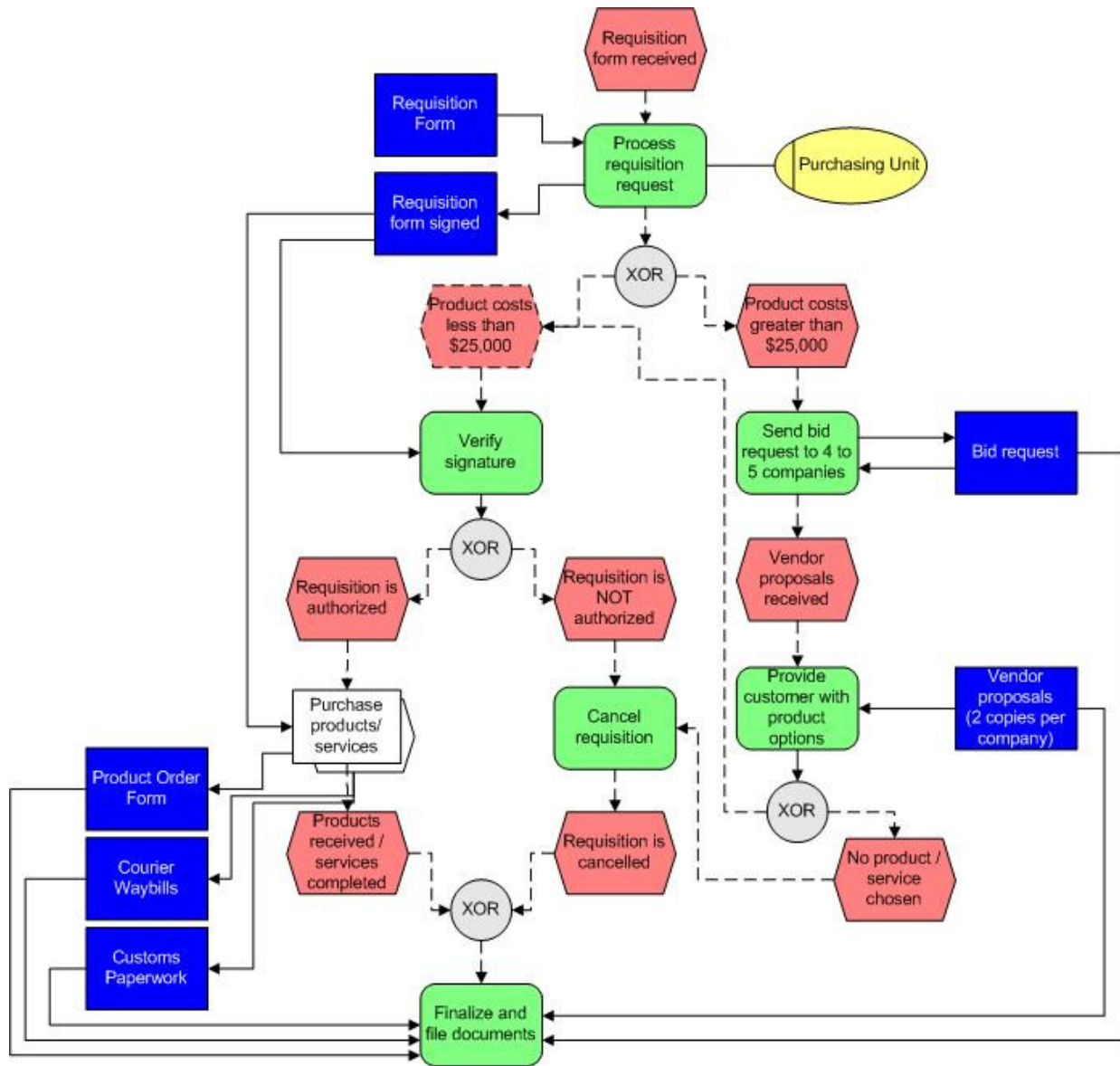
1. The Requisition Process

For this project, we focused our attention to analyzing the customer's requisition process as this was the process that used the most sheets of paper. This process is performed by our customers to handle the purchase of products and services for the school. The intention of this study was to identify whether documents produced and stored during the requisition process are necessary by law, by UBC policy, or simply stored just because they have always been stored.

