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MSU Business Process Review Business Case: Accounting Functions Team

Fixed Assets

Executive Summary

Fixed Asset Management at MSU consists of completely and accurately accounting for the University's fixed assets including, acquisition, disposal, and inventory, in accordance with State and Federal Regulations. The accounting for property is essential to the preparation of satisfactory and complete financial reports.

The Accounting Team reviewed our current fixed asset management processes and found similar processes with the exception of the following:

- Billings records their Non-Capital inventory valued at over \$1,000 in the Banner Fixed Asset module as well as their Capital inventory.
- Different reports and reporting tools (i.e. Access, Banner Web and Crystal) are currently being used on each campus for the Fiscal Year end reconciliation process.

We have identified four separate reports desired across the four campuses that we feel would enhance the fixed asset reconciliation process and standardize the reports used by all campuses for Fiscal Year end. We have also identified an ad-hoc Non-Capital report that could be used by the Billings campus to improve Non-Capital reporting. The new reports would be part of the Banner Web reports and could be run for each specific campus.

We have created a detailed list of the five reports that we would like to have created as well as the benefits of each report (Appendix A). We used this list to generate estimates of the time spent on each reconciliation process throughout the year and the associated salary costs (Appendix C). No software or hardware purchases are required to implement our recommendation. Analysis of these data suggests small cost savings over the long term – about \$2,419 per year across the four campuses.

We have identified many non-monetary benefits to the recommended option, including:

- Improved timeliness in running reports,
- improved efficiency in manual reconciliation process by reducing human error,
- enhanced technical support and reporting,
- standardization of the fixed asset fiscal year end reports used by all four campuses.

A copy of the Fixed Asset business case was sent to Internal Audit and IT Security for review. IT Security perceived no security-related issues with this business case. To date, Internal Audit has not responded with any concerns regarding this proposal.

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A. Introduction

1. MSU Business Process Review

The 4 campuses of MSU were invited to participate in a business process review of all administrative and financial business processes across the 4 campuses.

There were several strategic objectives:

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

Each of the processes will be:

- Redesigned,
- Modified, or
- 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 Accounting Processes to be Redesigned or Modified.

Process Title	June 28th 2006 Recommendations	Interim Recommendations
Chart Maintenance	Modify	Modify
Financial Reporting	Redesign	Redesign
Fixed Asset	Modify	Modify
Grants Management	Modify	Modify
Journal Entries	Redesign	Redesign
Reconciliation	Modify	Modify
System Management	No change	No change
UBIT	Modify	Modify

The Accounting Team reviewed eight 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 five modifications and two redesigns. This document describes Fixed Asset Management in its current state and our recommendations.

b. Business Process Review Objectives

The Accounting Team's goals for Fixed Asset Management are to:

- increase efficiency by improving time it takes to run fixed asset reports, leading to,
- improved efficiency in the manual reconciliation process by automating a large portion of the reports, thus reducing human error and streamlining the fiscal year end process,
- standardize the reporting tool used for Fixed Assets across all four campuses.

c. Scope of This Case

The Accounting Team reviewed our fixed asset practices in Phase I. During that review, we found that the four campuses use a variety of different reports to complete the Fiscal Year End reconciliation process. The software/applications used to provide these reports also varied. Therefore, we recommended a modification at the end of Phase I. Our goal was to develop and create reports designed to enhance the fixed asset reconciliation process relative to capital expenditures across all four campuses. The new reports would be created by entering a value into the Fixed Asset Module that would link the asset record to the General Ledger. The Oversight Committee endorsed this recommendation.

2. Business Process Review Business Case Purpose

This business case describes the Fixed Asset process, the data the Accounting 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 complete and accurate accounting of fixed assets is very important to the University. Adequate accounting procedures and records are essential for the protection of State property. The responsibilities of stewardship involved in safeguarding such a large public investment are of great importance to sound financial administration.

a. Problems and/or Opportunities Addressed by Business Process Review

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

- Standardization of fiscal year end reports used by all four campuses.
- Enhanced technical support by creating five new fixed asset Banner Web reports.

