Administrative Process and Decision Support Report

Administrative Processes and Decision Support Work Group Definition

The USM has made major investments in technology to operate our institutions, provide services to members of the university community and others, and to support planning and reporting. Effectiveness in these activities, however, requires more than technology investments, it requires appropriate business processes that make appropriate use of the tools as well as people who are knowledgeable, collaborative, and fully capable to take advantage of new approaches and tools as they develop.

Traditional enterprise technology is based on automating historic processes and producing necessary reports based on those processes.   Newer technologies have offered the ability to move from staff-intermediated processes to increased self-service. Emerging technologies are allowing much more personalized service. Similarly, regarding decision support, historic activity reporting is evolving into predictive modeling that will allow decision makers personal access to alternatives to various decision options.

Study Background

The work group reviewed similar initiatives and found that such initiatives take two primary paths, (1) improvement in existing processes and services, or (2) innovation. The former is an enhancement in the efficiency or effectiveness in an existing method or process. The latter is a design and implementation of an entirely new or redone process. Simply put, it is doing something different rather than doing the same thing better. Most often these initiatives fall in the category of improvement. Both improvement and innovation are important and valuable, however, understanding these differences is key to the change process. A combination of improvement initiatives and true innovation could advance the goals of greater efficiency and effectiveness, cost savings, revenue generation, and improved outcomes. Potential elements reviewed include shared services, outsourcing, information technology, use of benchmark information for success measurement, decentralized versus centralized structures, financing the evolution of these efforts, and expectations and realization of Return on Investment.

In addition, a preliminary search for successful models surfaced the system-wide approach at the University of California System with delegation to and support of individual institutions as one particularly worth studying further. The UC System's Working Smarter initiative is built around participation by each institution, with results reported at the institution level, while providing a consistent and clear vision and direction for the initiative. The work group found this approach especially relevant and well suited to the USM effort. The UC system initiative is dedicated to saving $500 million dollars in administrative and process cost, and to reinvesting those savings in critical

mission initiatives, directly benefiting students and contributing to their success, and enhancing the research enterprise. It is built on encouragement, innovation and improvement at every level.

Study Process

The work group did independent work in consulting user and industry experts both internal and external to the University System of Maryland. This included tapping into external expertise about successful and unsuccessful efforts across higher education and other industries (particularly health care), and critical elements of successful initiatives.

Identified Drivers

Four main drivers have been identified:

Reduced cost – This could be achieved by decreasing operating expenses such as personnel and cost of goods, or reducing capital and other one-time expenditures.

Cost avoidance-This could be achieved by eliminating duplicative costs in one or more areas, or by eliminating the need for future one-time expenditures such as computer servers or staff expansion due to growth.

Enhanced or improved, and more compliant processes – This could be expressed in decreased time to complete a process, decreased error rate, or increasing transaction compliance with policy or law.

Increased revenue-The revenue increase could accrue anywhere in the business cycle, be it to a school, the central university, or the university system.

Work Group Recommendations with Suggested Aligned Measures of Effectiveness

Recommendation: Expand the services of UM Ventures to all USM institutions as appropriate in order to avoid duplication of costs and support while leveraging available expertise.

UM Ventures provides commercialization and technology transfer support to faculty, staff and students to bring discoveries to market. This effort primarily focuses on the research effort of faculty. UM Ventures was created as a joint office and effort between UMB and UMCP under the MPowering the State banner, and led by a single person. It has increased its staff with MPower funding and has entrepreneurs-in-residence and site-miners who connect faculty and their research discoveries to needed services and companies, agencies or individuals with practical need of the discovery. UM Ventures has created one-stop service with a single entry point for external companies and entities looking to work with faculty. Successfully implemented at UMCP and UMB, UM Ventures could expand

support to remainder of the System in an incremental fashion. This would require increased personnel, but could be done in a manner that avoids greater costs and the inefficiency of each university trying to develop or expand its own commercialization and technology transfer office. The existing leadership and expertise may also bring other university efforts up to speed more quickly. This should result in increased revenues internal to the universities, and increased economic development for the state.

Measurements: Cost reduction, cost avoidance and increased revenue.