The business process starts with a UBC staff emailing the purchasing unit requesting to purchase an item via a requisition form. Depending if the product costs more or less than \$25,000, there are different processes to satisfy the request. If it costs greater than \$25,000 then our customers, the purchase unit, will send bid requests to some potential vendors. For interested vendors, they will submit a bid request back to the purchase unit for evaluation. Our customer will pick out the best product for the value and forward the suggestion to the requestor. The requisition form is required to be signed by the requestor's supervisor before the requisition can take place, and if requisition is authorized, the purchasing unit will go ahead and submit product order forms to buy the product. When the product is delivered to the requestor, courier waybills are generated by the courier company and customs paperwork is generated by the Canadian Border Service Agency. After the product has been delivered, all the documents produced during the process will be archived. Eventually, because storage space is limited onsite at UBC, documents are paid to be stored at Iron Mountain, a firm specialized in archiving business documents.

Through meetings with our customer, we have learnt that they execute the requisition process approximately 240 times a month. This translates into a minimum of 240 purchase order forms

produced. Our customers also indicated that they handle on average 1,000 customs paperwork per month. To understand how the documents are created, we modeled the requisition process using three types of diagrams; Event-Driven Process Chain (EPC), Business Process Modeling Notation (BPMN), and the R2M model. The diagram below is the EPC diagram, the other diagrams can be found in the appendix.



In the diagram above, using event procedure chains, we show our understanding of our customer's requisition process. Each blue box indicates one or more copy of the documents either produced or used during that process.

During each execution, they store a minimum of four documents. The minimum four documents are:

- **One copy of the requisition form with authorized signature** - these documents are the original documents produced by general staff of UBC, the people who wish to make a product purchase. The forms indicate the type of product they want, the estimated cost, and require a signature by the staff's superior to provide proof of authorization.
- **One (or more) copy of the PO, product order form** - these are documents produced and sent by our customers to the vendors indicating which products they are ordering, how many, and other information such as delivery address and contact person.
- **One copy of the courier waybills** - these are documents produced by the courier company that serve to indicate (when signed) that the product arrived at the address indicated in the waybill.
- **One (or more) copy of the customs paperwork** - these are documents produced by the Government of Canada, containing information on the taxes charged for importing these products.

In addition to these documents, the following documents may be produced:

- **Four or five copies of the bid request** - these are documents sent to (on average) four or five companies requesting for a quote on a certain type of product specified. If the product is not specified, the vendors would provide descriptions of suggest products.
- **Two copies of each of the four or five vendor proposals** - these are documents produced by the vendor which state the product they suggest UBC buys, and a quote on the price for the product. Two copies are received for each vendor proposal, because one is stored by the purchasing unit, and the other is forwarded to the original product requester. Note that along with these proposals, the vendor might also send brochures or other advertising material.

In the existing system, all the documents produced are stored and archived for the current year + six. For files that are ready to be archived, these documents are placed into boxes and they are picked up by a storage company called Iron Mountain. Whenever files are required, a request will be made to Iron Mountain and the files will typically arrive within the next business day (48 hours).

2. Work Systems Snapshot

Aside from diagramming the product requisition process, we understand the importance of viewing the problem from a holistic perspective, in that the process requires participants and/or machines performing work using information, technology, and other resources to produce products and/or services for internal or external customers. We decided to use a Work Systems Snapshot to represent this and help us understand the various aspects that come into play for the product requisition process.

Customers		Product and Services			
<ul style="list-style-type: none"> • Product requestor • Product purchaser 		<ul style="list-style-type: none"> • Accept delivered products • Bid requests • Approval or denial of purchase requests 			
Work Practices (Major Activities or processes)					
<ul style="list-style-type: none"> • Once a requisition is received, the requisition is processed by the purchasing unit • If the product costs more than \$25,000, bid requests will be sent to vendors to determine the lowest cost. Vendors send back a proposal and the product is chosen. The requestor is then satisfied. • If the product costs less than \$25,000 then there is no bid request needed. • The signature of the requestor's supervisor is required before the requisition can be approved, then the product is ordered • Courier waybills are generated by courier companies and customs paperwork generated by border service agency • After the requisition is complete, all documents are filed • Documents may be sent to Iron Mountain for long-term storage 					
Participants		Information		technologies	
<ul style="list-style-type: none"> • Product purchaser • Product vendor 		<ul style="list-style-type: none"> • Bid requests • Courier way bills 		<ul style="list-style-type: none"> • Telephone • Internet 	

<ul style="list-style-type: none"> • Courier • Product requestor 	<ul style="list-style-type: none"> • Purchase request form • Purchase order form • Product invoices 	<ul style="list-style-type: none"> • Product request model spreadsheet
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3. System for Archiving Documents

Other than the documents produced throughout procurement (the requisition process), the supply management office also has two other operations that produce a lot of paper: logistics and travel programs. Our customers stated that the three areas of their operations produce similar amount of paper that needs to be archived. Each record or batch of records will be filed in Iron Mountain boxes that hold upwards of 3,000 sheets of paper. The amount of paper that each box can hold varies depending on if they are put in binders or other folders because they may occupy additional space. Each box is marked with multiple barcodes which are used to uniquely identify its contents, and the barcode can be looked up in the supply management office's paper logbook which consists of descriptions for the contents within the boxes.

