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MSU Business Process Review Business Case: Purchasing Team

Payment Approvals

Executive Summary

The Purchasing Team researched the current purchasing practices within each MSU campus. While we found that the four campuses are consistent with compliance rules required by the State, as they have delegated authority through MSU Bozeman Purchasing, the only differences (though slight) were related to volume on each of the campuses. Based on this knowledge the team focused on processes and tools to improve the efficiency of purchasing as well as the customer satisfaction in performing its purchasing.

The purpose of this process modification is to streamline the payment approval process. During our investigation period, analysis revealed two non value added processes. Both of these processes were the cause of considerable delays in the processing of payments. First was the issue of a comprehensive manual review. Currently every BPA submitted is reviewed for compliance by the purchasing department. This is a very time consuming and labor intensive process as hundreds of BPA's are submitted daily. Furthermore, research done by the Accounts Payable Team has shown that approximately 70% of all BPA's submitted are under \$500.00.

The second non value added process was that of requisition approval, clarification and corrections. Customer surveys ranked this area as the highest for need of improvement. Currently all of these tasks are handled by paper mailing. This routing of paper documents is often the most time consuming step of the procurement process.

As multiple surveys revealed, delays in the purchasing process were of the highest concern for our customers. Therefore, we focused on finding a solution to significantly reduce these delays. The BPR Purchasing Team in tandem with the BPR Accounts Payable Team recommended the BPA Review process only apply to those BPA's whose dollar amounts are greater than \$500.00. Not only does this significantly reduce delay time for vendor payments, but it provides an obvious labor cost savings as well. Also, because purchasing regulations are not applicable at this spending level, compliance is not an issue. (Note: certain vendors would be flagged as providers of controlled commodities.). In order to further reduce delays the team recommendation was to reduce the amount of paper mailing to various areas for clarifications and corrections. Electronic routing reduces delays normally in the range of days and weeks to one of hours or a day or two at most. This will be done primarily by email correspondence, including pertinent documents as attachments.

We feel that by modifying the process of payment approvals, we will accomplish the following objectives:

- Reduce delay time caused by paper mailing for approvals, clarifications and corrections.
- Reduce potential for lost documentation.
- Reduce labor cost by making BPA Review process only applicable to those BPA's whose dollar amounts are greater than \$500.00.
- Increase customer satisfaction by increased payment efficiency.
- Enhance vendor relations due to prompt payments.
- Improve morale of payment approval staff, due to reduction of monotonous review tasks.

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A. Introduction

1. MSU Business Process Review

The four campuses of MSU were invited to participate in a Business Process Review (BPR) of all administrative and financial business processes across the four campuses.

There were several strategic objectives:

- o develop a single process to be used by the 4 campuses,
- o have a consistent set of definitions for all data elements, and
- o improve institutional and system efficiencies and effectiveness.

Each of the processes will be:

- o Redesigned,
- o Modified, or
- o Remain unchanged.

Each process will have a business case and cost benefit analysis to support the final recommendations.

The investigation and development phases (Phases I and II) occurred during 2006. Implementation of approved recommendations will occur during 2006 and 2007 in alignment with business cycles and resources availability.

a. Summary of Purchasing Processes to be Redesigned or Modified.

Process Title	Recommendations	Interim Recommendations
General Services	Modify	Modify
Buying Goods	Modify	Modify
Contract Administration	No change	No change
Payment Approval	Modify	Modify
Compliance	Modify	Modify

The Purchasing Team reviewed five processes in Phase I and brought the above recommendations to the Oversight Committee in June. In the meantime, we have reviewed in greater depth the four modifications. This document describes Purchasing in its current state and our recommendations.

b. BPR Objectives

The Purchasing Team’s goals for Purchasing are to:

- increase customer satisfaction by redesigning page with interactive instructions and electronic purchasing forms,
- improve efficiency of purchasing staff and provide better customer service with electronic submission of Purchase Requisition and electronic approvals,
- improve efficiency of payment approval with the incorporation of approval queues,

- improve efficiency of the purchasing process by converting all current Excel logs to one Access database
- provide improved training, as well as easier access, updated policy manual and electronic forms for additional customer satisfaction and efficiencies.

c. Scope of This Case

The Purchasing Team reviewed our purchasing practices in Phase I. During that review, we found that the four campuses are consistent with compliance rules required by the State, as they have delegated authority through MSU Bozeman Purchasing. The only differences (though slight) were related to volume on each of the campuses. Therefore, we recommended a redesign at the end of Phase I. Through further research and refinement in Phase II, we now recommend a modification for this case. Our goal was to streamline the payment approval process. The BPR Purchasing Team in tandem with the BPR Accounts Payable Team recommended the BPA Review process only apply to those BPA's whose dollar amounts are greater than \$500.00. This provides an obvious labor cost savings. Also, because purchasing regulations are not applicable at this spending level, compliance is not an issue. (Note: certain vendors would be flagged as providers of controlled commodities.). In addition, the team recommendation was to reduce the amount of paper mailing to various areas for clarifications and corrections. Electronic routing reduces delays normally in the range of days and weeks to one of hours or a day or two. This will be done primarily by email correspondence, including pertinent documents as attachments.

2. BPR Business Case Purpose

This business case describes the Payment Approval process, the data the Purchasing Team collected to review it, and the recommendation we have developed. The Oversight Committee and President Gamble, may use this document to inform their decisions to approve our recommendation.

