

By Nathan Norman and Tanisha McClinton

at time when budget cuts are taking place at institutions everywhere, the need for cutbacks became even more vital at the University of Michigan's Plant Building Services Department (PBS). This department had to make a decision on how to deal with the constraints as a result of the decline in state funding. Whenever resources are scarce, a company, institution, or department must look at the most efficient way to reallocate resources to maintain and enhance services. This is exactly what PBS was able to accomplish. In December 2002, PBS entered into a formal agreement with University Stores. This was a collaborative effort that resulted in benefits for both parties.

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Plant Building Service History

In 1999, warehouse manager Richard Williams wanted to address the lack of space available in the university's warehouse facility. The warehouse was unable to meet the increased demand for product storage space (due to the growth in serviced square footage on the Ann Arbor campus). After researching several options, a proposal to build a new facility that would accommodate the need for space, now and in the future, seemed like the best solution. The new facility was approved and built in 2000. With the new warehouse built and the need for space addressed, PBS focused their attention on a new problem, an inefficient warehouse management system. The software then being used was incompatible with the University Stores' software, which made communications difficult. In addition, this process was inefficient because it took too much time, too many resources, and was prone to errors.

Looking Into New Resources

As a result of decreases in state funding in 2001, budget cuts were inevitable. Programs and procedures that were vital to the department were at risk, as well as a reduction in workforce. The department had to evaluate activities and identify those activities that were under utilized and prioritize where resources should be spent.

PBS's approach was to increase productivity and consequently reduce overall operational cost. One of the areas targeted for improvement was the warehouse operation. Plant Building Services took two years researching the benefits of outsourcing the University Stores operation, which supplied about 90 percent of all supplies to PBS. They did this by meeting with external distributors for pricing, lead-time, customer service, etc. The department compared the quotes from outside vendors with identical products that were already being delivered through University Stores.

At that time there was no formal agreement between PBS and University Stores, which meant that prices and product agreements weren't always consistent. To alleviate some of the confusion, both parties began to weigh their options. At that time, building services departments at other universities were looking toward outsourcing; Plant Building Services began doing the same. They were seeking opportunities for cost savings. Not only was PBS looking to save money, it was also looking at other benefits that generally come along with outsourcing such as: increased technical support, warehouse management training, and improved customer service. The department was looking at these benefits to improve the inefficiencies at the warehouse. To their surprise, the prices that were being charged by University Stores were very competitive with outside distributors.

Building Services and University Stores Partnership

In recognition of the competition that University Stores was able to offer, PBS began to explore other, more efficient,

advantages they may be able to provide. There were some cases where the outside distributor's prices may have appeared to be lower than University Stores' at first, but when the administrative costs were accessed to Plant Building Services, it was either equal in price or above those charged by University Stores.

Some of the benefits that the department was looking for in outsourcing were also able to be provided by University Stores, such as a new warehouse management system that would give Plant Building Services direct contact to University Stores. University Stores would be able to track inventory at the PBS' warehouse, replenish stock in a timely manner, and provide reports that would aid Plant Building Services. This would also greatly improve communication. University Stores would be able to provide an inventory management system within the warehouse facility, which offered the benefits of having a more efficient warehousing operation.

The costs associated with this process represented a significant savings to the department. Plant Building Services began drafting a formal Service Level Agreement with University Stores. Through this collaboration, University Stores was able to develop a customized process for ordering, and provide system support and ongoing training for the staff of Plant Building Services. In an effort to keep costs at a minimum, University Stores agreed to buy the inventory and set up the PBS warehouse facility as a division within the University Stores Warehouse Management System. By proceeding with this process, it would mean there would be shared control of the operation.

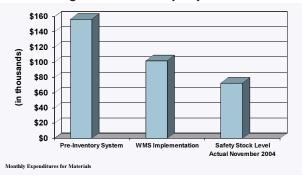
A major benefit to entering into this agreement is that PBS would not have to secure another software license which would have also included software cost of approximately \$250,000. The advantages to the department definitely outweighed the disadvantages, and in November 2003, Plant Building Services and University Stores entered into a formal agreement.

In order to prepare for the collaboration, new hardware had to be installed in the warehouse. The process began by assigning product locations, establishing the warehouse pick paths, reviewing product usage reports to set replenishment levels, and training Plant Building Services staff in receiving, stocking, cost, and order processing.

Current Situation

Plant Building Services has experienced tremendous benefits from their partnership with University Stores. One example is reduced lead time which results in lower emergency stock, leading to less money being tied up in inventory. Also, there is an improvement in inventory management because of the shared resources. For instance, Plant Building Services now uses University Stores' warehouse management software, technical support, and warehouse management support. PBS also has the advantage of sharing purchasing knowledge and administrative support with University Stores.

Figure 1 - Inventory Expenditure



The improved communication between University Stores and Plant Building Services definitely helped this transition, and the figures tell it all with the overall reduced markup of 14.5 to 9.4 percent in two years. As an auxiliary, University Stores is charged with funding its own operation. In the Service Level Agreement, Plant Building Services guarantees University Stores a predetermined dollar volume in sales. As a result of this guarantee, University Stores is able to reduce the margin applied to the products and services they offer. University Stores is also able to negotiate better pricing with their suppliers based upon volume buys.

Future Aspirations

University Stores is moving toward becoming more of an Integrated Service Center, offering additional services from inventory management to asset tagging and beyond.

By using University Stores, not only is Plant Building Services assured, but the University of Michigan knows that the people on this campus and in their facilities are employees of the same university and are expected to follow certain rules and regulations. The collaborative efforts between Plant Building Services and University Stores has allowed University Stores to live its vision of becoming the premier logistical service provider in fulfilling customer needs within the University of Michigan environment. They were able to maximize service and quality through the effective use of people, processes, and technology by providing specialized inventory management, warehousing, and delivery solutions. In order to ensure the longevity of this collaboration, both parties will continue to search for ways to save money, improve communications, and run more efficiently.



Meeting between Building Services and University Stores. From left: John Bogi, Nathan Norman, Lynette Wright, John Gleason, Zita Gillis, Rose Griffith, and Carl Smith