Currently, 500 boxes of records are stored at Iron Mountain by the UBC Supply Management team. They intend to archive 80 additional boxes of records at Iron Mountain shortly, and estimate that they will be adding 80 additional boxes every year. Our customer had also informed us that during the last fiscal year (April 1, 2008 to March 31, 2009), 17 of the 500 boxes had to be retrieved on 17 occasions; meaning that no two boxes were requested at the same time. None of the documents were requested as an urgent or rushed delivery; therefore the cheapest delivery cost will be used to calculate the cost of utilizing this system.

By looking into the contract agreement between UBC and Iron Mountain, it cost UBC Supply Management around \$3,000 to store 500 boxes for a year, and an additional \$510 to retrieve and re-archive the 17 boxes. To store the additional 80 boxes per year, storage costs approximately

\$480 and transportation to the Iron Mountain location cost \$134. Taken together, these costs sum up to approximately \$4,200 per year.

4. Digital Records Management System

The Supply Management office had previously investigated the possibilities of going paperless in their processes. In one of their attempts, they had identified a records management system called Laserfiche which can store scanned documents and other electronic documents in a central repository.

The product was chosen and purchased after they have determined that it provided best value for their team. We were told that this record management system is used or maintained by one office member for approximately 50% of their working hours. When the system was installed, it had cost the customers a one-time fee of \$5,000 and is now a server maintained by UBC IT. The office had bought five floating licenses so that five users can use the system concurrently. The department consists of 12 people, and we were informed that 5 licenses for the team of 12 people are sufficient for day-to-day activities. Currently, Laserfiche Version 7 is installed and accessible by all the work stations in the office and we are told that ongoing upgrades will be free and optional training for staff is also provided.

Problems with the Current Process

The main problems of the current process are:

- **Misinterpretation of policies** (storing all the documents)
- **Lack of management, leadership, and commitment to take initiatives** (nobody in charge)
- **Resistance to change** (digital record management system)

1. Storing all the documents

One of the major reasons why the process has not gone paperless in the digital era is because of the misinterpretation of policies set forth by UBC. According to UBC Policy 117, 'UBC Policy on Records Retention and Disposition', the policy described that the University's corporate records needs to

- Be managed in an effective and efficient manner
- Ensure that no corporate records are destroyed or disposed of unless authorized by an approved retention schedule or with the approval of the University Records Disposition Committee
- Ensure that any physical destruction carried out in accordance with the records retention schedule is appropriate for the type of record involved

Based on this description, there is no mentioning of which records need to be kept, or if so, how long.

In our attempt to further understand what the policy entails, we contacted the UBC Legal Council and the University's Access to Information and Privacy Officer, and they pointed us to the UBC Library Archivist, Alan Doyle, and he provided us with information and insights about records management. When we showed him the EPC diagram of the current process discussed previously, he explained that most documents does not need to be stored. He said that financial

documents must be stored for the current year + six (government bylaw), information that includes employment acts must be stored for two years, and records with personal information must be kept for one year only. Other documents may be kept for an arbitrary amount of time, depending on the departments' needs.

With an ambiguous stated policy, the issue here is that our customers were unclear of the requirements for archiving documents. To play safe, all the documents produced are archived at Iron Mountain, regardless if they are duplicates or not, useful or not. We took a look at the documents produced during the product requisition process and identified some documents which can be discarded. An example of such document is the courier waybill. Other than proving that the product has been delivered to the Supply Management office, no additional information is provided by this document. Whether the product was delivered to the original staff who initiated the product requisition process is one of the information that the courier waybill cannot offer. The waybills can therefore be discarded. More discussion about documents that can be discarded will follow in the alternatives section.

2. Nobody in Charge

Without anyone taking the initiative to improve the process, the lack of management and lack of leadership had led the current requisition process to be outdated. Despite being in the digital era where all of the documents can readily be received via email, majority the documents are still being printed because the staff believe that the process requires them to do so. This type of initiative requires management support and commitment to transform into a better process. Nobody from administration wants to be held responsible for looking into the legal requirements or audit requirements and making recommendations that can potentially be challenged as incorrect or similar reasons. Even if there was effort invested to looking at how to make the

process better, there might not be any further action taken because the improvement process may not be their top priority, and may not be at the forefront of their attention. Such activity is not in their job description and they most likely do not want to take the risk of being at fault if the project fails.

3. Digital Record Management System

If the paper system had been functioning properly but now we want to transform into a paperless system, chances are that many problems and issues may arise. Likewise, if we change the system that the staffs have been working with for many years, it will be difficult for them to adapt.

