



TEAM MEMBERS:

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EXECUTIVE SUMMARY

Procurement processes play such a crucial role at all levels of government: federal, state, and local. State of Ohio agencies are faced with mastering the process on a day-to-day basis while being trusted to be economical with tax payer money. Acquiring goods/services is the backbone of how government functions and maintains processes, as well as improving productivity. In procurement, there are numerous steps, and even more employees involved; from realizing a need, to ultimately receiving the product. In order for the State of Ohio to deliver first-rate service to its constituents, ensuring the procurement process runs smoothly is a top priority.

When thinking about the layers incorporated in the procurement process, some the key issues can be overlooked. A generous portion of time working on improving the process deals with high level process mapping in high level positions or teams. Whether that be contracts, legal requirements, MBE/EDGE participation, or varying levels of purchases (IT/supplies/etc.), they are all intricate parts of the entire process. Per the interactive budget on the Office of Budget and Management (OBM) website, over 230 million dollars were spent on Supplies, Materials, and Minor Expenses in fiscal year 2017.¹ What often times gets overlooked is the very beginning of the procurement process. The business need is realized, BUT figuring out how to get a product purchased or where to turn for a point of contact comes with confusion.

Based on interviews with Subject Matter Experts (SME's), Chief Officers in Procurement, and the 'Quick Wins' team within Ohio Administrative Knowledge System (OAKS), it was realized the existing problem in procurement is the employee knowing where to turn to have their purchasing needs met, and with consistency. Understanding this may not be as severe of an issue within a small, intimate office setting, but for those employees working off-site, or whose job duties require working in a remote office setting, the need exists. Seemingly all agencies have adopted their own internal purchasing form, housed either internally or on internet site.

Establishing uniformity across the state for day-to-day purchases, an electronic Agency Purchasing Request (APR) form would be basic in nature and be available to all state employees. A few reasons for the creation of an electronic APR form that make sound business sense include:

- Consistency within all agency's statewide;
- Includes minimum fields/requirements necessary to process;
- Found in one specific area/location that most, if not all, employees have access to;
- Increase efficiency from need to product delivered;
- Reduce the time in locating a point of contact to ensure purchase gets taken care of.

Even though agencies do vary in size and in their procurement ways, the idea that there cannot be a universal form should be challenged. Conducting agency-wide research from various size agencies will provide in-depth analysis about what may belong on an electronic APR form, and help the move towards the creation of a "practical and universal" purchasing form. With agency testimonials, procurement leadership onboard, and a willingness to adapt, a universal form can be created and implemented. Employees must have a consistent purchasing model rolled out for use. Efficiency and productivity will rise, and in turn, the State benefits. Once the frontline step of a universal form is created, future improvements along procurement lines will lead to paperless processes. Ohio can be the catalyst for top quality procurement services in the entire nation.

¹ Ohio's Interactive Budget. A Comprehensive View of Ohio's Finances: <http://interactivebudget.ohio.gov/>

INTRODUCTION

Problem Statement

There have been inconsistencies in how Ohio state agencies process business transactions. Every agency has their respective internal business procedures in which they operate, guided by the Ohio Revised Code (ORC). The result for these business processes might be the same, but the approaches are vastly different. Some agencies process business transactions just because it is how it has been done for years and they don't want to change, whereas other agencies make modifications to fit into the current modern electronics business age. The fact is, challenges grow every day in every area of business transactions and processes. It is essential to position the numerous state agencies to embrace technology, which will aid business transactions to flow smoother and cost less.

The focus will be the creation of an Agency Purchasing Request (APR) form procurement document. The intention is to design a centralized electronic form, accessible to all state agencies, for basic office supplies purchases, that will be easy to use by all state employees. Because state agencies have different ways, procedures, and forms for their respective purchasing needs, it was imperative that multiple state agencies procurement officers and Subject Matter Experts (SME's) were interviewed to obtain information on current procurement practices, process challenges, and various recommendations that will help create and standardize the new proposed form. This would then assist to evaluate the feasibility a universal procurement form across all agencies statewide. The target end users would be ALL state employees and the project is expected to roll out in phases, if accepted.

Every employee is allowed to determine the need for particular item(s) to be purchased for their respective department/unit. For most state agencies, the purchasing process starts where a need for a particular item is identified and then entered into some type of purchasing form. Typically, the form is printed and subsequently handed over to the next level of approval. This form could also be routed electronically to the supervisor for approval and then to the procurement officer for that agency to make the purchases following the state purchasing guidelines.

A procurement form typically helps itemize potential purchases with necessary required information such as what is being purchased, the quantity needed, and other pertinent fiscal information useful for the procurement officer while making said purchase. Once completed, the form is routed to the procurement manager for their authorization. Unfortunately many of these departmental forms are not the same throughout the state, and most of them are not user friendly either. In some agencies, the form submissions are manually processed, while in other agencies, they are a bit more technologically advanced. Some agencies combine a hybrid of both practices (manual and tech savvy). Too many unnecessary processes, unwarranted paper waste, and repetition have led to employee's frustrations in requisitioning an updated process.

Successful implementation of this form will enhance quality, improve the ease of use, and ultimately centralize the form utilized by all state agencies and employees. It is anticipated to be designed to reduce cost by saving on paper, ink/toner purchase reduction, and minimize the physical storage of paper files/documents, since the process will be electronically processed.

