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Proficient University Procurement

Senior Honors Project

April 25, 2013

Leiah Hess

Abstract

According to a startling statistic revealed by Ralph Meier, fewer than 2 percent of more than 4,000 colleges and universities in the nation have the type of eProcurement systems in place they need to gain visibility over spending or implement a strategic sourcing program (Meier 2009). Why is this a problem? In my work, *Proficient University Procurement*, I examine the practices of centralized procurement and decentralized procurement, compare traditional procurement to eProcurement, and highlight the effectiveness and shortcomings of their practices here at Grand Valley State University. At then end of my research I've included recommendations to put into practice more spending conscious guidelines and technology that will strengthen procurement effectiveness at the university and benefit its students and faculty alike.

Introduction

Students everywhere have been drastically affected by the state of the economy and the rising costs of tuition. For Grand Valley State University (GVSU), the annual price of tuition has nearly doubled in the past 10 years (McVicar 2012). State aid to public universities is continuously being cut (15% at GVSU in 2012) and tuition continues to rise (3.7% at GVSU for the 2012-2013 academic year). It is the reasonable expectation of the parents and the students of GVSU that everything is being done to cut costs wherever possible.

The vision of procurement services here at Grand Valley State University is to maximize Grand Valley State University's resources through strategically focused purchasing solutions in alignment with the University's mission ("Procurement Services" 2012). Procurement services touches nearly 1/4th of the \$232 million that GVSU spends

on average every year (Patrick 2012). Within their daily operations, there are numerous projects taking place to evaluate purchasing here at the university and ways to make it more effective. A large part of their strategy is their decentralized structure. Simply put, GVSU purchasing is not managed by one department that controls all of the buying, (centralized purchasing) but it is the responsibility of each department to supply their own needs within the guidelines given them.

There are great arguments for and against both centralized and decentralized purchasing structures. During the time of my senior project this semester my central focus began at conducting a cost and spend analysis that involved 6 public universities, 3 of each purchasing structure. As my research evolved, the scope of my project shifted to focus on 4 Universities, Ferris State University, Western Michigan University, Central Michigan University, and The University of Pennsylvania, all of which have decentralized purchasing structures. My focus then shifted to comparing and contrasting how universities of similar size in the same region carried out their purchasing practices. Ultimately I sought to draw best practices and ideas to recommend for implementation here at GVSU.

My research consisted of online sources, primarily of the available information on the public universities I chose and their purchasing departments and procedure. I also sought journal articles on other university procurement topics. Emails, phone calls, and interviews for further research on the specifics of these universities followed. The detailed financial analysis I hoped to accomplish between these universities did not work out as information on the specifics of their purchasing practices was not available.

If decentralized purchasing is going to be effective, Procurement Services here at GVSU recognizes the need for more refined purchasing procedures and better technology. It is my belief that this project and its final recommendations will put into practice more spending conscious guidelines for Grand Valley State University that will strengthen its effectiveness and benefit its students and faculty alike.

Centralized vs. Decentralized

Traditionally, Buy-Side Marketplaces will utilize one of 4 strategies. Bidding where suppliers compete against each other, Auction sites where customers bid as buyers, or group purchasing systems where participants' demand is aggregated to create large volume. The last strategy is collaboration with suppliers, which shares information about sales and inventory, reduces inventory and stock-outs, and enhances just in time delivery. Both centralized and decentralized purchasing can use any combination of these buy-side marketplace strategies, but typically, bidding, group-purchasing systems, and collaboration with suppliers are used. There are strong arguments for utilizing both centralized and decentralized purchasing.

Centralized purchasing is a system in which all departments of a company can make purchases through a common organization such as one or more purchasing managers. This system is efficient at avoiding order duplication and promotes the benefits derived from high volume bulk discounts, lower transportation costs, and lower inventory related costs. It also fosters better-organized transactions and improved vendor relationships (Centralized Purchasing). Because the purchasing is contained in one centralized location, inventory and the costs associated with it are reduced. There is one place for inventory to be kept and replenished as opposed to many different

locations to order for. Order processing costs are also lower due to fewer larger orders as opposed to many small orders. This model is not ideal for all purchasing organizations, as it presents some drawbacks. Its disadvantages include delays in receiving materials, shrinking employee morale due to their decision-making being minimized, and a lack of expert buying in the various types of items that were once sourced by experienced employees (Rao).