The effects of RMS (Records Management System) may be a combination of the following:

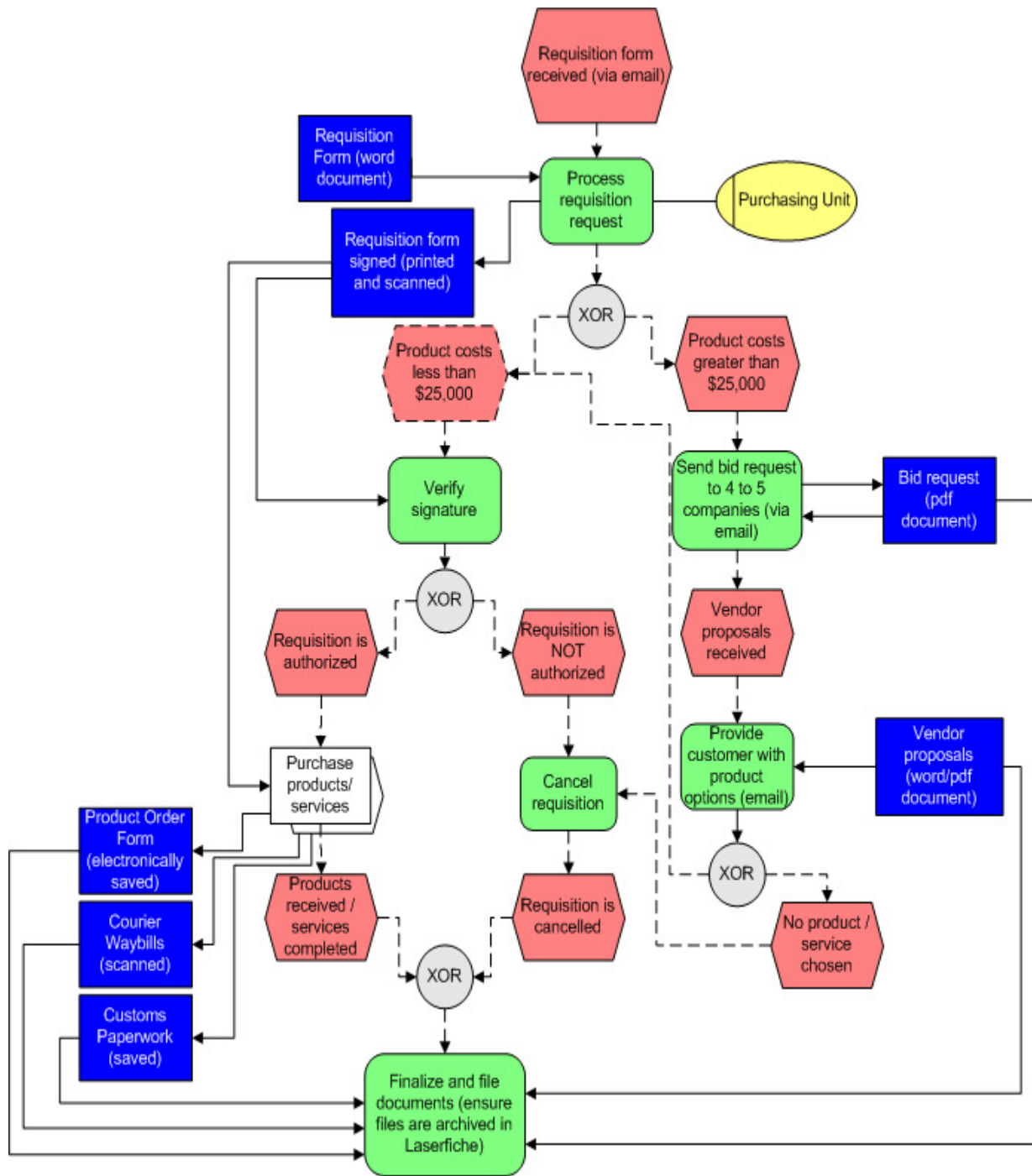
- **Additional training** - the reason the digital record management system (RMS) that is in place (Laserfiche) is not used primarily is because some staff do not know exactly how to use the features and will have to be re-trained. Regardless of on- or off-the-job training, staff will require time to understand and adapt to Laserfiche. This time might not be available if the business operations are critical. In our case, because the requisition process is not mission critical, taking time out for training is possible.
- **Staff hesitation** - if the system works now, staff may become hesitant to adapt to the new system because they believe the existing system works and works well enough and neglect to acknowledge the benefits of the newer system. Because not everyone is open to changes (especially if they have been working with the system for an extended period of time), forcing them to use Laserfiche may cause more trouble than ones it is trying to solve
- **Job insecurity** - if the RMS system is capable of replacing the staff member's tasks, then there is a risk that the staff member will feel job insecurity. If they feel this insecurity, their productivity and quality of work may decrease as they start thinking the new system can do it all. This essentially reduces extra value you expect from using Laserfiche.