Background

Our research process began with an interview of Betsy Bashore, Chief of Value Management Office, Office of Budget and Management (OBM). The meeting was intended to inquire if OBM was currently working on a similar type of project so we could potentially collaborate or obtain current information that could help guide our research. Several OAKS functionality's were mentioned as related to the project topic, but many of these are currently either under-utilized or not explored at all by many state agencies. In curiosity, we inquired why OBM would not mandate all State agencies to explore these functionalities, and were subsequently told that OBM could only show agencies what is available in OAKS, but cannot mandate their usage, since each agency has their own internal policy that guides them. Betsy recommended the group focus more on "procure to pay" as the amount of paper related to those processes remain in high quantity, and directed the team to Joseph Banicki, a team member of OAKS at DAS.

When our group met with Joe Banicki, Agency Engagement Center, Office of Information Technology, Ohio Administrative Knowledge System, Department of Administrative Services (DAS), he discussed how Public Safety created a work-around for paper processing on procurement purchases/requests. Kelli Whalen coordinated the project and he suggested that they have a good model to follow as they consist of several divisions within the department. Joe shared some background via email, including past studies done that have broached this topic. One such recent study was the Standardized Purchasing Process Pilot, managed by Joe back in 2014. The scope of the pilot was to create a standardized agency purchasing process, by reducing paper requests, and creating a more accurate and efficient procure-to-pay process. Where this process is beyond the scope of our topic, the Kaizen held and the results within were influential to forward our interest to start at the beginning—the procurement form. It was suggested our group meet with a team within DAS called 'Quick Wins', to provide further insight on what similar projects are currently active at the state level regarding possible procurement collaboration before any meetings were organized with said 'Quick Wins' team.

We subsequently had two meetings with the DAS 'Quick Wins' team, which consisted of highly experienced professionals in both Information Technology (IT) and Procurement within DAS that are responsible for numerous projects. The big takeaway was a common goal of reducing unnecessary paperwork used during procurement processing. Many processes could have been used electronically in OAKS, but unfortunately many agencies are not utilizing the full potential. Joe stated the lack of training and exploration at the initial OAKS implementation back in 2007 lead to bad habits created over time, thus why it is not currently consistent throughout the state. The "this is how it has been done" scenarios lead to state agencies creating their own internal policies and procedures on purchasing and processes. If more time and effort was invested initially, this could have saved time and money, and be effective and efficient in the current procurement flow within the state. Several projects were discussed during our meetings, among which were: APR Form, OIT Release & Permit Form, Buyers Portal, Debarment Process, Complaint to Vendor, and Vendor Verification Form. Most of the projects listed above were brought up at a 'Kaizen Event'. As there could have been collaboration between our group and the 'Quick Wins' team, they were currently working on a different long-term project. The meeting experience was invaluable who gladly endorsed our project topic.

After analyzing the projects, it was decided the paper focus would be on designing a centralized electronic 'procurement form' as this will cut across all agencies—small, medium or large; elected or non-elected. This is an area that, regardless of where you work, title or job function, the process needs improvement, efficiency, and consistency; and should be simplified and

universal. And that is where our paper begins. There is no standard or universal form that is currently being utilized, every agency has their own 'created' procurement form unique to their own needs. The goal is to identify examples of systems already in place—how they differ, how they are similar, and then conclude with a consistent notion of creating an Agency Purchasing Request (APR) Form. This would be a simplified form and universal form, where the training and resources utilized are universal in scope, and one that Joe the Plumber, or Matt the Maintenance Man, can initiate and submit, via a secure portal/method, and allow the request follow-thru the chain of command based on their log-in credentials. The research will outline and establish what can be a kick-start to a forward-thinking process that can make the State of Ohio a more efficient workplace and a more paperless functionality.

Research Strategies

The method of assembling data and analysis used in this paper includes data from small, medium, and large state agencies. Surveys and interviews with Subject Matter Experts (SME's) in the area of purchasing and procurement are to be conducted to evaluate the effectiveness of already established procurement forms used by the agencies studied. The SME's would explain the uniqueness and disparity among our state peers in their respective procurement processes via questionnaires sent and interviews conducted (both telephone and face-to-face). What will follow next is our comparison and methods to better understand our current state, albeit, a small sample-size, but none-the-less, a glass half full concept to create the form which will be the conclusion of our capstone project.

The first step in the process was to determine what agencies to sample, as there are well over 100 Agencies/Commissions/Boards to choose from. We ultimately decided to focus on these agencies: Department of Transportation, Department of Public Safety, The Ohio Industrial Commission, Bureau of Workers Compensation, Department of Health, Department Developmental Disabilities, and Ohio Secretary of State. We attempted to produce a diverse sampling of small to large departments, as recommended by the 'Quick Wins' team per previous Kaizen events, to understand the varying aspects of purchasing from different size departments. The second step was to determine the list of questions to ask the SME's of each team member's assigned agency. The questions and format were designed in a manner that enabled us to conduct an in-person interview or use a survey tool if scheduling became an issue. The final step was to conduct the departmental interviews, which we determined would be our primary method of data collection.

The purpose of these interviews and questions were to identify the subject matter experts to assist to develop the details of the proposed new form. This would gauge a better understanding of the current purchasing processes within the respective department, determine similarities in the processes outlined, and establish the areas of most improvement to focus our curriculum on. The following questions were used when surveying the identified SME's:

1. What is the purchasing process for your agency from start to finish? Are there any issues? Please explain?
2. How much paper is involved in your agencies current purchasing process?
3. What would you like to see on an electronic purchasing form?
 - a. Please rank the following fields as High, Medium, or Low importance in the box provided (see figure 1):

Figure 1
Ranking fields as High, Medium, or Low importance

QUANTITY	COST	ITEM DESCRIPTION	REASON / JUSTIFICATION	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
IS THIS ITEM ON CONTRACT?	IS IT BUDGETED?	SHIP TO?	SUGGESTED VENDOR?	OTHER
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Source: Ohio Fiscal Academy—Capstone cohort group procurement form questionnaire / survey.