Recommendation: Exercise the autonomy afforded USM institutions through legislation enacted in 1999 in the area of procurement. In addition, USM should investigate an on-line procurement "marketplace" solution, like SciQuest or another application, as a means to maximize purchasing power while improving compliance.

Recapturing a greater level of autonomy in the procurement process would reduce both the direct expense of goods and services purchased, and the indirect expense resulting from cumbersome procurement processes. This will need to be carefully reviewed to determine what benefits will be concretely gained as well as the challenges that need to be overcome to achieve them.

The USM Service Centers for capital projects, located at UMB and UMCP, have identified improvements, in conjunction with several USM institutions, to enhance USM autonomy and reduce growing oversight and reporting requirements from both within and outside of USM. These suggestions were recently reviewed with USM staff. Examples include the following:

- Revise the USM Procurement Policies and Procedures so that the threshold for modifications requiring BPW approval would be $1M, as is the case for contracts (per HB 422).
- Increase the Chancellor's delegated authority to approve project change orders from the current $500K threshold to $5M.
- Revert to the previous practice of BPW approval of awards for Construction Management at Risk contracts to include the full award amount for pre-construction and construction negating the need to obtain subsequent BPW approval for each GMP amendment for construction.
- Pursue delegation authority from MDE for storm water management and erosion control; the current process is delaying the start of construction for 9-12 months.
- Obtain MCE blanket waivers for purchases under $25K.
- Obtain relief from the requirement to take any GO funded contract award to BPW for approval at the first $1.00. In reviewing the USM agendas submitted to BPW for approval in FY 2013, an estimated 40% would not have required that approval if they were not GO funded.
- Update the 1994 USM Service Center Guide for consistency and increased flexibility.

New on-line procurement "marketplace" solutions, such as SciQuest, are a relatively new technological advancement that capitalizes on buying power, collection of robust procurement data, and ease of ordering products and services at the best price. These systems can provide the following improvements:

- Process efficiencies with requests for payment and creation of purchase orders.

- Obtaining good, rich data to make data-driven decisions, analyze spending and consolidate supplies; make sophisticated purchasing decisions.
- Onboarding of vendors to take advantage of payment discounts and signing bonuses that provide additional savings.
- Strategic sourcing.
- Improved monitoring of and compliance in corporate purchasing card (P-card) use. These systems can identify frequently used vendors and dollars spent with them, so that competitive pricing can be established. The systems also can be designed to disallow purchases which are contrary to P-card guidelines, enhancing compliance controls.

Measurements: Cost reduction, enhanced process.

Recommendation: Evaluate shared services guidelines for USM institutions within each institution in the areas of general administrative and business services such as payment processing, purchasing, travel, etc., HR and payroll, and research administration – pre and post award.

Shared services models are emerging in higher education institutions across the country, especially at large complex institutions, in response to the complexities arising out of robust new administrative systems, rapidly expanding regulatory and compliance requirements, and shrinking financial resources. These models generally involve the establishment of a strong provider group that takes responsibility for all administrative and financial activities previously performed by generalist staff located in individual departments. Benefits realized at other campuses through implementation of shared services centers include the following:

- Higher level of specialization and expertise, allowing for proactive problem resolution.
- Broader knowledge of administrative and financial policies and processes, resulting in stronger support and appropriate back-up for all departments.
- Improved transactional flow and accuracy to decrease duplication of effort and errors.
- Increased standardization of business processes across the institution.
- Greater use of technology to improve communications, monitoring, and reporting.
- Strengthened compliance with internal and external requirements.
- Improved audit results.

Each institution will need to evaluate the applicability and best potential structure to implement shared services units to provide varying combinations of administrative and financial services. Different organizational models also exist, including multi-departmental, college-level, and centrally located shared services operations. These shared services units have the benefit of creating high-volume users who are content experts. This allows for more efficient transactional and support functions, stronger compliance and standardization, and potential decreases in personnel expenses over time to accomplish the same work.

Measurements: Cost reduction, cost avoidance, enhanced process, revenue increase.

Recommendation: Establish guidelines for greater centralization or standardization of key information technology services and support within each USM institution.