Alternatives Considered

What we would like to do is to change the current requisition process into a process where less paper is generated. In order to do this we have considered several alternatives that can be achieved by our customer.

1. Integrate Laserfiche software into the current requisition process

The physical documents produced by the requisition process are replaced by electronic copies which are stored and managed by Laserfiche. With this new system we can reduce the number of hard copy documents that is usually generated when a requisition takes place. From our understanding, other participants of the requisition process are capable of delivering documents electronically as well (such as bid documents and courier waybills), thereby allowing these documents to be stored electronically without having to store a physical copy. Based on these, we can reduce the number of paper generated by the requisition process down to one document. This document is the requisition form with signatures from the item requestor and the purchasing unit representative because these signatures certify that the item requisition has been authorized. All of these electronic documents are then stored and filed within Laserfiche. This is beneficial for the purchasing unit because if some documents needs to be accessed, these documents are easily accessible without having to wait for boxes from Iron Mountain to arrive with the requested document.



Advantages

- Relatively cheap to utilize since the UBC Supply Management Department currently holds five licenses for Laserfiche.
- Less time to retrieve old documents.
- Less paper produced.

- In alignment with the goals of the sustainability office.

Disadvantages

- Staffs need to be trained to use Laserfiche.
- Staffs need time to adapt to new system.

2. Purchase Commercial RMS Software

Look for off the shelf record management software that has been used by other institutions and which has been demonstrated to be successful in reducing papers consumption of that particular institution.

Advantages

- System has been proven to be effective in reducing paper consumption.

Disadvantages

- Need to spend money to purchase the license
- Staffs need to be trained to use the new system.
- Need to integrate the system in such a way that it will work with the current system.

3. Modify the Current Requisition Process

Make modifications to the current requisition process so that it will not require the purchasing unit to produce as much paper as the current system. This modification will require all staffs to adapt to the new system.

Advantages

- No money spent of obtaining new software.

Disadvantages

- The amount of paper reduced is insignificant if we compare it with the work done in changing to the new procedure.

4. Let Other Participants Store the Documents

Lastly, as mentioned earlier, another possibility is to cut the storage cost of some of these documents by simply not storing them. This is achievable because some of the other participants (the product vendor and courier services) usually store the documents used for a particular instance of the requisition process, therefore the act of storing them again by UBC is redundant. By examining the requisition process we have identified that the following documents can be removed. A note to make here is that in this alternative, we only consider a wasteful action if the sustainability office needs to print physical documents themselves, therefore if the vendors only means of delivering the information is through physical documents, then this is not considered wasteful by this definition. However, if the vendors are capable of sending the information electronically, the purchasing unit will request the information to be sent in this format.

- **Courier way bills** - Provides information of the sender, receiver, date sent, and date arrived, sender address and receiver address. This isn't necessarily useful for our customer's business process can be requested from the vendor if necessary. Therefore this document can either be stored on the vendor side and request it when necessary, or ask the vendor to send an electronic copy instead and stored it in Laserfiche.
- **Customs paperwork** - These can be sent electronically, therefore we can make this request and store the documents in Laserfiche.
- **Bid request and vendor proposals** - These documents are generated on the computer first and then printed out. Therefore, they can be digitally sent to and received from the vendors instead.
- **Product order forms** - Most product order forms are filled out online and is not required to be printed, therefore we only need to keep the email receipt in the record management system.

Advantages

- Without printing these documents, no cost for archiving

- Documents sent to us on paper can be scanned and discarded, no cost for archiving
- Reduce paper usage by requesting vendors to stop printing the documents and delivering them electronically
- If only the original requisition forms are stored as paper and other forms in Laserfiche, we expect that 3,000 requisition forms can be stored as a box that would be enough for a year (240 requisitions per month as stated in page 11). To store just this one box at Iron Mountain, it would cost \$6 for the storage, and \$15 for the box to be shipped to Iron Mountain. This means that to store all the documents, it would only cost \$21 dollars to store it at Iron Mountain in contrast to the \$4,200 required in the current process. We do not consider the additional fees for Laserfiche because those are fixed fees and are not changed if we have more documents or fewer documents.