- Improved efficiency by reducing time it takes to run reports.
- Improved efficiency in the manual reconciliation process by reducing human error.

b. Connections to other Projects/Products or Programs

- Accounts Payable Team
- SABHRS
- Banner Finance Reports
- Financial Statements

c. Other, Alternative Actions

If the Oversight Committee or President Gamble does not approve our recommendation to standardize Fixed Asset reporting across the campuses, we propose reverting to the *status quo*.

d. Current Problems or Limitations

In our Phase I Recommendation to the Oversight Committee, we identified the additional workload to an already burdened report writing staff as a potential problem to the development and creation of five new Fixed Asset Banner Web reports.

B. Methods and Assumptions

In Phase I, the Accounting Team developed flowcharts for the Fixed Asset 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). After comparing the data collected for each campus, we discovered that there is significant agreement among the campuses in the steps of the process with the exception of the following:

- Billings records their Non-Capital inventory valued at over \$1,000 in the Banner Fixed Asset module as well as their Capital inventory.
- Different reports and reporting tools (i.e. Access, Banner Web and Crystal) are used on each campus for the Fiscal Year end reconciliation process.

We then identified four different reports that would aid in the fiscal year end reconciliation process and standardize the reports used among all four campuses (Appendix A). We also collected data on the time it took each campus to run their current fixed asset reconciling reports (Appendix B).

1. Business Case Scope and Boundaries

a. The Analysis Period

We predict time involved over one projected year based on estimates of actual time spent on Fixed Asset Reconciliation over the last year.

b. Geography or Location

Billings, Bozeman, Great Falls, and Northern are involved in this analysis.

c. Organizations

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

d. Functions and Positions

The Fixed Asset Coordinator and the Director of Financial Services (or the equivalent positions) are the principal actors in fixed asset management.

e. Technology

No technology costs are included in this business case. Our recommendation is to develop five new reports from the tools already available i.e. Banner Web Reports.

2. Scenario Design

This business case compares continuing the *status quo* on all four campuses to the development and creation of five new Banner Web reports. The main difference between these two scenarios will be in the timesavings and efficiency of the fiscal year end reconciliation process.

3. The Cost Model

The financial considerations we have included are employee costs due to time spent on the current fixed asset reconciliation process and the time it takes to run reports.

4. The Benefits Rationale

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

- Improved timeliness in running reports,
- improved efficiency in manual reconciliation process by reducing human error,

- enhanced technical support,
- enhanced reporting,
- standardization of fiscal year end reports used by all four campuses.

5. Data Structure

N/A

6. Data Sources and Methods

We used the following data sources for our analyses:

- Flowcharts
- Workload Distribution Chart
- Cost-Benefit Analysis
- Feedback from Advisory committee

a. Data Sources

All sources are internal to the BPR process.

b. Methods for Estimating Costs and Benefits

We used data collected from all four campuses in regards to time spent on the current fiscal year reconciliation process and then compared the data to the estimated time spent with the creation of new Banner Web reports (Appendix C).

7. Assumptions

For time and salary analyses, we assume that the time it takes to run similar Banner Web reports is indicative of the time it will take to run new Banner reports. In addition, due to the change in the job responsibilities in Bozeman, the salary for the Financial Manager position was used instead of the salary of the previously held position.

C. Business Impacts

Appendix C shows the current process of running fiscal year end reports on all four campuses as compared to the creation of the new Banner Web reports. Our results show that by enhancing the Banner Fixed Asset reconciling reports, we can save time and consequently money. By implementing these changes, we project total timesavings of 108.1 hours annually. This in turn provides an annual savings of \$2,419.

1. Analysis

a. Benefits and Gains

As stated earlier, the financial benefits attained from the development and creation of the new Banner Web reports will be increased efficiency in the time it takes to run the fixed asset reconciliation reports as well as the manual process of inputting the data into a workable format.

b. Expenses (or “Operating Expenses”)

The operating expenses incurred will be due to the creation of additional workload to an already burdened report writing staff. Report writers in Bozeman estimate the time involved to create the new reports at approximately 50 hours. This would result in a one-time implementation cost of approximately \$1,771.

c. Analysis Summary

- Timesavings on an annual basis are positive but not substantial.
- Implementation costs are marginal.