Information technology is often a prime area of focus for innovation and efficiency initiatives with good reason. Duplicative equipment, services, and variable equipment causes increased capital and personnel costs, work-arounds, inefficiencies in organizations IT system, and potential security issues. For example, a particular school may choose to install a separate email system based on the perception that it may be more reliable or available. However, in many cases that email system would be connecting over the university's main email network. If this is the case, the school would have simply created an additional potential fault in the system as email would now travel from the school's network to the university network and then external to the university. In addition, there would be increased equipment such as email servers, and the personnel to manage the servers. In this example, a more expensive, redundant system with an additional breakpoint was created. Situations like the one described need to be understood, and to be sure effective information technology systems can be centralized or decentralized. This initiative should recommend a thorough examination of information technology structures, organization and service delivery to determine optimal arrangement for each university's particular setting and needs. This may decrease capital expenditures for equipment, potentially reduce personnel expense, with the expectation of increased service, expertise and security.

Measurement: Cost reduction, cost avoidance, enhanced process.

Implementation Recommendations (include benefits and challenges, and how BOR carries recommendations forward)

Summary:

The Board of Regents and the Chancellor should establish a system-wide innovation initiative with high-level directives that each institution should evaluate to determine how best to apply in their setting. This work group recommends that each institution evaluate the specific recommendations above. In terms of next steps, these specific recommendations should be discussed with USM institution vice presidents for administration and finance and the vice presidents for information technology, and others as appropriate. It is also recommended that each institution have a limited number of major innovation initiatives. Experts suggest that an institution can accomplish one or two major innovation initiatives at a given time. Therefore, phasing is particularly important.

1. Recommendation: Institutions should examine each of the above recommendations and evaluate them in a centralized and decentralized model to determine the best model. Both models can offer viable solutions to many of the above referenced concepts. However, expected outcomes, service levels and savings identification and realization need to be well understood by all parties.

2. Recommendation: Change management is critical, and as learned, often the most ignored part of the process. Change management takes constant attention with strong two-way communication regarding proposed changes, clear articulation of benefits and challenges, and frequent updates.

3. Recommendation: Establish and communicate clear goals for the initiatives, with specific intent and benefits being sought.

4. Recommendation: For specific initiatives there should be service level agreements created between the service provider and the service receiver with clear understandings of responsibilities and performance expectations.

5. Recommendation: The Board of Regents should establish a USM website with a related page for each institution that allows transparent reporting of progress, successes and challenges. This allows for sharing of ideas, submission of suggestions, and assists in long-term sustained change management. This site should include concrete performance metrics and milestones to ensure accurate measurement of achievement.

Further Discussion of Benefits and Challenges

Any such initiative must have clearly defined benefits to warrant execution. In the case of this particular effort the clear benefit is more efficient and effectively run institutions. This includes costs savings that result in money to reinvest in key mission priorities, and keeping tuition rates down to benefit USM students. These benefits accrue to current and prospective students alike, as well as faculty and staff.

Effective implementation of such initiatives also carries inherent challenges. Chief among them is the ability and persistence of leadership to maintain the change management process. Universities can be resistant to change, especially when those changes are not well justified, communicated and managed. There are currently several examples in the country of valid university led process changes that have gone badly because the change was not effectively managed.   A second challenge is the resistance of schools, departments, or units to the change itself. Change is often perceived as threatening, a loss of autonomy or control, or jeopardizing a particularly valued unit or individual.

For example, information technology systems management is an excellent area to examine for such an effort. However, leaders at many levels often view information technology as a key service they must control. Server management or software program delivery can be viewed as a local proprietary need, rather than a standardized, critical "utility" and enabling service. This often occurs because other providers of information technology service can be perceived as less effective or responsive than one's own. This creates incredible challenges to realizing seamless, effective and secure information technology services, be it in a centralized or decentralized model.

Other challenges include properly staffing initiatives, and dedicating high-functioning managers to lead them. This often requires an upfront investment, with the return-on-investment being realized over-time. In addition, efficiency initiatives often mean an eventual reduction of positions which can be very difficult for organizations to accept. These challenges are not unique or insurmountable by any measure. They do require consistent leadership, dedication and support. However, the results both financial and operational can be considerable.