Disadvantages

- Retrieving these documents will require an extra step. For example, if we want to figure out when exactly the product was delivered by the courier, we will have to call up the courier company
- Documents can be lost and there is no guarantee that the courier way bills will still be kept after 6+1 years for example

Feasible Alternatives

In order to reduce the paper consumption, a new system will be required to replace the current one. Changing the system in different departments at UBC is no small feat. Different departments have different system and policies. Even though the new system will reduce paper consumption, which is in line with UBC's commitment in supporting sustainability issues, the person in charge with each department might not see it this way. Some of them may have other interests which may come into conflict with the sustainability goals we are trying to accomplish with the new system.

We propose two feasible alternatives that can be taken to solve this issue.

1. Refine Policy 117 then Form a Committee to Enforce the Policy

The solution here is refine Policy 117 to clearly indicate that an electronic records management system is suitable for records retention, and to form a committee that can influence departments in UBC to enforce this policy. This committee must be consists of members who hold influential power in UBC. According to our interview with Alan Doyle, the University Archivist, we need at least 4 people in the committee.

- An influential high executive such as Stephen Toope, the president of UBC
- Someone important in IT department such as the Chief Executive of IT Department
- Christina Ulveteg who is the University's Access to Information and Privacy Officer
- Alan Doyle himself to explain the archiving procedures for the new system

With a clear understanding of the policy and an influential committee enforcing it, departments should be able to comply and initiate the system change regardless of what they think about it.

2. Step-by-Step System Change

The solution here is to implement the new system in one department as a prototype / pilot project, and see whether if the outcome is favorable. If the outcome of implementing a paperless system is favorable, then this can serve as convincing evidence that it can be applied to other departments as well.

The approach here is to implement the system change in a business process (such as the product requisition process) within a department. If it is successful then we can go ahead and implement it into another process in the same department, while making sure that this new process can utilize the same electronic records management system without any conflict. This step by step transformation will continue on until the whole department is capable of using this system with no major issues. From here, we can take the same approach in other departments, by showing them the benefits and increase in cost savings realized by the pilot department.

Recommendations

- We recommend integrating Laserfiche into the current requisition process because it will significantly reduce the amount of papers used in this process while it is economically feasible since UBC Supply Management Department already has the system in place but not utilized
- We recommend Laserfiche training to be mandatory for all staffs in the department, so that staff can familiarize themselves with the system before using it in the work place
- We recommend using the step-by-step method since forming an influential committee is hard unless we have a strong case. While some departments might be resistance to the change, with enough evidences of success from pilot departments, a strong case may be presented and thus initiate the formation of an influential committee to push the change

Appendices

[COMM436] SEEDS Project: Paper reduction initiative

17 messages

(Alex) Kwan Ting Lee <stratrix@gmail.com>

Mon, Feb 23, 2009 at 12:38 PM

To: kimberley.beck@ubc.ca

Cc: "Dennis, Chris" <panthera2003@yahoo.com>, Kevin Sun <kevinsun@shaw.ca>

Hi Ms. Beck,

My team and I are doing a project on paper reduction as part of the SEEDS initiative for our Commerce 436 class project cooperating with the UBC Sustainability office.

Our main objective is to identify which documents produced/used in the product requisition process can be kept as electronic copies to reduce the use of paper.

We are working with Vicki Wakefield and she gave us your contact as a reference for the legal counsel. We have some questions about how long documents need to be held and which documents must be retained as paper copy for legal reasons, so my team and I was wondering if you could schedule some time to meet with us later this week or early next week?

Thanks,
Alex Lee

(Alex) Kwan Ting Lee <stratrix@gmail.com>

Mon, Feb 23, 2009 at 12:38 PM

To: kimberley.beck@ubc.ca

Cc: "Dennis, Chris" <panthera2003@yahoo.com>, Kevin Sun <kevinsun@shaw.ca>

[Quoted text hidden]

Beck, Kimberley <kimbeck@exchange.ubc.ca>

Mon, Feb 23, 2009 at 12:40 PM

To: "(Alex) Kwan Ting Lee" <stratrix@gmail.com>

Alex:

Your question is better answered by my colleague, Christina Ulveteg, who is the University's Access to Information and Privacy Officer. I am cc'ing her on this reply to put the two of you in touch.

Regards,
Kimberley

From: (Alex) Kwan Ting Lee [mailto:stratrix@gmail.com]

Sent: Monday, February 23, 2009 11:38 AM

To: Beck, Kimberley

Cc: Dennis, Chris; Kevin Sun

Subject: [COMM436] SEEDS Project: Paper reduction initiative
[Quoted text hidden]

Beck, Kimberley <kimbeck@exchange.ubc.ca>
To: "(Alex) Kwan Ting Lee" <stratrix@gmail.com>
Cc: christina.ulveteg@ubc.ca

Mon, Feb 23, 2009 at 12:41 PM

Forgot to cc it before sending: my apologies, here it is.