2. Analysis of Results

The recommended process will save the campuses about 108.1 hours per year. While there are some implementation costs, the team believes that the benefits outweigh the costs.

3. Non-financial and Non-quantified results

- Standardization of fiscal year end reports used by all four campuses
- Error reduction through greater automation.
- Enhanced reporting at minimal additional programming cost.

D. Sensitivity, Security and Risk Analysis

Since the new reports will be located on the Banner Web, there are no added security issues or risks involved. This was verified by IT Security personnel in Bozeman.

E. Conclusions and Recommendations

The Accounting Team recommends the development and creation of the five Banner Fixed Asset Web reports (Appendix A) for four-campus use. While the process of Fixed Asset Management is very similar across all four campuses, we have found considerable differences in the fiscal year end reconciliation reports. These differences are not only in the types of reports each campus is running, but also in the various reporting tools used (i.e. Access, Crystal and Banner Web).

We feel that by creating these Web reports, we will accomplish the following objectives:

- Standardize the Fixed Asset fiscal year end reports across the four campuses
- Improve the timeliness of running reports by putting them on the Banner Web
- Improve the efficiency in the manual reconciliation process by reducing human error
- By having these reports on the Banner Reports Web, we will be gaining technical support that we do not have with current reporting tools
- Enhanced reporting due to automation of much of the currently manual reconciliation process

F. Appendixes and References

Please see attachments.

APPENDIX C

MSU Administration and Finance Business Process Review									
Flowchart Data Collection Template									
(Touch) Time to Complete (Hours)									
Resource Cost	Description	BAU Avg Hours	New Avg Hours	BAU Annual Time Hours	New Annual Time Hours	BAU Annual Cost	New Annual Cost	BAU Wght AVG	New Wght AVG
22.39	Fixed Assets to GL-Annually	5.2	3.0	62	35.4	1,388	793		
22.39	Analyze GL to NIIP-Annually	7.0	4.4	83.5	53.04	1,870	1,188		
22.39	Capital Expense to Purchase-Annually	9.7	6.0	116	71.76	2,597	1,607		
22.39	Depreciation Flow-Annually	1.3	0.9	16	10.68	358	239		
21.00	Non Cap Inventory Report-On Demand	0.2	0.0	2	0.48	42	10		
21.00	File	0.8	0.8	10	10	210	210		
	Total	24.1	15.1	289.5	181.4	6,465	4,046	22.33	22.31

\$ in 1000s

SCENARIO 1 FULL VALUE CASH FLOW STATEMENT

<i>For the year ending</i>	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
	Sept 2008	Sept 2009	Sept 2010	Sept 2011	Sept 2012	
BENEFITS / GAINS						
Benefit item 1	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 2	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 3	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 4	0.0	0.0	0.0	0.0	0.0	0.0
Total Benefits/Gains	0.0	0.0	0.0	0.0	0.0	0.0
OPERATING EXPENSE ITEMS						
Cash inflows (outflows)						
Expense group A						
Central Process Costs (acctng off)	(6.5)	(6.7)	(6.9)	(7.2)	(7.4)	(34.7)
Dept Process Costs	0	0	0	0	0	0
Error Correction	0	0	0	0	0	0
Expense group B						
Paper & Storage Costs	0	0	0	0	0	0
Training	0	0	0	0	0	0
Reference Expenses	0	0	0	0	0	0
Expense group C						
Travel - training	0.0	0.0	0.0	0.0	0.0	0.0
ITC -ASG	0.0	0.0	0.0	0.0	0.0	0.0
Financial Systems - Report Writing	0.0	0.0	0.0	0.0	0.0	0.0
Total Impact: Op Exp Items	(6.5)	(6.7)	(6.9)	(7.2)	(7.4)	(34.7)
ASSETS PURCHASED						
Cash inflows (outflows)						
GROUP 1 Assets						
Assets G1 item 1	0.0	0.0	0.0	0.0	0.0	0.0
Assets G1 item 2	0.0	0.0	0.0	0.0	0.0	0.0
Group 1 Total assets:	0.0	0.0	0.0	0.0	0.0	0.0
GROUP 2 Assets						
Assets G2 item 1	0.0	0.0	0.0	0.0	0.0	0.0
Assets G2 item 2	0.0	0.0	0.0	0.0	0.0	0.0
Group 2 Total assets:	0.0	0.0	0.0	0.0	0.0	0.0
Total asset costs:	0.0	0.0	0.0	0.0	0.0	0.0