FINDINGS

Agency's Processes

Department Of Transportation

With 4,847 employees and full-service facilities in every county of the state, the Department of Transportation's (ODOT) twelve (12) District Offices represent the first contact many Ohio's citizens and businesses have with the department. ODOT's Central Office plays a vital role in statewide oversight and guidance of the department's activities.² The electronic APR form was discussed with SME Ruth Ann Neely, Senior Financial Analyst, Agency Paycard/EDI Administrator. Because ODOT is a decentralized department with 12 districts covering multiple counties throughout the state, each district runs their local finance office with varied processes for requesting, processing purchase orders, and payment. Central finance office is the final approval for all requisitions, no matter where the requisition may have originated. All Purchase Order's (P.O.'s) generated are reviewed and verified against all requirements, purchasing rules and vendor thresholds prior to approving the requisition to purchase order to Interface with OAKS. Central finance office then reviews and corrects errors that may have been generated from the Interface process into OAKS for those purchase orders that haven't successfully post to OAKS.

The purchasing process is a very thorough and expansive procedure and goes through many channels before the final output is sent to central finance office for their verification and execution. The Requestor identifies the need for the purchase of goods/services and that item is then searched for availability on contract. If it is not on contract, then it must be determined if the item is sole source justified, or if quotes need to be gathered? Once established, a requisition is requested from the finance office thru a form filled out from ODOT's SharePoint site. That requisition is entered into Appropriation Accounting (which is ODOT's Interface System) and goes

² Department of Transportation—Fiscal year 2016 Annual Report:
<http://www.dot.state.oh.us/policy/Documents/ODOT2016-AnnualReport-FINAL.pdf>

through the approval process (i.e. is the item required/desired, etc.). During this phase, the transaction interfaces to OAKS, where it must pass multiple validations (as set by OAKS). A purchase order is generated and printed and then distributed to the vendor. The Requestor then places the order from the P.O. for the goods/services in question. The Vendor will submit an invoice for payment, and the responsible party for the P.O. acknowledges the receipt of the goods/services and approves the invoice for payment. Central finance office will then create the voucher, which then interfaces to OAKS, and generates payment to vendor. As read above, the purchase goes through many different levels of checks and balances before being finalized.

When a department of this size is involved, many levels have to interact in order to ensure all the proper processes are adhered to and all policy and protocols followed. ODOT faces one major obstacle: Decentralization. There are too many different ways of doing the same job at the end. If there was continuity throughout the agency on the purchasing process, the knowledge base and understanding would be fluid throughout the agency, and so many individualized processes would not exist across all the districts. ODOT acknowledges this issue up front. Of the obstacles highlighted above, the request for purchasing has different processes agency-wide, which causes confusion and doesn't establish any type of streamline process or uniform guidance to adhere to. The requisition process is not consistent, and it is difficult to manage and advise individuals for solutions to the problems when no two districts are alike. At the root of the process, there is no consistency from each district. This makes the job of the staff from central finance office that much more cumbersome with no proper uniformity to follow.

As it relates to the physical paper involved in getting a purchase complete from start to finish, ODOT has functions that are paper heavy. Part of that is due to the grants that ODOT administers, as some grants can range from 5 to 20 years. Thus, a paper copy of a grant file could be vital. Activities compared at the local district process will vary based on how requisitions requested are to be created, any/all quotes to be gathered, personal service contracts involved, varying types of grant agreements to be collected, etc., with all purchase orders printed out by ODOT. Personal Service Contracts (PSA) and grant agreements are typically attached to the P.O.'s, with most originating offices keeping hard copies of the PSA or grant agreements on file. There is an E-Quote system that houses all quotes, which does help to reduce the need for paper quotes. But, with that being said, there could be some districts that are printing the paper quotes and attaching that document to the P.O., which is a duplication of the process. Decentralization of the requisition process means that most districts are not using the requisition request system that is paperless for requesting purchases, which is a tool that is not fully utilized as it could be, leading to a more paper heavy process. Multiple thoughts can play a factor in this, such as a lack of understanding the resource is available, or even ensuring proper protocol is adhered to per central finance office guidelines and regulations. For example, OIT requires 3 quotes from vendors for IT related items. These must come back in on vendor letterhead. That letter can simply be emailed, and ultimately uploaded in the requisition system. But likely, the letter is also be printed out and housed with the P.O. at the district level, in addition to being in the requisition request system, which creates duplicate copies of the quote packet and creates a less efficient centralized paper process.

When it came to establishing what fields are most important on an electronic APR form, the ensuing rankings were outlined based on ODOT's importance of that respective field necessary to their functionality. **HIGH:** Quantity—identify the proper quantity of items or goods/services; Cost—identify the proper dollar (\$) amount; Item Description—must describe the specs and pertinent information for item being purchased (finance office would have to call to get the information if not properly detailed out in the order); Reason/Justification—necessary to justify the request in question; Is Item On Contract—determines if the purchase needs to be validated for vendor threshold limits, quoting or sole source justification options/procedures need to be

followed. **MEDIUM:** Ship To—items are sent to the proper address; OTHER: Bill To—if different than 'Ship To', advantageous to use both so the invoice can be processed timely after receipt of the good/service and ensure that bill will be paid timely as well. **LOW:** Is It Budgeted—should already be known and requestor should not be requesting if not on the budget (workflow approvals should review and ensure purchase is allowable per budget).