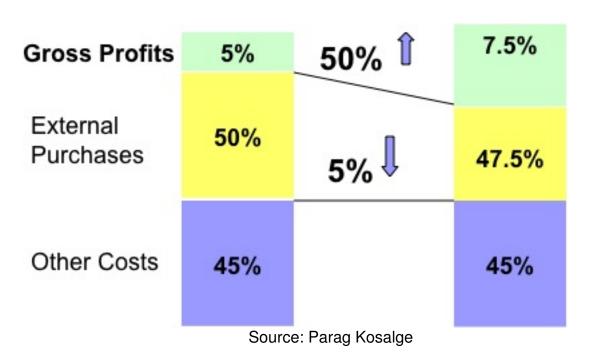
Decentralized purchasing is the purchasing by all departments and branches to fulfill their needs. This system is efficient at purchasing materials immediately in case of urgent situations and goes without the common bureaucracy that comes with the centralized structure. Benefits to decentralized purchasing include local purchasing of supplies when they are required, each department can purchase the right quantity at the right quality that comes with experienced buying and distinct knowledge, and the replacement of defective materials takes less time. Disadvantages of this purchasing structure include losses to the organization of the benefits of aggregated demand and bulk purchasing, the risk of over and under ordering of materials by inexperienced staff, less effective control of materials and their costs, and lack of cooperation and coordination among various departments.

Overall, centralized purchasing provides the most control to a purchasing organization and is the most cost effective while decentralized purchasing gives the most freedom for buying and is more effective at getting what's ordered to the customer quickly.

No matter the purchasing system, purchasing plays a critical role in today's economy. Figure 1.1 below shows that with a simple 5% reduction in external

purchases, which is achievable for most organizations, gross profits can be increased by 50%! What a remarkable difference a focused effort can make.

Figure 1.1



University Procurement

Traditionally, University procurement has been decentralized with some centralized aspects. These centralized aspects come into play wherever technology is used to make purchasing more efficient and centralized. This decentralized approach is appropriate for most educational institutions due to the number of departments they have, the physical span of their operations, and the number of faculty and staff needing and placing orders. During my research I evaluated and interviewed 4 institutions, Ferris State University, Western Michigan University, Central Michigan University, and The University of Pennsylvania. All but one of these institutions (University of Pennsylvania) has implemented the eProcurement technology necessary to maximize its efforts and

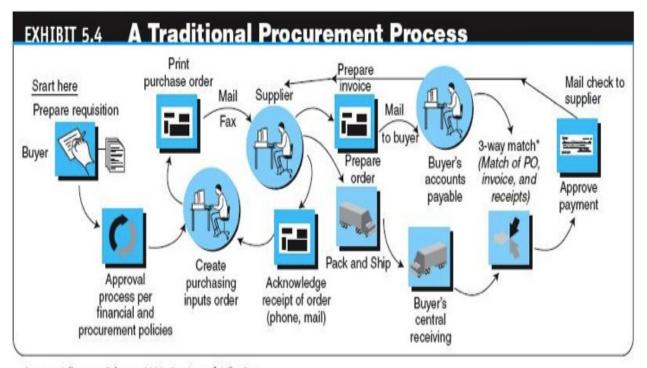
efficiencies. I chose these institutions for 2 reasons. All of them are local and they all are of similar size to Grand Valley. When I interviewed the purchasing personnel at these, I'll refer to them as traditional institutions, I found a lot of similarities between their structures.

First, they all have purchasing department personnel dedicated to handling purchases of a specific nature, mostly purchases that involve spending over a certain threshold. Western for instance, allows their employees to purchase goods within certain guidelines that are under \$5,000. Once the \$5,000 threshold is reached, the purchasing department handles the purchases through a bids, where they would seek out the best competitive offer for the goods or services being purchased. All of the traditional institutions had these thresholds in place, guidelines on what the employees could and could not purchase, and purchasing card systems where the faculty purchases could be reviewed and reimbursed more easily. Some universities, like Grand Valley and Ferris, have banner systems where employees submit purchasing requisitions to vendors of their choice as long as it's under \$10,000 (In Ferris' case). I asked each of these traditional universities for specific financial information that could be broken down into metrics such as how much is spent on maverick buying (purchases outside contracted vendors), vendor metrics, even the yearly purchased amounts by each department. I was startled to find that not one of these institutions could pinpoint any of this information for me. To their credit, all of these universities did have some forms of automation to help with the purchasing process, but in the big picture, it's not nearly enough to make any of them as cost effective as they should be.