From: (Alex) Kwan Ting Lee [mailto:stratrix@gmail.com]
Sent: Monday, February 23, 2009 11:38 AM
To: Beck, Kimberley
Cc: Dennis, Chris; Kevin Sun
Subject: [COMM436] SEEDS Project: Paper reduction initiative

Hi Ms. Beck,
[Quoted text hidden]

(Alex) Kwan Ting Lee <stratrix@gmail.com>
To: Kevin Sun <kevinsun@shaw.ca>, "Dennis, Chris" <panthera2003@yahoo.com>
Cc: christina.ulveteg@ubc.ca, "kimberley.beck" <kimberley.beck@ubc.ca>

Mon, Feb 23, 2009 at 12:43 PM

Thank you.

Also adding teammates back into the loop.

- Alex
[Quoted text hidden]
--

(Alex) Kwan Ting Lee
<http://www.alexleekt.com>

Ulveteg, Christina <culveteg@exchange.ubc.ca>
To: "(Alex) Kwan Ting Lee" <stratrix@gmail.com>, Kevin Sun <kevinsun@shaw.ca>, "Dennis, Chris" <panthera2003@yahoo.com>
Cc: Alan Doyle <aldoyle@interchange.ubc.ca>

Mon, Feb 23, 2009 at 12:46 PM

Hi Alex,

I would recommend that you contact the University Records Manager, Alan Doyle, regarding your records questions.

Alan Doyle can be contacted by e-mail at aldoyle@interchange.ubc.ca. I have also copied him on this e-mail.

Should you have any questions, please contact me.

Sincerely,
Christina

Christina Ulveteg
Access & Privacy Manager
Office of the University Counsel
The University of British Columbia
T: 604-822-2451
F: 604-822-8731