Department Of Public Safety

The Ohio Department of Public Safety's (DPS) nearly 4,000 employees are dedicated to the mission of contributing to a safer Ohio through its six (6) divisions: the Ohio State Highway Patrol; Bureau of Motor Vehicles; Homeland Security; Emergency Management Agency; Emergency Medical Services; and Office of Criminal Justice Services.³ In discussing the electronic APR form with the SME's Jeff Shadburn, Chief Procurement Services, and Kelli Whalen, CPPB, Business Administrator, Procurement Services, the following conclusions were drawn.

In a bit of an unconventional wisdom when compared to other state departments, DPS utilizes OAKS on the front end of the purchasing process. Once the requisition is entered and completed within OAKS, then the requisition will interface with Workflow, Tracking and Follow-up System (WTFS), which is DPS's internal electronic purchasing management system. Currently DPS has their own Asset and Inventory Management System (AIMS) as well, but, in the near future, it will be replaced by a new system, Inventory and Receiving Management System (IRMS), which will handle all replenishment and warehouse orders. This transition is due to the fact that AIMS was created on the Oracle 9i platform, which is no longer supported by Oracle.

When a requisition for a new good or service is initiated, it is done electronically through OAKS by the requestor. A pause here to provide some clarity on *the requestor*. They are a specifically assigned individual within the various DPS division(s), and for which is granted special permissions/credentials to process the item request. Currently, OAKS is not set up to provide every state employee this particular type of access. Rather, DPS created a point-of-contact within its division(s) to handle such requests. Now, back to OAKS. The requestor will choose eProcurement and then select 'Requisition', to begin the ordering process for the item(s) in question. In the business unit field you will choose Public Safety (DPS01) and then the 'Requestor Code' will be chosen. Another clarification point here, the *requestor code* is NOT a person, but used to identify the section (i.e. division(s)) who will process the order and ultimately who will pay the bill. Once 'Special Requests' is selected (creating a non-catalog request), that will take you to the requisition details. This is where the most pertinent information is populated to ensure accuracy of the item being purchased. Once entered, any 'Additional Information' (in narrative format) is also explained, in order to supplement any specific details about the good or service in question. Once populated, the requestor will 'Add to Cart'. If more items are desired to be ordered, then repeat the steps, otherwise click 'Checkout'.

The 'Review and Submit' screen will appear, where the requestor will enter the name and phone number (contact information) of the person to be contacted regarding the purchase order in the event there are questions that need further clarification or more information in necessary. Navigate over to the 'Details' icon to produce a 'Line Details' screen. Here, check the box next to 'Amount Only', click 'OK' at the bottom of the screen, and if a pop-up box appears, then click 'YES'. This will take the requestor back to the 'Review and Submit' screen, where the 'Comments' bubble will be clicked on. This will provide the option to include any further comments needed to

³ Department of Public Safety: <http://www.publicsafety.ohio.gov>

describe the item (i.e. including part numbers, color, etc.), as well as be able to add any pertinent attachments (i.e. quotes, estimates, etc.) necessary to include with the requisition in order to help facilitate purchasing in the request. The “Ship To” field will now be entered to populate the necessary shipping information for the item(s). By clicking on the magnifying glass icon, one can determine where the item(s) can be shipped within the pre-populated dropdown box, if the requestor is not sure where to have the items shipped. Next, the ‘Attention To’ box will be filled in, identifying the point-of-contact (subsequently add the person’s name receiving the item(s)). The final step will be to scroll down to the bottom of the screen, click on the little gray arrow (next to the ‘Accounting Lines’) to expand the view, and will open up in order to select the ‘CHARTFIELDS2’ tab. The generic DPS Accounting Lines entered are **default values**, which are necessary to be able to save the requisition. At this point, all the necessary detail of the requisition has been entered, and the requisition process able to be ‘Save and Submit’.

The requestor is now directed to a ‘Confirmation’ page stating that the requisition has been submitted. A paper copy can be printed by clicking on the ‘View Printable Version’ (if you so choose). The requisition is now in DPS purchasing queue and will be processed accordingly. Due to requiring a substantial level of knowledge of OAKS, this could be a barrier to ‘Joe the Plumber’ or ‘Matt the Maintenance Man’ and their daily interaction, or lack thereof, with OAKS.

As it relates to the physical paper involved in getting a purchase complete from start to finish, there is considerable paper involved within DPS. Everything is documented and retained with paper. This is not an efficient method of being ‘paperless’ or even ‘paper light’, but there are mechanisms in place that could make the process fully paperless if the proper channels are adhered to and the capacity of OAKS is adjusted and expanded to ensure that items submitted within OAKS are not deleted (per record retention policy) once it is entered in the database.

In conversations with the SME’s, it was stated that DPS does not see a need for an APR form, as OAKS is used from initiation. Even with all of OAKS’s current limitations, the SME’s feel that another application/form to deal with under their current procedures is unnecessary. Within the questionnaire submitted, the section to rank certain fields by importance to include on an APR form was not filled out by DPS, so the following rankings were determined based on the functionality in the OAKS process (as described above), and labeling the pertinent features critical to the submission of a complete requisition. **HIGH:** Quantity—identify the proper quantity of items; Unit Price—identify the proper dollar (\$) amount; Item Description—describe the specs and pertinent information for item being purchased; Unit of Measure—AMT; Category—this code is default to ensure that the requisition can proceed to the next step.