In traditional industry, where supplies are purchased, manipulated, and sold to an end customer, successful companies track purchasing down to the cent. They exercise cost savings initiatives to keep their supply prices competitive and track vendor performance using tools like scorecards to ensure they're getting the best products and services. Why wouldn't institutions, although they are not competing for profits and market share, be analyzing the same metrics to maximize the effectiveness of their spend and operations? With 98% percent of educational institutions nationwide falling short in having the type of eProcurement systems in place they need to gain visibility over spending or implement a strategic sourcing program, it is clearly seen that this hasn't surfaced at the forefront of importance (Meier 2009). As governmental funding continues to get cut, institutions like Grand Valley are realizing that stepping away from traditional procurement towards eProcurement is what's necessary to make education thrive.

EProcurement Solution

Traditional procurement is a thing of the past. Exhibit 5.4 breaks down how extensive the traditional process really is, yet most educational institutions still conduct most of their procurement using its extensive processing techniques. The more human interaction with a transaction involving things like approval processes and paperwork, the more costly it is to an organization and the more time it adds to the process. EProcurement on the other hand, as put by Valerie Rhodes in her work *Old-School*

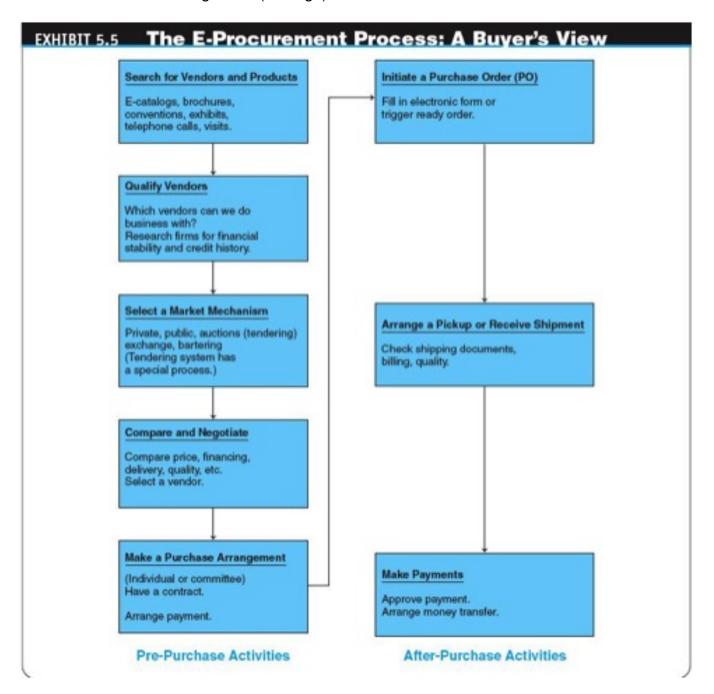


Source: Ariba.com, February 2001. Courtesy of Ariba Inc.

Purchasing to eProcurment, is a sourcing tool that gives freedom to end users to shop vendor punch out or hosted catalogs that have been selected by their institution (2012).

On average, EProcurement solutions cost \$1 million and average 6 -12 months to implement. With a simple glance, it is easy to see the difference eProcurement makes in comparison to traditional procurement (see Exhibit 5.5). Implementing these solutions include benefits such as increasing the productivity of purchasing agents,

lowering purchasing prices by combining purchases, and improving the flow of information and its management (Kosalge).



Source: Parag Kosalge

The reason these universities could not give me specific financials on their spending is because they do not have to tools in place to capture these metrics. With

eProcurement tools, organizations can identify and negotiate with multiple suppliers, shorten their sourcing cycles by 25%-35%, and reduce their material prices by 5%-10%. Potential to lower administrative costs by up to 70%, cut maverick buying in half, and reduce inventory costs by 25%-50% are also among potential benefits (Kosalge).