Figure 1 - Email Transcript showing Difficulty getting information sources

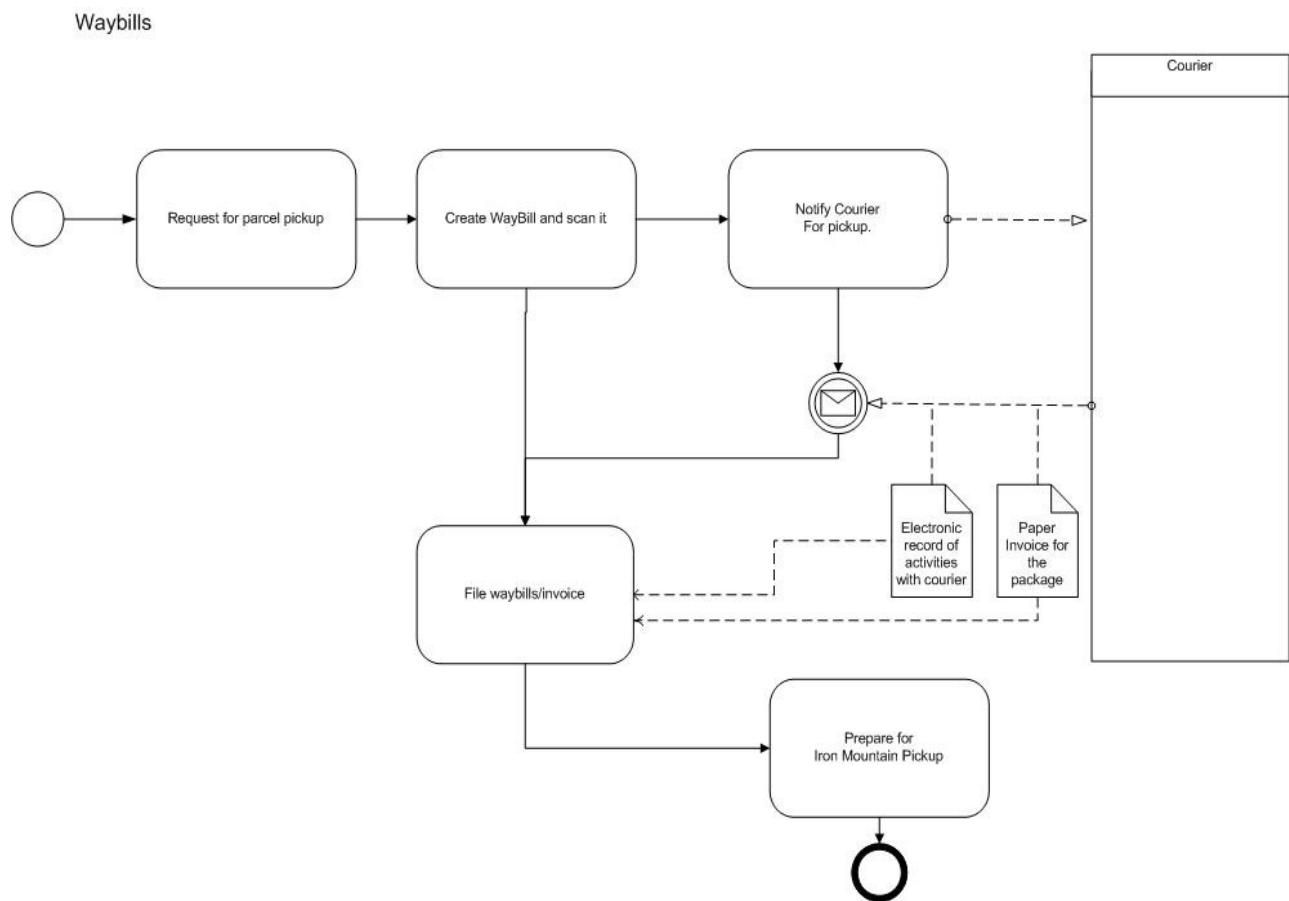


Figure 2 – Illustration of Waybill document process in BPMN

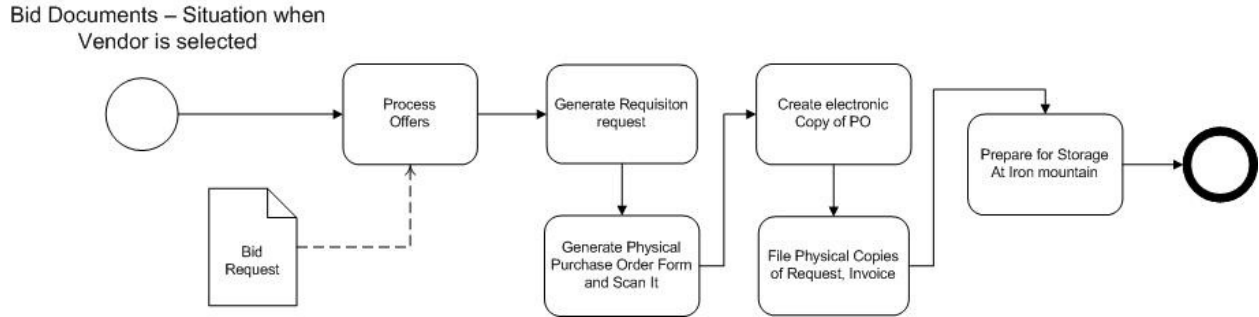


Figure 3 – Illustration a bid document process in BPMN

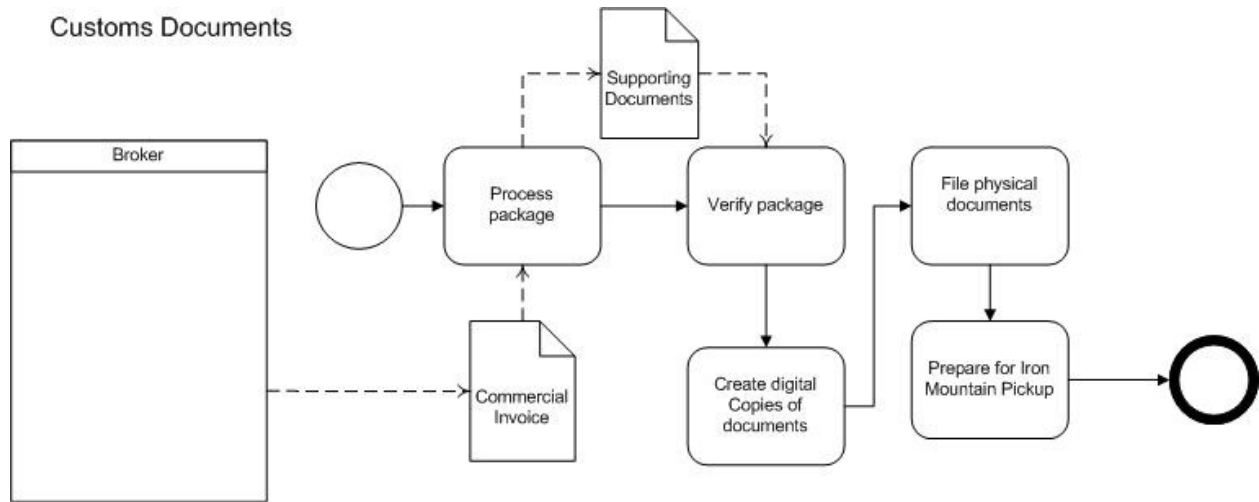


Figure 4 – Illustration Customs document process in BPMN

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