Ohio Industrial Commission

The Ohio Industrial Commission (OIC) is comprised of just over 300 employees that range in location from the central office in downtown Columbus to the eleven (11) outlying district offices scattered around the State. In discussing the electronic APR form with the SME, Tina Wood, Procurement Manager, she added many different facets of purchasing by OIC. Tina is located in the OIC Central Office, where purchases ultimately get finalized with proper documentation and the proper channels are followed.

The purchasing process within the OIC starts with an electronic form found on their intranet site, named the ‘Requisition Form’. The form itself is one (1) page, front only, in length and is filled with seven (7) field areas. Once the need for a product is realized, and the form filled out, a box, where if checked off, it authorizes management approval for the item requested to be

purchased. There is a primary contact, located at each of the 11 outlying district offices, to push along a management approved requisition form to the central office procurement team after a final look through of the document is completed.

One caveat to OIC Central Office, they happen to have a 'stock room' for supplies and other basic needs readily available to employees within the central office and the outlying districts. Employees fill out a 'Stock Request' for basic needs, which is fulfilled online through their SharePoint services portal. This saves the agency money on purchases when there is currently stock of different items within the central office.

A major concern for OIC is communication, i.e. between the outlying district offices and the central office. There are multiple layers of employees along that way, and when a request is originated to the point of central office, there can still be some uncertainty. As explained by the SME interviewed, sometimes the promptness of needing a product is lost track of. This can lead to wasted time, inefficient productivity, frustrated employees, and potential distrust between outlying districts and central office. One last point to mention, current DAS rules/regulations put in place can lead to a cumbersome purchasing process, and with what topic is focusing on with basic purchases, the pain point is less apparent, but still present at times.

As it relates to the physical paper involved in getting a purchase complete from start to finish, OIC strives for the motto of "paper lite". The ultimate goal would be "paperless" but with all the steps involved, paper is still present to some degree. When a need is realized, an employee can find the OIC requisition form online, fill it out, convert to PDF, and email the completed form electronically to the next level approval. But, in some instances, the online form will be printed, filled out manually, scanned on a computer, and routed that way. Thus leading to variations in the process. Once at the central office, the requisition form is printed to ensure all information is populated before getting scanned in to the requisitions tab for future reference.

When it came to establishing what fields are most important on an electronic APR form, the ensuing rankings were outlined based on OIC's importance of that respective field necessary to their functionality. **HIGH**: Quantity; Reason or Justification—due to the fact that the keeper of money has to be aware of why, if purchases slip through without any justification it can lead to a snowball effect of other employees requesting an item that should have never been purchased due to cost/lack of need/etc.; Is item On Contract; and Ship To address. **MEDIUM**: Item Description. **LOW**: Cost—every employee may not know an exact amount rather know what they need and how many, also whatever item is being ordered, the central office team will take care of where to purchase from; Is It Budgeted; and Suggested Vendor. Some suggestions were made in the 'OTHER' category: Name/Contact Info; Location or Office represented; Phone # / Email Address.

According to the SME interviewed, the idea of an electronic APR form would be a great improvement for statewide purposes but with the massive variety in sizes and different agency setups, it seems difficult to consider. OIC operates fairly smooth when it comes to purchases of the basic variety that an electronic APR form would potentially assist on. What OIC uses for the basic purchases that helps all offices involved in their operation is the stock request, which is done online internally. OIC was accepting and satisfied with their current purchasing process as it relates to everyday items being requested via the stock request tool, or if an item must be purchased, the requisition form does a proper job.

Bureau Of Workers Compensation

The Bureau of Workers Compensation (BWC) has ten (10) service offices located all around the entire state, with a central office and warehouse located in Central Ohio. With roughly 1,900 employees, only 8 of those have direct ties to the procurement needs located in the central office that service all the other offices. The central office ultimately is where procurement needs are finalized and documents housed. In discussing the APR form with the SME, Charles “Mike” Robinson, Procurement Manager, useful information was discussed relating to BWC’s procurement process.

The purchasing process within the agency has a centralized procurement function. Request for purchases come through the dedicated purchasing email inbox or the SharePoint site. Once received, the request is assigned to a sourcing analyst, working with the internal customer to refine the needs and verify quantities. A quote request is sent out to the appropriate suppliers; and when the quotes are received, the analyst meets with the internal customer and a supplier is selected. The sourcing analyst then determines if the purchase needs a release and permit or controlling board approval. Once approved, the analyst creates the requisition in OAKS and sends it through the approval workflow. At the time of requisition being fully approved, the purchase order is dispatched and sent to the supplier. The customer is also notified at this time that the purchase has been completed. Basic, low level items requested for purchase would not be applicable in this process described above.

Even in the process described above, procurement does come with pain points. One major pain point as it relates to low level purchases is making sure the internal customer submits the email to the inbox or submits a SharePoint request in a timely manner. This is especially true if it happens to be a new or infrequently purchased item, where BWC has diminutive past experience with. Purchasing employees may catch wind of a potential purchase needed or hear about it informally, but that does not get a purchase in motion. In some cases, the need gets overlooked, and paperwork will be last minute and could possibly delay production. A benefit that BWC has is employees out in the service offices are equipped with P-cards. The P-card is used mainly at BoLinds once a need is realized and delivered directly to a set up destination via the website. This process uses a log, which is approved by specific management. Once routed, it goes directly to Accounts Payable so procurement teams have little involvement. A few years back, BWC adjusted their process where the inventory team would make multiple deliveries around the state to all service offices. The idea was geared towards using current supplies on hand and fulfilling the purchasing needs of the service offices by having delivery routes. Once the savings of back scaling on that process were realized and the P-cards became more relevant, it was an easy choice to make the change.