3. Background

The process of payment approval is an integral part of the purchasing process. Each campus is responsible maintaining a payment approval process.

a. Problems and/or Opportunities Addressed by BPR

The Purchasing Team had identified several opportunities identified by BPR including:

- Reduce delay time caused by paper mailing for approvals, clarifications and corrections.
- Reduce potential for lost documentation.
- Reduce labor cost by making BPA Review process only applicable to those BPA's whose dollar amounts are greater than \$500.00.

b. Connections to other Projects/Products or Programs

- Banner
- Microsoft Office Products

c. Other, Alternative Actions

The Oversight Committee and President Gamble have already approved the recommendation of the accounts payable team to not require the review of invoices under \$500.00. If the recommendation for sending correction notices electronically is not approved then we will resume using paper.

d. Current Problems or Limitations

We do not know of any problems or limitations at this time.

B. Methods and Assumptions

In Phase I, the Purchasing Team developed flowcharts for the Purchasing process on all four campuses. We collected data on the amount of time each step takes (flowchart analysis) as well as how much of each employee's FTE is devoted to the process overall (workload distribution analysis). There were two surveys sent out to various constituents of the process. After comparing the data collected for each campus, we discovered that there is significant agreement among the campuses regarding process improvement.

During investigation, analysis revealed that the routing of purchasing documents was a non-value added process. Customer surveys revealed that the delays caused by mailing documents back and forth for corrections and clarifications were of great concern. This process was rated highest in order of need for improvement.

Currently every BPA submitted is reviewed for compliance by the purchasing department. This proves to be a very time consuming and labor intensive process as hundreds of BPA's are submitted daily. This review process carries a significant labor cost. Furthermore, research done by the Accounts Payable Team has shown that approximately 70% of all BPA's submitted are under \$500.00.

1. Business Case Scope and Boundaries

a. The Analysis Period

We based our analysis on an annual operating cycle based on time spent handling and reviewing payments.

b. Geography or Location

Bozeman, but process recommended to all purchasers, including campuses in Billings, Great Falls, and Havre.

c. Organizations

Financial Services or the equivalent office is included on each campus. Departmental purchasing specialists.

d. Functions and Positions

The Director of Purchasing, Purchasing Department and University Business Services are the principal participants in payment approvals. They coordinate with the State, stakeholders and other campuses.

e. Technology

No product costs are included in this business case. However, there will be a slight labor costs to develop new payment approval training.

2. Scenario Design

This business case compares continuing the *status quo* on all four campuses to the recommended modification to the payment approval process. The main difference between these two scenarios will be in the efficiency of payment processing.

3. The Cost Model

The financial considerations we have included are employee costs associated payment approvals, preparation time of correction documentation and employee search time in finding documents in need of correction.

4. The Benefits Rationale

Aside from the financial considerations, we also considered the following non-monetary benefits:

- Reduce delay time caused by paper mailing for approvals, clarifications and corrections.
- Enhanced vendor relations due to prompt payments.

5. Data Structure

The cost/benefit analysis compared costs for business as usual versus the implementation of these modifications.

6. Data Sources and Methods

a. Data Sources

We used the following data sources for our analyses:

- Flowcharts
- Workload Distribution Chart
- Cost-Benefit Analysis
- Surveys
- Peer data

b. Methods for Estimating Costs and Benefits

No unique cost/benefit methods were used in this analysis.

7. Assumptions

We combined the two processes in our cost benefit analysis. The assumptions are that purchasing will be reviewing less so there will be fewer correction notices for purchasing to prepare in addition to the preparation time being cut in half, however the reduction in the number of corrections does not necessarily hold true for the departments, but the response time to an electronic message should be less than handling paper. We assumed an annual number of BPAs reviewed by purchasing would drop from 28,600 to 15,600. We didn't think a reduction of 70% was appropriate because there are still the unique situations and the controlled commodities which might fall under the \$500.00 limit.

C. Business Impacts

Appendix C shows the cost of a comprehensive BPA review as compared to the recommended review of those BPA's in Excess of \$500.00 combined with the addition of switching from paper correction notices to electronic notices. Appendix D shows the cost benefit of each taken separately.

a. Benefits and Gains

As stated earlier the financial benefits attained from the recommended payment approval modification will be improved accuracy and efficiency of payment processing.

b. Expenses (or "Operating Expenses")

The initial operating expenses incurred will be the training personnel as with any process change. No on-going expenses are expected from this recommendation.

c. Analysis Summary

- Time savings on an annual basis are substantially positive.
- Development and implementation costs are marginal.

2. Analysis of Results

The recommended process will save the campuses about 724 hours per year.

3. Non-financial and Non-quantified results

- Improved timeliness in the processing of transactions,
- Reduce delay time caused by paper mailing for approvals, clarifications and corrections.
- Enhanced vendor relations due to prompt payments.
- Improved morale of payment approval staff, due to reduction of monotonous review tasks.

D. Sensitivity, Security and Risk Analysis

There are no sensitivity, security, or risk concerns.

E. Conclusions and Recommendations

The Purchasing Team recommends the modification of the payment approval process. The BPR Purchasing Team in tandem with the BPR Accounts Payable Team recommended the BPA Review process only apply to those BPA's whose dollar amounts are greater than \$500.00 This provides an obvious labor cost savings. In addition, the team recommendation was to reduce the amount of paper mailing to various areas for clarifications and corrections. Electronic routing reduces delays normally in the range of days and weeks to one of hours or a day or two. This will be done primarily by email correspondence, including pertinent documents as attachments.

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F. Appendixes and References

Please see attachments.