CASH FLOW SUMMARY

Cash inflows (outflows)

Benefit impacts	0	0	0	0	0	0
Expense Item Impacts	(6.5)	(6.7)	(6.9)	(7.2)	(7.4)	(34.7)
Net operating inflow (outflow)	(6.5)	(6.7)	(6.9)	(7.2)	(7.4)	(34.7)
Asset purchase (from above)	0.0	0.0	0.0	0.0	0.0	0.0
NET CASH FLOW	(6.5)	(6.7)	(6.9)	(7.2)	(7.4)	(34.7)
Cumulative Net CF	(6.5)	(13.2)	(20.1)	(27.3)	(34.7)	(34.7)
Discounted Cash Flow						
At 5.0%	(6.5)	(6.4)	(6.3)	(6.2)	(6.1)	(31.4)
At 7.0%	(6.5)	(6.3)	(6.0)	(5.9)	(5.7)	(30.3)

\$ in 1000s

SCENARIO 2 FULL VALUE CASH FLOW STATEMENT

<i>For the year ending</i>	Year 1	Year 2	Year 3	Year 4	Year 5	
	Sept 2008	Sept 2009	Sept 2010	Sept 2011	Sept 2012	TOTAL
BENEFITS / GAINS						
Benefit item 1	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 2	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 3	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 4	0.0	0.0	0.0	0.0	0.0	0.0
Total Benefits/Gains	0.0	0.0	0.0	0.0	0.0	0.0
OPERATING EXPENSE ITEMS						
Cash inflows (outflows)						
Expense group A						
Central Process Costs	(4.0)	(4.2)	(4.3)	(4.5)	(4.6)	(21.7)
Dept Process Costs	0	0	0	0	0	0.0
Error Correction	0	0	0	0	0	0.0
Expense group B						
Paper & Storage Costs	0.0	0.0	0.0	0.0	0.0	0.0
Training	0	0	0	0	0	0.0
Reference Materials	0.0	0.0	0.0	0.0	0.0	0.0
Expense group C						
Travel - training	0.0	0.0	0.0	0.0	0.0	0.0
ITC-ASG	0.0	0.0	0.0	0.0	0.0	0.0
Financial Systems - Report Writing	(1.8)	0.0	0.0	0.0	0.0	(1.8)
Total Impact: Op Exp Items	(5.8)	(4.2)	(4.3)	(4.5)	(4.6)	(23.5)
ASSETS PURCHASED						
Cash inflows (outflows)						
GROUP 1 Assets						
Assets G1 item 1	0.0	0.0	0.0	0.0	0.0	0.0
Assets G1 item 2	0.0	0.0	0.0	0.0	0.0	0.0
Group 1 Total assets:	0.0	0.0	0.0	0.0	0.0	0.0
GROUP 2 Assets						
Assets G2 item 1	0.0	0.0	0.0	0.0	0.0	0.0
Assets G2 item 2	0.0	0.0	0.0	0.0	0.0	0.0
Group 2 Total assets:	0.0	0.0	0.0	0.0	0.0	0.0
Total asset costs:	0.0	0.0	0.0	0.0	0.0	0.0

CASH FLOW SUMMARY

Cash inflows (outflows)