As it relates to the physical paper or transient documents created and housed in the procurement process, there is still more paper than is desirable. The mindset for the future is to become less reliant on paper being printed and stored for purchasing needs. With old habits of printed paper records stored in a specific manner, going ‘paper lite’ or ‘paperless’ are a future goal of BWC. Large amounts of paper specifically showing the entire path of how a purchase was made, including losing bids or quotes, are kept. That relates to a large amount of purchases mainly with low-level purchases done via P-card that have the typical log and associated documents.

When it came to establishing what fields are most important on an electronic APR form, the ensuing rankings were outlined based on BWC’s importance of that respective field necessary to their functionality. **HIGH:** Quantity—how many items are needed; Item Description—be as

accurate as possible with model number, certain colors as the procurement team never assumes they know exactly what is being requested with a simple request; and Reason/Justification. **MEDIUM:** Cost—internal customers may not know exact cost of an item and it also may be searched in more detail for a better cost; Is Item On Contract; Is It Budgeted; and Suggested Vendor—internal customers may not know specific contract items and may not be aware of multiple vendors for a specific item. **LOW:** Ship To—lot of equipment gets shipped to the BWC warehouse to begin with and again, employees getting supplies directly using their P-card have a ship to address already in place. A suggestion was made in the 'OTHER' category: Department Fund Code.

Per the SME interviewed, an electronic APR form, if created, would add value to not only BWC but State-wide also. In BWC's case, it would benefit the employees in the central office and employees in the services offices that do not utilize a P-card. The P-card has alleviated some of these headaches due to the fact that the person is directly responsible for their own low level purchase as they see fit. Once an electronic APR form was submitted through the process, if these fields were present: Item Description, Quantity, Reason, Dept. Code (to be charged), the SME is confident all purchasing needs could be taken care of without issue.

Department Of Health

The Ohio Department of Health (ODH) is a cabinet-level agency, meaning the director reports to the governor and serves as a member of the Executive Branch of Ohio's government. The executive team, which consists of the Chief of Staff, the Medical Director, the Chief Policy Advisor, and General Counsel, helps the Director of Health formulate the agency's strategic policy goals and objectives. These leaders, along with senior-level managers and supervisors, work in tandem to ensure the state health department is responsive to the needs of Ohio's 11.5 million residents.⁴ In discussing the electronic APR form with the SME, Paul Maragos, Procurement Officer, insight was provided on their current purchasing request process.

ODH is primarily a decentralized agency where each program area is responsible to obtain quotes and provide justifications for purchases. Those requests are submitted to the procurement unit on analysis for compliance and also assist to get additional quotes or further approvals, such as release and permits as well as data collection for Controlling Board hearings, etc. The types of purchases under this methodology are goods and services using existing DAS contracts. Contracts that are over \$25,000 are bid through Procurement Services. Hence, the procurement unit works with the SME's to build the specifications for the purchase. RFP's, RFQ's, and RFI's are released and managed by Procurement Services. All requests are submitted using the agency Workflow System (WISE).

The procurement unit consists of two (2) units, Purchasing and Contracting. Purchasing is staffed with two (2) sourcing associates and Contracting is staffed with two sourcing associates and one (1) printing coordinator. These positions are supervised by a financial manager and a sourcing supervisor. The number of contracts and RFP's processed and written annually are 1,200 and 30 respectively. The number of purchases and payment cards processed and analyzed are 2,500 and 2,500, respectively. In addition, about 50 out-of-state travel requests are booked per year and about 40 Controlling Board requests per year are written and presented. Due to staff limitation, ODH relies on numerous program partners to be an extension

⁴ Department of Health—About Us: http://www.odh.ohio.gov/landing/about_odh/about1.aspx

of Procurement. There are a variety of trainings available to program staff regarding procurement rules to ensure a good understanding of how to procure goods and services.

The department has transitioned its procurement process from manual to electronic. Requests are submitted electronically and all documents are maintained in the Workflow System (WISE). This has improved accountability, communication, transparency, and metrics. The Workflow System (WISE) doesn't tie into OAKS; however, dual monitors assist to transition information from one data system to another. This eliminates piles of paper on each person's desk and the manual recording of process steps, leading to a more paper 'light' practice. Despite the fact the agency strives to make the purchasing process easy and fast, they still faces challenges in the current purchasing process.

The primary challenge deals with a shortage of staffing, which hinders the procurement unit, and thus personnel are stretched to keep up with the demand. The SME suggested this challenge can be improved if the agency decides to move from a transactional model to one that is more strategic. However, that would mean an investment into procurement to hire the right people for the right positions. To move in that direction, multiple positions (i.e. Senior Sourcing Analysts, Sourcing Planners, Financial Program Managers, etc.) would need to be filled.

When it came to establishing what fields are most important on an electronic APR form, the ensuing rankings were outlined based on ODH's importance of that respective field necessary to their functionality. **HIGH:** Suggested Vendor, Item Description, Quantity, Cost and Ship To. **MEDIUM:** The Requester, Business Area Contact Info, Specifications, Suggested Venders, Funding Source/Coding and MBE/EDGE.

Department Of Developmental Disabilities

The Ohio Department of Developmental Disabilities (DODD) oversees a statewide system of supports and services for people with developmental disabilities and their families. DODD develops services to ensure an individual's health and safety, encourage participation in the community, increase opportunities for meaningful employment, and provide residential services and support from early childhood through adulthood.⁵ In discussing the electronic APR form with the SME, Pamela Mitchell, Procurement Officer, she provided insight pertaining to their current purchasing request process.