University of Pennsylvania

The University of Pennsylvania is the last school I chose to look at when doing this project and one of the few schools in America to implement a drastic eProcurement system successfully. In its first decade of use, the system produced an astonishing \$88.7 million in savings (Meier 2009). This cost savings is just one of the benefits the university drew from implementing the system. Others include shrinking the waiting time for supplies to arrive with orders from 18 days to less than one, negotiation of more favorable terms and conditions with suppliers, and freeing the budgets of university departments to take more aggressive measures in Penn's pursuit of academic excellence (Maier 2009). This transformation was not at all easy and at the beginning of its journey, Penn's purchasing function, as put by Ralph Meier, was a processing function, a bureaucratic necessity that on the surface contributed little strategically and delivered few tangible results to the bottom line and the people it served. This sounds a lot like most educational establishments today, but Penn unlike most, chose to do something about it. In the mid 1990s, the leadership at Penn placed a new emphasis on a set of goals that significantly changed that role of procurement and paved the way for cost containment efforts that would clearly demonstrated the potential of a strategic approach to buying in higher education (Maier 2009). A commitment was made to automate the administrative systems, paper-based processes were eliminated, and the

Purchasing Services Department was, for the first time, presented with a cost containment goal. As with any other organization, going through such drastic changes wasn't easy or well received by all. When asked, "What's the biggest thing that purchasing can improve upon at your university?" the local educational institutions I spoke with said more teamwork and use of automation. What better way to do this than with an eProcurement tool? One that cuts costs, strengthens efficiency, and gives benefits to the institution, its students, and faculty. To start, all it takes is a commitment to make things better.

Recommendations

My recommendations to Grand Valley State University as it moves forward are to invest in the necessary technology that will make these cost savings a reality.

Implementing stricter guidelines on the vendors faculty and staff are allowed to purchase from and consolidating its supplier base is an alternative that will help GVSU cut many of its unnecessary costs in the mean time. Because decentralized purchasing is the most effective purchasing structure for this university, the next goal is to move beyond that to take advantage of the benefits that come with centralized aspects of purchasing.

Grand Valley has been recently introduced to an eProcurement tool being offered for free by the state of Michigan. BuySpeed has been offered to local governments, schools, and universities in an effort to, "Alleviate budget shortfalls and reduce costs across the state" (Tolivarri 2013). Although hard to believe, this free tool will eliminate the need for investment by GVSU in multi-million dollar technology as the government had already done so. The goal in offering this procurement transformation tool from

Periscope Holdings is to be able to make the state more effective as a whole and to draw the benefits that come from aggregating demand to receive greater discounts. According to Phil Jeffery, Chief Deputy Director for the Michigan Department of Technology, Management, and Budget, "The new eProcurement solution will improve state purchasing and allow for better data tracking, giving the state a competitive advantage when it comes to obtaining the most for the taxpayer dollar" (Tolivarri 2013). Through BuySpeed, universities can take advantage of the purchasing contracts already established by the state and manage their local procurement processes. With BuySpeed offered for free, the cost barrier is out of the way and the commitment for change is the only hurdle left.

In the article *Old-School Purchasing to eProcurement*, Gina Adams, Director of Purchasing at Colorado College says, "Resistance to change was the biggest challenge and, as with any other new initiative, the key has been thoughtful discussions and communication to campus. The response (the new tool) receives from the campus users will ultimately be how its success is measured" (Rhodes-Sorrelle 2012). Grand Valley can take a lot from looking at other universities who have gone through the process already. Tom Kaloupek, Director of Materials Management at Virginia Polytechnic Institute and State University, shares several lessons his institution learned. "First, you must get top level buy in." If Grand Valley takes this tool to the top level and gains their buy in, getting the rest of the university on board will soon follow. Tom goes on to explain the importance of having a dedicated team of purchasing, AP, and IT professionals, the benefits it gives to suppliers from being in your marketplace, and

most importantly, how it is a lot of work but in the end is transformational and well worth doing (Rhodes-Sorrelle 2012).

With all of the resources they need at their fingertips, all Grand Valley must do is make a decision for change and get people who support it to follow it thorough until its completion. It is my opinion that investing time and financial resources to continue business as usual or implement other alternatives would be a waste. BuySpeed provides the best solution right now that will bring Grand Valley State University into the age of 21st century procurement.

Conclusion

As educational institutions like Grand Valley State University continue to thrive and expand while government resources continue diminishing, it will either be at the expense of its students or its creative efforts in making a difference. Ralph Maier says it best in that, "Supply management and procurement professionals today have the opportunity to institute real change and play a key role in generating the savings that absolutely must be achieved to ensure that the education system continues to thrive" (2009). Grand Valley State University has been named among the "Best in the Midwest" colleges and one of America's 100 Best College Buys. Let's continue to be the best, doing what's best for the University and its students.

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