Benefit impacts	0.0	0.0	0.0	0.0	0.0	0.0
Expense Item Impacts	(5.8)	(4.2)	(4.3)	(4.5)	(4.6)	(23.5)
Net operating inflow (outflow)	(5.8)	(4.2)	(4.3)	(4.5)	(4.6)	(23.5)
Asset purchase (from above)	0.0	0.0	0.0	0.0	0.0	0.0
NET CASH FLOW	(5.8)	(4.2)	(4.3)	(4.5)	(4.6)	(23.5)
Cumulative Net CF	(5.8)	(10.0)	(14.3)	(18.8)	(23.5)	(23.5)
Discounted Cash Flow						
At 5.0%	(5.8)	(4.0)	(3.9)	(3.9)	(3.8)	(21.4)
At 7.0%	(5.8)	(3.9)	(3.8)	(3.7)	(3.5)	(20.7)

\$ in 1000s

INCREMENTAL CASH FLOW STATEMENT

For the year ending

	Year 1	Year 2	Year 3	Year 4	Year 5	
	Sept 2008	Sept 2009	Sept 2010	Sept 2011	Sept 2012	TOTAL
BENEFITS / GAINS						
Benefit item 1	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 2	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 3	0.0	0.0	0.0	0.0	0.0	0.0
Benefit item 4	0.0	0.0	0.0	0.0	0.0	0.0
Total Benefits/Gains	0.0	0.0	0.0	0.0	0.0	0.0
Checksum	0.0	0.0	0.0	0.0	0.0	0.0
OPERATING EXPENSE ITEMS						
Cash inflows (outflows)						
Expense group A						
Central Process Costs	2.42	2.50	2.59	2.68	2.78	12.97
Dept Process Costs	0.00	0.00	0.00	0.00	0.00	0.00
Error Correction	0.00	0.00	0.00	0.00	0.00	0.00
Expense group B						
Paper & Storage Costs	0.00	0.00	0.00	0.00	0.00	0.00
Training	0.00	0.00	0.00	0.00	0.00	0.00
Reference Materials	0.00	0.00	0.00	0.00	0.00	0.00
Expense group C						
Expense item C1	0.0	0.0	0.0	0.0	0.0	0.0
Expense item C2	0.0	0.0	0.0	0.0	0.0	0.0
Financial Systems - Report Writing	(1.8)	0.0	0.0	0.0	0.0	(1.8)
Total Impact: Op Exp Items	0.65	2.50	2.59	2.68	2.78	11.20
Checksum	0	0	0	0	0	0
ASSETS PURCHASED						
Cash inflows (outflows)						
GROUP 1 Assets						
Assets G1 item 1	0.0	0.0	0.0	0.0	0.0	0.0
Assets G1 item 2	0.0	0.0	0.0	0.0	0.0	0.0
Group 1 Total assets:	0.0	0.0	0.0	0.0	0.0	0.0
GROUP 2 Assets						
Assets G2 item 1	0.0	0.0	0.0	0.0	0.0	0.0
Assets G2 item 2	0.0	0.0	0.0	0.0	0.0	0.0
Group 2 Total assets:	0.0	0.0	0.0	0.0	0.0	0.0
Total asset costs:	0.0	0.0	0.0	0.0	0.0	0.0
Checksum	0.0	0.0	0.0	0.0	0.0	0.0

CASH FLOW SUMMARY

Cash inflows (outflows)

Incremental benefit impacts	0.00	0.00	0.00	0.00	0.00	0.00
Incremental expense item impacts	0.65	2.50	2.59	2.68	2.78	11.20
Net operating inflow (outflow)	0.65	2.50	2.59	2.68	2.78	11.20
Asset purchase (from above)	0.00	0.00	0.00	0.00	0.00	0.00
Net Incremental CASH FLOW	0.65	2.50	2.59	2.68	2.78	11.20
Cumulative Net Incremental CF	0.65	3.15	5.74	8.43	11.20	11.20
Discounted Incremental Cash Flow						
At 5.0%	0.65	2.38	2.35	2.32	2.28	9.98
At 7.0%	0.65	2.34	2.26	2.19	2.12	9.56