DODD's request to purchase is completed in two different formats. The first format is if the RTP has the bid specifications and the bids attached, then procurement will review the documentation and make sure that all the guidelines have been adhered to, in addition to the verification that the vendor selected is in OAKS as a supplier. The second format is if procurement receives a RTP with the specifications only, the sourcing agents will review the documents and proceed to acquire bids if there are no concerns. The procurement team then informs the initiators and provides bid information and bid selection (vendor). If there is no opposition, procurement moves forward with acquiring the goods. In both scenarios, DODD's procurement division ensures that the DAS' procurement protocol is followed and adheres to DAS/OBM guidelines.

The internal procurement process is all completed outside of OAKS until the requisition/purchase order(s) are created. The bid specifications and bids attached are reviewed

⁵ Department of Developmental Disabilities—About Us: <http://dodd.ohio.gov/About/Pages/default.aspx>

to ensure all guidelines have been adhered to, as well as verifying the vendor selected is an OAKS verified supplier. If procurement receives a RTP with the item description and quotes, the sourcing agents will review the documents and proceed to acquire bids if it is other than a contract term, whereas then procurement informs the initiators and provides bid information and bid selection (vendor). The purchasing process prior to OAKS entry involves multiple levels of employees. A request is most likely initiated by a deputy director or their administrative assistant. The administrative assistant would proceed to process the request by initiating the bids and/or sending the request documentation to DODD's co-procurement division as mentioned above. Once this process is complete and the requisition or purchase order is created, then the following step will be the approval process that ties into OAKS.

The procurement department tries to minimize the amount of paper involved. When a need arises to purchase an item, the initiator starts off with a request to purchase via a paper form. That form is thoroughly checked by a manager for appropriate bids, item description, justification of the purchase, and quotes from vendors (if the item is not under term contract). Once completed, the purchase orders are approved by a manager and routed to DODD's Central Office Procurement e-mail box, and at this point, shifts to a paperless process. The most challenging issue encountered is finding better pricing on products and services elsewhere. Because this additional time and effort put forth to research and ultimately find a better price or service will lead to more paper, thus slowing the process of the purchasing order from the initiator until its final approval. The SME suggested more strategic purchasing in order to get better pricing on products and services for the agency, and would resolve the challenge to better serve the need in more effective way.

The SME would like to see a new electronic purchasing form that can be completed from two different perspectives. The first perspective be completed by seasoned staffer who's completed the bidding process and has selected vendor. The second perspective be completed by a novice in purchasing. When it came to establishing what fields are most important on an electronic APR form, the ensuing rankings were outlined based on importance necessary to their functionality. **HIGH**: Suggested Vendor—to make the process easy and fast; Quantity; Item Description; Is Item On Contract; and Reason/Justification—why the purchase is needed. The SME feels the form should also be able to provide detailed specifications if need be and whether the bids received are set-aside or EDGE purchase; **MEDIUM**: Contract Number; Release and Permit; Sole Source (Yes/No); Controlling Board; and OAKS ID Number.

Secretary Of State

The Ohio Secretary of State (SOS), a small agency with about 138 employees, is an elected statewide official. SOS is responsible for overseeing elections in the state, registering business entities (corporations, etc.) and granting them the authority to do business within the state, registering secured transactions, and granting access to public documents. In discussing the electronic APR form with the SME, Peter Graybeal, Purchasing Manager, he narrates that the entire procurement process uses three (3) different APR forms:

1. Request to purchase information technology goods and services;
2. Request to purchase printing goods and services;
3. Request to purchase other general goods and services.

The request will come from an individual or department that needs certain items (i.e. office supplies, services, or IT equipment), typically via email, to the procurement manager, who then keys in the information to the applicable Request to Purchase form(s). The Purchasing Manager

will route the form for approval before starting to proceed in getting quotes. A Division Director must approve and send the form to the Finance Division with other purchasing documentation. If the requested purchase involves any type of contract or agreement (including when a potential vendor has an existing state term contract), finance will forward the form and/or documentation to the Legal Division for their review and/or drafting of the contract or agreement.

If the anticipated purchases will be more than \$500, the Division Director (or the Finance Purchasing Coordinator) *must* obtain and provide at least three (3) quotes for the proposed purchase (which must include necessary supplemental documentation). This also applies when utilizing a State Term Schedule (STS) contract. If the purchase is less than \$20,000 for an IT related project, and if a STS contract will be utilized, and if the supplier offers a rate lower than what is provided in the STS contract, then three (3) quotes are *not* required to be received.

There are exceptions and special circumstances that may arise in which three (3) quotes are not received. Such situations include: emergency purchasing needs, sole source (with required documentation), maintenance or lease renewals, reprints, litigation-related work, miscellaneous office supplies, building work where building management specifies allowable vendors for the work, memberships or subscriptions, and other special circumstances as approved by the Assistant Secretary of State or Chief of Staff. After receiving approval from the Chief of Staff or designee, finance will proceed with the purchase or notify the requester of the items or services to proceed with the purchase. Finance will prepare a Purchase Order (PO) when necessary, sign it following approval by the Chief of Staff and forward it to supplier as needed.⁶

The SME further explained that there is substantial paper that is still involved in the process. Many steps are just repetition of what has been electronically processed. Reasons for many of these repetitive steps included: 'the way it has been done in the past' and the manager still wants to 'continue to do it the same way'. For example, all forms are saved electronically, yet at the same time, hard copies must be entered on a database and physically filed. In addition, many of these papers are not tied to OAKS in any way, which provides another barrier.

The SME thought the agency's current processing practice in purchasing is sufficient for the size of the agency, yet embraced the idea of having a centralized electronic procurement form. When it came to establishing what fields are most important on an electronic APR form, the ensuing rankings were outlined based on SOS's importance of that respective field necessary to their functionality. **HIGH:** Quantity; Item Description; and Reason/Justification. These fields will give the procurement officer a better idea of what they are buying and why they are buying it.

CONCLUSION

Recommendations

As this capstone project began in its infant stage, our group had a vision to address proper storage and/or policies on record retention and its inefficiency across the state. The initial thought was to store documents electronically in a centralized and uniform process. What then became a more reasonable issue was focusing more on electronic sustainability and increasing efficiency with less paper and lower costs; thus, pursuing the idea of a 'paper-less' government and less on software purchase and storage capacity. In drawing an inference on this was keying in on the idea of 'Efficiency' and 'Uniformity', while addressing the inconsistencies in how state

⁶ Ohio Secretary of State Internal Purchasing Procedure

agencies process business transactions because ‘that it is how it has been done for years’ and ‘they don’t want to change’. It is essential to position the state to embrace technology, thus aiding business transactions to flow smoother and cut costs. In doing so, the focus was steered in procurement and to centralize the purchasing request process. The intention simple: design a centralized electronic Agency Purchasing Request (APR) form, accessible to all state employees, across all state agencies, for basic office supplies purchases.

During the course of our project and research, our group had the opportunity to hold meetings with different agencies and their respective management teams, officers and subject matter experts. We learned that no one agency is the same in technology or how they operate in their day-to-day procurement business, and that every agency has its own distinct differences and specific needs. Yet, in our group’s opinion, our research does not yield a strong recommendation to proceed with a centralized APR form at this time. Sufficient data was not gathered in the project timeline allotted to substantiate a formulation of a proper and accurate form. It became clear that many more levels of research would be necessary to obtain an accurate and fair assessment of the form and its implementation. The foremost immediate limitation encountered was the timeliness of the SME’s responses (once identified at their respective agencies). A proper sample of agencies was not established from the onset to justify a true variation to include central service agencies that represented many different areas of state operations. Other reasons, of which a few are highlighted below, explain our assessment:

- Limited involvement of agency input, not gathering a sound spectrum of sizable agencies within our research strategies;
- Agencies sampled were mainly large agencies;
- Most of the agencies feelings towards the APR form were geared in the mentality of ‘this is the way it has been done’ and ‘we don’t want to change’—this was a substantial barrier echoed throughout this research;
- Time constraints of the project to yield a full and proper sampling of agency responses;
- SME’s interviews’ seemed focused on their own department specific internal form(s), not thinking broadly to imagine broad picture from a state level;
- And, not enough elaboration by the group to be explicit in the APR form questionnaire.

Stemming from the initial the questionnaire/survey provided, and with the data collected, our group highlighted a visual representation (see table 1) of the specific fields, as categorized by their importance, according to the SME’s at their respective departments.

Table 1
Fields ranked by importance on an electronic purchasing form

HIGH	MEDIUM	LOW
QUANTITY	SHIP TO	IS IT BUDGETED
COST	ITEM DESCRIPTION	COST
ITEM DESCRIPTION	COST	SUGGESTED VENDOR
REASON/JUSTIFICATION	IS ITEM ON CONTRACT	SHIP TO
IS ITEM ON CONTRACT	IS IT BUDGETED	
SHIP TO	SUGGESTED VENDOR	
SUGGESTED VENDOR		

Source: Subject Matter Expert’s Survey responses. Personal interview(s). Multiple dates.

What the table shows is the level of importance by the SME's in their opinions on what fields should be critical to a simple and central APR form. No two agencies saw eye-to-eye on this. It was very interesting to understand the thought process from one department to another when the 'OTHER' category was populated with their respective suggestions (see table 2) on what other fields could be important on an APR form:

Table 2
Other field suggestions for an electronic purchasing form

OTHER		
SPECIFICATIONS	CONTRACT NUMBER	CATEGORY
FUNDING SOURCE/CODING	RELEASE AND PERMIT	UNIT PRICE
MBE/EDGE	CONTROLLING BOARD	NAME/CONTACT INFO
BILL TO	SOLE SOURCE	LOCATION/OFFICE REPRESENTED
THE REQUESTOR	OAKS ID #	PHONE # / EMAIL ADDRESS
BUSINESS AREA CONTACT INFO	UNIT OF MEASURE	DEPARTMENT FUND CODE

Source: Subject Matter Expert's Survey responses to 'OTHER' field. Personal interview(s). Multiple dates.

Depending on the agency sophistication of their current procurement process, you can see from the table above that a wide range of additional options were suggested, which further gave our group a supportive notion that much more time and research is necessary to justify such a form state-wide. As this doesn't damper our trials or tribulations, the group felt confident from The Quick Wins team as well as from Joe Banicki that a state-wide APR form is necessary, none-the-less. They emphasized the need is there, as it will be only a matter of time before action is taken down the line. Future phases or research on this topic should include the full research and analysis of every department within the state on their respective procurement process. This would include the actual completion of an electronic form (format compatible to or originated within, OAKS), a storage mechanism for state usage, as well as producing efficiency, uniformity, and consistency across the state in the procurement process with a simplified and rudimentary form.

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